

**2017 ANNUAL GROUNDWATER MONITORING AND
CORRECTIVE ACTION REPORT**

**ALABAMA POWER COMPANY
PLANT GASTON
ASH POND**

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Prepared for

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By

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ABBREVIATIONS

AL	Alabama
APC	Alabama Power Company
APCEL	APC Environmental Laboratory
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
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
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 (EPA) coal combustion residual (CCR) rule (40 CFR 257 Subpart D), this 2017 Annual Groundwater Monitoring and Corrective Action Report has been prepared to document 2017 groundwater monitoring activities at the Plant Gaston Ash Pond and satisfies the requirements of §257.90(e). Semi-annual monitoring and reporting for Plant Gaston Ash Pond is performed in accordance with the monitoring requirements §257.90 through §257.94.

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 Ash 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 Ash 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 ft MSL along the eastern plant boundary to approximately 530 fet 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 Newla 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.

Near the ash pond, the shallow subsurface bedrock geology is comprised entirely of dolomites of the Knox Group. Boring logs from various on-site investigations indicate that the ash pond is underlain by 11 to 63-ft-thick layer of residual clay, mainly formed by the in-situ weathering of the underlying Cambrian-Ordovician-age Knox dolomite. The actual thickness of the natural overburden may be lower than 63 ft, since fill and embankment material were used around the periphery of the ash pond. At the site, the Knox dolomite is characterized as a light to medium gray, fine-grained dolostone with bedded chert.

Evidence of faulting was not observed in core samples and no faults have been mapped underneath the ash pond. One small splay, thrust fault has been mapped in the area (Szabo, 1969, Frings, 1981). This splay fault has been interpreted to cross the river near the location of the coal pile and trends to the northwest approximately 500 to 1,500 feet to the north of the ash pond. Locally, this splay fault marks the transition from the older Knox dolomite to the Pennsylvanian-aged Parkwood Formation.

3.3 Uppermost Aquifer

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

At the site, the uppermost aquifer consists of Knox dolomite. Wells were generally screened in fractured or weathered intervals of Knox dolomite, where permeability is enhanced. Depths to these intervals are highly variable at the site and range from 35 to nearly 125 ft below ground surface (BGS).

3.4 Flow Interpretation

The local groundwater flow pattern at the site is generally towards the north, west, and east. A topographic high directly to the south of the pond forms a localized groundwater divide and provides space for upgradient locations. Groundwater flow at the site is accomplished via fractured flow and other secondary discontinuities within the rock fabric such as weathered zones and bedding planes.

4.0 GROUNDWATER MONITORING SYSTEM

Pursuant to §257.91, Plant Gaston has installed a groundwater monitoring system to monitor groundwater within the uppermost aquifer. The PE-certified groundwater monitoring system for the Ash Pond is designed to monitor groundwater passing the waste boundary of the CCR unit within the uppermost aquifer. Wells were located to serve as upgradient, lateral, and downgradient monitoring locations based on groundwater flow direction as determined by the potentiometric surface elevation measurements. 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.

4.1 Monitoring Wells

The groundwater monitoring network is comprised of 22 monitoring wells. As required by §257.90(e)(1), monitoring well locations referenced to the Ash Pond 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 Ash Pond.

4.1.1 Upgradient Wells

Monitoring well locations GN-AP-MW-1 through GN-AP-MW-3 serve as upgradient locations for the Ash Pond. Upgradient wells are located south of the Ash Pond as determined by water level monitoring and potentiometric surface maps constructed for the site.

4.1.2 Downgradient Wells

Monitoring well locations GN-AP-MW-4 through GN-AP-MW-22 are utilized as downgradient locations for the Ash Pond. Downgradient locations are located west, north, and east of the Ash 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)
GN-AP-MW-1	Upgradient	12/3/2015	1176920.74	2283196.28	123.5	460.54	457.72	271.42
GN-AP-MW-2	Upgradient	10/7/2015	1176581.4	2282345.82	123.5	445.67	442.81	329.64
GN-AP-MW-3	Upgradient	9/30/2015	1176143.9	2282060.22	78.5	447.14	444.34	375.54
GN-AP-MW-4	Downgradient	11/6/2015	1175062.07	2281020.14	75.5	440.57	437.86	354.47
GN-AP-MW-5	Downgradient	9/17/2015	1177490.12	2284846.07	59.9	431.24	428.06	378.25
GN-AP-MW-6	Downgradient	9/21/2015	1177492.16	2284847.54	99.6	427.77	424.61	387.45
GN-AP-MW-7	Downgradient	9/23/2015	1177496.74	2284850.77	64.8	420.26	416.8	365.35
GN-AP-MW-8	Downgradient	10/14/2015	1177568.42	2284736.1	74.9	430.22	426.87	355.53
GN-AP-MW-9	Downgradient	11/12/2015	1178554.49	2281365.54	69.7	424.85	422.164	299.16
GN-AP-MW-10	Downgradient	9/4/2015	1178850.57	2282040.74	79.9	425.69	422.689	353.09
GN-AP-MW-11	Downgradient	10/9/2015	1179132.61	2282666.85	39.3	425.39	422.618	357.95
GN-AP-MW-12	Downgradient	9/9/2015	1179430.1	2283330.46	92.9	425.22	422.427	345.72
GN-AP-MW-13	Downgradient	9/1/2015	1179697.95	2283988.8	63	424.04	421.207	368.62
GN-AP-MW-14	Downgradient	12/10/2015	1180209.36	2284813.2	75	427.2	424.541	340.15
GN-AP-MW-15	Downgradient	6/2/2016	1179719.07	2286000.59	65	442.6	440.35	377.36
GN-AP-MW-16	Downgradient	9/16/2015	1178734.93	2285724.01	62	422.3	419.078	381.95
GN-AP-MW-17	Downgradient	10/13/2015	1178159.49	2285347.91	38	407.75	404.859	350.33
GN-AP-MW-18	Downgradient	9/11/2015	1177498.2	2284989.04	62.5	416.13	413.217	365.24
GN-AP-MW-19	Downgradient	11/3/2015	1176692.67	2284143.51	110	406.65	413.748	334.26
GN-AP-MW-20	Downgradient	12/1/2015	1176964.09	2284730.29	85.4	416.16	403.891	328.35
GN-AP-MW-21	Downgradient	6/9/2016	1176379.27	2280690.66	40	428.25	425.25	403.65
GN-AP-MW-22	Downgradient	6/8/2016	1176073.13	2280698.61	35	427.11	424.11	407.11

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.

5.0 GROUNDWATER MONITORING HISTORY

As required by §257.90(e), the following describes monitoring-related activities performed during the preceding year. Since this is the first Annual Groundwater Monitoring and Corrective Action Report, it also describes related activities performed prior to 2017.

5.1 Available Monitoring Data

In accordance with §257.94(b), the detection groundwater program was implemented by collecting 8 independent samples. Samples were collected from each background and downgradient well and analyzed for the constituents listed in Appendix III and IV. Background sampling was performed over the period from March 2016 to June 2017.

Following background monitoring, the initial detection monitoring event was completed by collecting an additional round of groundwater samples in August 2017. Groundwater samples were collected from each monitoring well and analyzed for Appendix III constituents according to §257.94(a). Analytical data from the background and initial groundwater monitoring events is included as **Appendix A, Groundwater Analytical Data**, in accordance with the requirements of §257.90(e)(3).

Table 2, Historical Well Sampling Summary, presents a summary of groundwater sampling events completed at the site for the preceding year, as well as background samples collected prior to 2017. Table 2 also identifies the purpose of the sampling event.

5.2 Historical Groundwater Flow

Historical potentiometric data from the site indicates that groundwater flow direction have been consistent at the site during the background monitoring period. The local groundwater flow pattern at the site is generally towards the north-northwest, west, north-northeast, and east. A topographic high directly to the south of the pond forms a localized groundwater divide and provides space for upgradient locations.

Groundwater elevations fluctuate in response to rainfall. Seasonal variations of 0.25 to 14 ft are typical at the site. These fluctuations are consistent in response in monitoring wells across the site, but vary in magnitude. **Figure 4, Potentiometric Surface Map (August 2017)**, confirms that groundwater flow direction is consistent despite seasonal fluctuations. Groundwater elevation data indicates that water levels tend to be higher in the spring and early summer and lower during the fall and winter seasons. **Table 3, Historical Groundwater Elevations Summary** below provides a summary of water level data for the site.

Table 2. Historical Well Sampling Summary									
	Background								Detection
Event	B.1	B.2	B.3	B.4	B.5	B.6	B.7	B.8	D.1
Date	3/2016	5/2016	7/2016	9/2016	11/2016	2/2017	5/2017	6/2017	8/2017

Notes: (1) B.# indicates background event
 (2) D.# indicates detection monitoring event.

Table 3. Historical Groundwater Elevation Summary				
Well ID	Average GW Elevation (ft MSL)	Highest GW Elevation (ft MSL)	Lowest GW Elevation (ft MSL)	GW Elevation Variation (ft)
GN-AP-MW-1	431.43	432.63	429.35	3.28
GN-AP-MW-2	432.97	433.79	432.16	1.63
GN-AP-MW-3	432.27	433.27	429.73	3.54
GN-AP-MW-4	428.80	435.66	423.27	12.39
GN-AP-MW-5	420.27	425.56	416.08	9.48
GN-AP-MW-6	417.66	422.98	415.39	7.59
GN-AP-MW-7	413.23	416.66	407.55	9.11
GN-AP-MW-8	414.62	419.70	405.81	13.89
GN-AP-MW-9	418.60	420.21	414.77	5.44
GN-AP-MW-10	419.55	421.17	417.24	3.93
GN-AP-MW-11	420.58	422.27	419.10	3.17
GN-AP-MW-12	424.45	424.85	422.77	2.08
GN-AP-MW-13	423.75	424.04	423.26	0.78
GN-AP-MW-14	399.82	401.55	399.07	2.48
GN-AP-MW-15	403.16	403.59	402.82	0.77
GN-AP-MW-16	402.79	403.22	402.38	0.84
GN-AP-MW-17	407.65	407.75	407.50	0.25
GN-AP-MW-18	395.95	396.37	395.80	0.57
GN-AP-MW-19	412.31	413.96	407.91	6.05
GN-AP-MW-20	398.29	398.95	397.79	1.16
GN-AP-MW-21	417.39	419.16	415.60	3.56
GN-AP-MW-22	418.46	421.65	415.59	6.06

*Groundwater elevations are referenced to NAVD88

6.0 GROUNDWATER SAMPLING AND ANALYSIS

6.1 Sampling Event Summary

Groundwater sampling for the initial detection monitoring event was performed in August 2017. Samples were analyzed for the constituents listed in Appendix III. Analytical data from the groundwater monitoring events are included as Appendix A.

6.2 Groundwater Sample Collection

Groundwater samples were collected by APC Field Services in accordance with §257.93(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:

- 0.1 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.

6.3 Sample Preservation and Handling

Groundwater samples were collected within the designated size and type of containers required for specific parameters. Sample bottles were pre-preserved by the laboratory and did not require field preservation. Where temperature control was required, samples were placed in an ice-packed cooler.

6.4 Chain of Custody

All samples were handled under sCOC procedures beginning in the field through delivery to the laboratory. The COC forms contain the following information:

- Sample destination and transporter,
- Sample identification numbers,
- Signature of collector,

- Date and time of collection,
- Identification of monitoring well,
- Number of sample containers,
- Parameters requested for analysis,
- Signature of person(s) involved in the chain of possession, and
- Inclusive dates of possession.

6.5 Laboratory Analysis

Groundwater samples collected for background data included both Appendix III and Appendix IV parameters. Groundwater samples collected during the August 2017 detection monitoring event were analyzed for Appendix III monitoring parameters only. Analytical methods used for groundwater sample analysis are listed on the analytical laboratory reports included in Appendix A.

Laboratory analyses were 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.

6.6 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 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 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.

7.0 GROUNDWATER DATA EVALUATION

7.1 Groundwater Elevation Data Evaluation

Prior to recording water levels, each well was opened and allowed to equilibrate to atmospheric pressure. Within a 24-hour period, depths to groundwater were measured to the nearest 0.01 ft with an electronic water level indicator. Depths are referenced from the top of the inner PVC well casing. Groundwater elevations are calculated by subtracting the depth to groundwater from surveyed top of casing (TOC) elevations. During the initial detection monitoring event, static groundwater elevations obtained prior to purging and sampling ranged from 0 to 39.01 ft MSL. Groundwater levels for the most recent sampling event are included in **Table 4, Groundwater Elevations (August 2017)**.

The most recent potentiometric surface map presented in **Figure 4, Potentiometric Surface Map (August 2017)**, shows the local groundwater flow pattern at the site is generally towards the north-northwest, west, north-northeast, and east. A topographic high directly to the south of the pond forms a localized groundwater divide and provides space for upgradient locations. Groundwater flow at the site is accomplished via fractured flow and other secondary discontinuities within the rock fabric such as weathered zones and bedding planes.

Table 4. Groundwater Elevations (August 2017)

Well ID	TOC Elev (ft MSL)	Depth to GW (ft TOC)	GW Elevation
GN-AP-MW-1	460.54	27.91	432.63
GN-AP-MW-2	445.67	12.05	433.62
GN-AP-MW-3	447.14	13.89	433.25
GN-AP-MW-4	440.57	9.04	431.53
GN-AP-MW-5	431.24	7.75	423.49
GN-AP-MW-6	427.77	9.38	418.39
GN-AP-MW-7	420.26	4.88	415.38
GN-AP-MW-8	430.22	12.35	417.87
GN-AP-MW-9	424.85	5.4	419.45
GN-AP-MW-10	425.69	5.53	420.16
GN-AP-MW-11	425.39	3.91	421.48
GN-AP-MW-12	425.22	0.44	424.78
GN-AP-MW-13	424.04	0	424.04
GN-AP-MW-14	427.2	26.7	400.5
GN-AP-MW-15	442.6	39.01	403.59
GN-AP-MW-16	422.3	19.1	403.2
GN-AP-MW-17	407.75	0	407.75
GN-AP-MW-18	416.13	20.17	395.96
GN-AP-MW-19	406.65	2.2	404.45
GN-AP-MW-20	416.16	8.44	407.72
GN-AP-MW-21	428.25	9.09	419.16
GN-AP-MW-22	427.11	5.46	421.65

8.0 BACKGROUND GROUNDWATER DATA QUALITY

Groundwater elevation data and potentiometric surface maps were utilized to determine upgradient or “background” monitoring well locations. These well locations provide representative samples of groundwater quality as it enters the site.

8.1 Statistical Methodology and Tests

Statistical tests used to evaluate the groundwater monitoring data consist of interwell prediction limits, combined with a 1-of-2 verification resample plan to determine whether there has been a statistically significant increase (SSI) over background groundwater quality. 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.

Time series plots were used to screen proposed background data for suspected outliers, or extreme values that would result in limits that are not conservative from a regulatory perspective. Suspected outliers are formally tested using Tukey’s box plot method when applicable, and when identified, are flagged in the computer database with “o” and deselected prior to construction of statistical limits.

No suspected outliers were observed for any of the detected data in any of the data sets except for the following: calcium, sulfate and TDS in well GN-AP-MW-15R. Note that because lead was detected in the first sample, but has reported nondetect values during each subsequent sampling event at well GN-AP-MW-14, this value was flagged as an outlier and will be excluded in any statistical analyses. When any values are identified as outliers, they are plotted in a lighter font on the time series graph. A substitution of the most recent reporting limit was applied when varying detection limits existed in data.

No true seasonal patterns were observed on the time series plots for any of the detected data; therefore, no deseasonalizing adjustments were made to the data. When seasonal patterns are observed, data may be deseasonalized so that the resulting limits will correctly account for the seasonality as a predictable pattern rather than random variation or a release.

The Sen’s Slope/Mann Kendall trend test was used to evaluate all data at each well to identify statistically significant increasing or decreasing trends. The results of the trend analyses showed a few statistically significant increasing and decreasing trends. All trends noted were relatively low in magnitude when compared to average concentrations; therefore, no adjustments were recommended to any data sets.

Prediction limits were constructed as recommended in the USEPA Unified Guidance, and based on the following:

- Annual false positive rate of 10%
- 1-of-2 verification resample plan option for Interwell Prediction Limits
- Semi-annual sampling
- Constituents = 7 (Appendix III)
- Downgradient wells = 19

Parametric prediction limits are used when the screened historical data follow a normal or transformed-normal distribution. When data could not be normalized or when the majority of data were non-detects, a non-parametric test was utilized. The confidence level associated with both tests is greater than 99%. The distribution of data was tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (USEPA, 2009), data was analyzed using either parametric or non-parametric prediction limits.

The following guidance is also applicable to the statistical analysis method:

- Statistical analyses are not performed on analytes containing 100% non-detects (EPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% nondetects in the background, simple substitution of one-half the reporting limit may be utilized in the statistical analysis. The reporting limit utilized for non-detects is the practical quantitation limit (PQL) as reported by the laboratory.
- When data contain between 15-50% non-detects, the Kaplan-Meier non-detect adjustment is applied to the background data.
- Non-parametric prediction limits are used on data containing greater than 50% non-detects.

The statistical evaluation reports are located in **Appendix B, Statistical Data Evaluation.**

8.2 Statistical Exceedances

Analytical data from the initial detection monitoring event in August 2017 at the Ash Pond was statistically analyzed in accordance with the PE - certified statistical methods described above. Based on the statistical analysis included in Appendix B, SSIs of the prediction limits were identified. Summary tables identifying the SSIs are included in Appendix B.

8.3 Verification Sampling

The statistical methods incorporate the option of resampling to verify SSIs. Verification sampling was not conducted for the initial detection monitoring event; therefore, the initial SSIs are treated as verified.

8.4 Appendix IV Background Data

Pursuant to §257.95, Appendix IV groundwater quality data is statistically analyzed and compared to groundwater protection standards if assessment monitoring is implemented. APC is currently performing detection monitoring at the Ash Pond per §257.94 and has not implemented assessment monitoring. Therefore, statistical analysis of the Appendix IV data has not been performed.

9.0 MONITORING PROGRAM STATUS

Plant Gaston Ash Pond is in detection monitoring. SSIs of Appendix III parameters have been identified. Pursuant to §257.94(e)(1), APC has 90 days from the date of determination to either (1) prepare a demonstration that a source other than the Ash Pond was the cause, or (2) implement assessment monitoring per §257.95. APC will address the reported SSIs in accordance with the requirements, and options, of §257.94(e)(1-3) and (f).

10.0 CONCLUSIONS AND FUTURE ACTIONS

In accordance with §257.94(b), eight (8) independent samples were collected from each background and downgradient well and analyzed for the constituents listed in Appendix III and IV. Background sampling was performed over the period of March 2016 to June 2017. Groundwater sampling for the first detection monitoring event was performed in August 2017. Constituents listed in Appendix III were collected and analyzed for detection monitoring.. APC will perform the following future actions:

- Conduct alternate source demonstration or complete groundwater sampling for Assessment Monitoring within 90 days of determining the SSI, and
- Conduct the first semi-annual detection monitoring event by April 2018.

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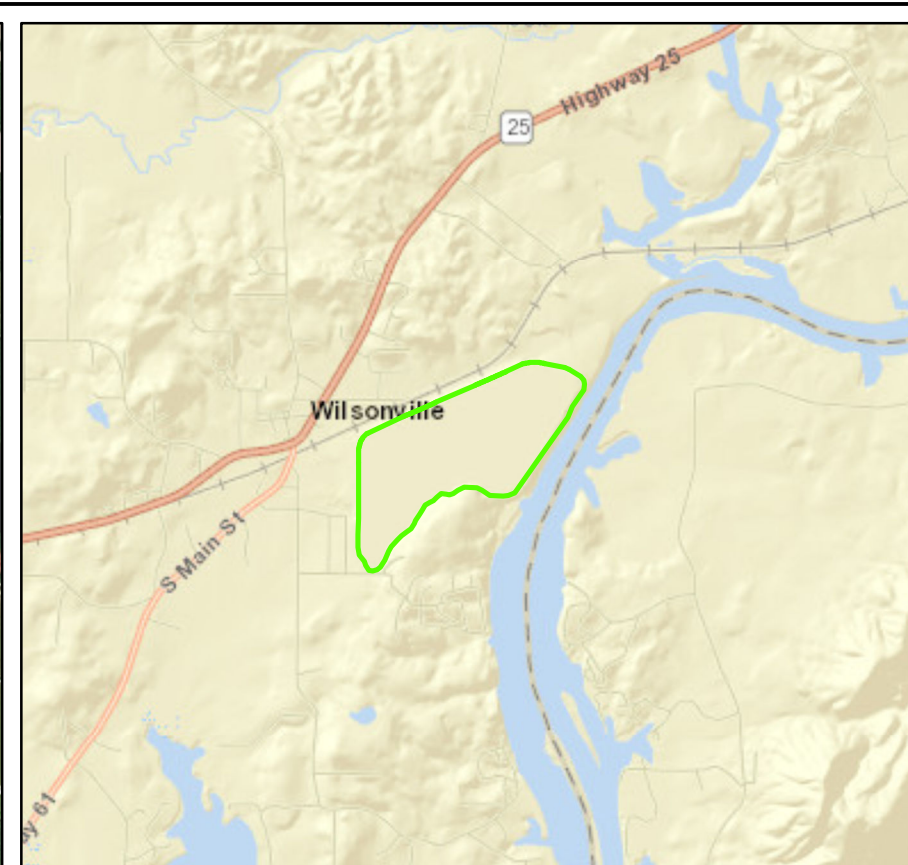
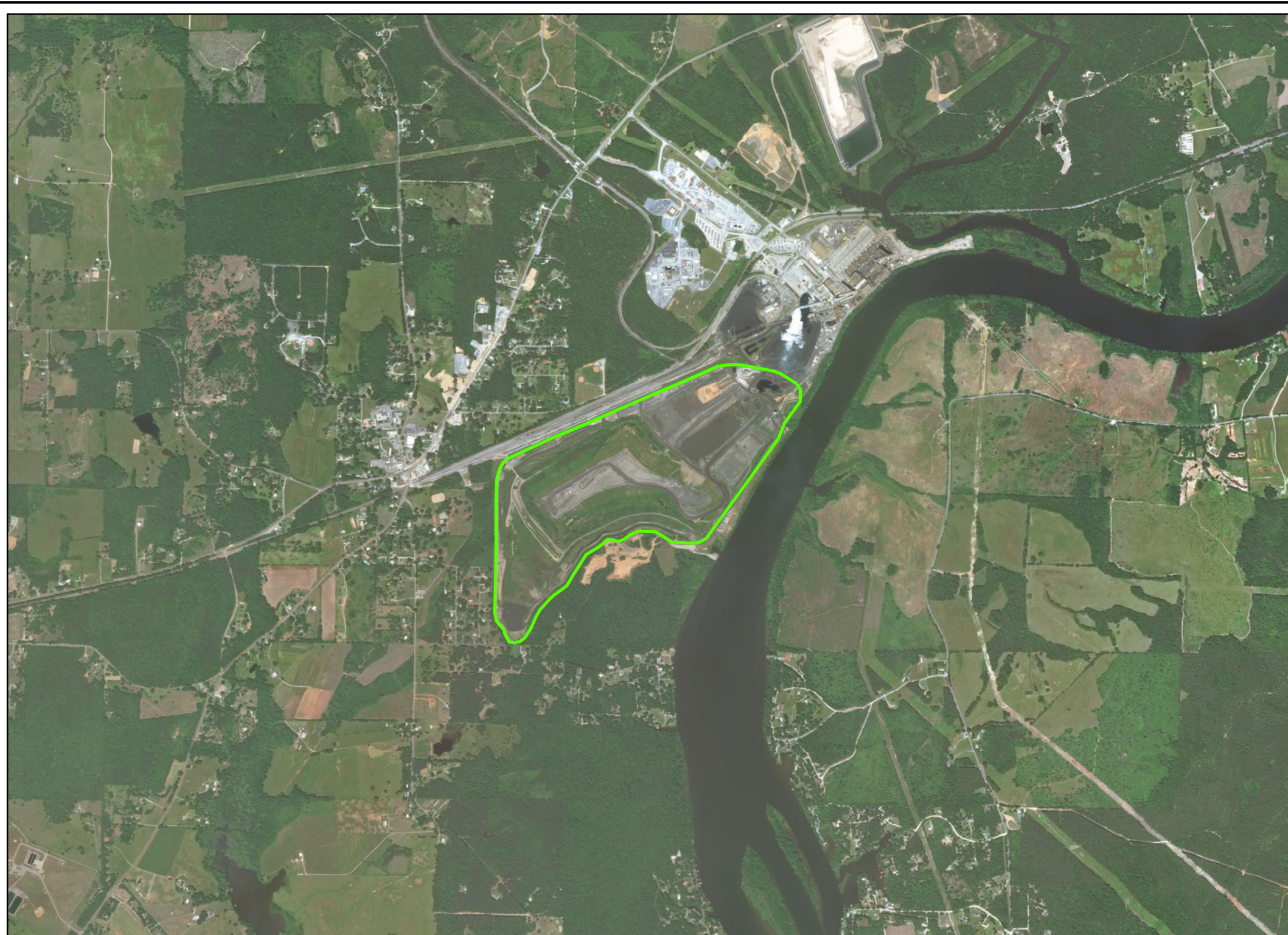
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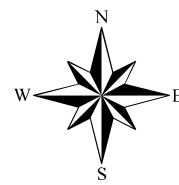
Figures



0 0.5 1 2 3 Miles

Legend

Ash Pond Boundary



0 1,000 2,000 4,000 6,000 8,000 Feet

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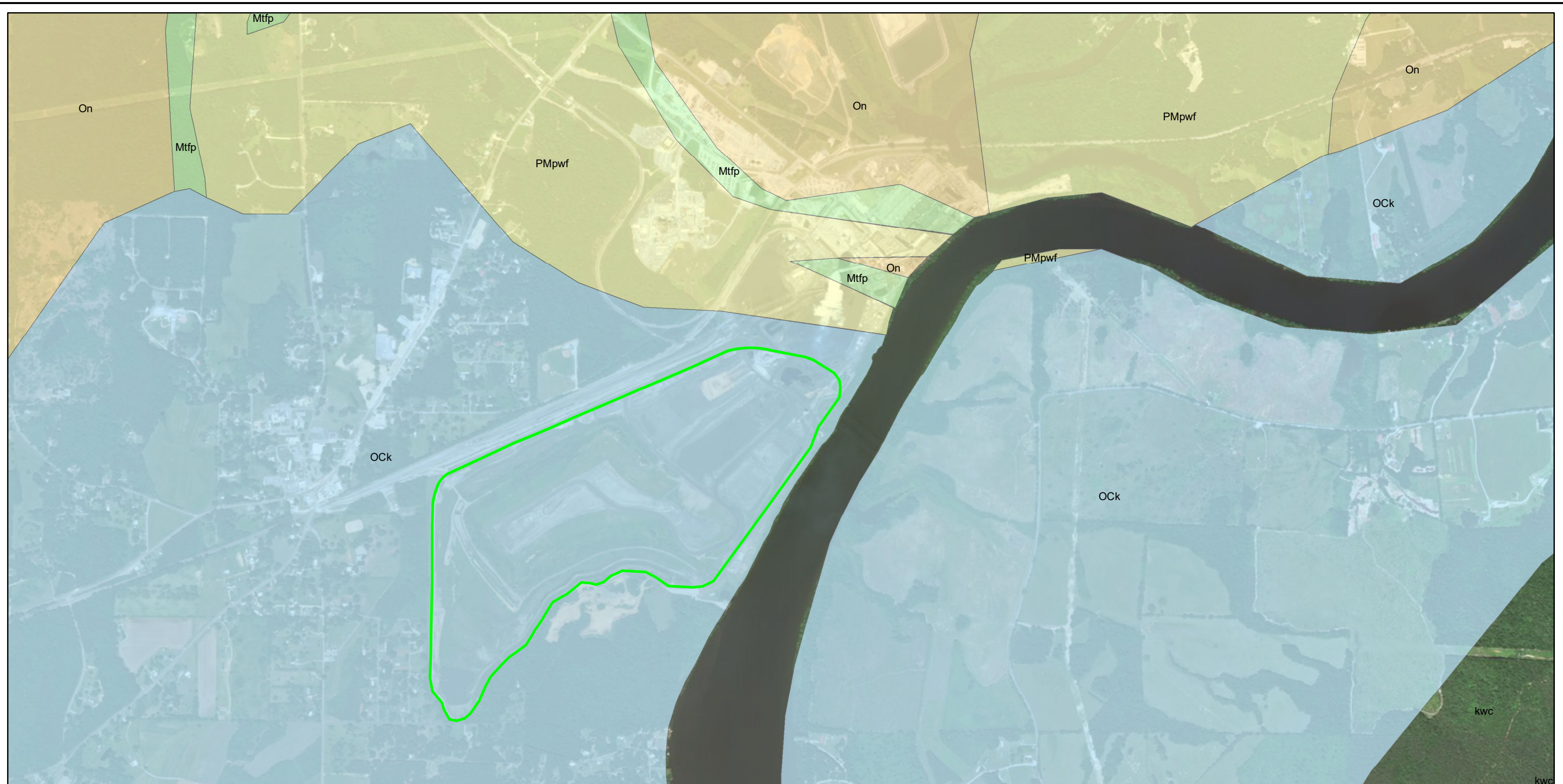
**Southern Company Generation
Earth Science and Environmental Engineering**

FOR

**PLANT GASTON
ASH POND
FIGURE 1
SITE LOCATION MAP**

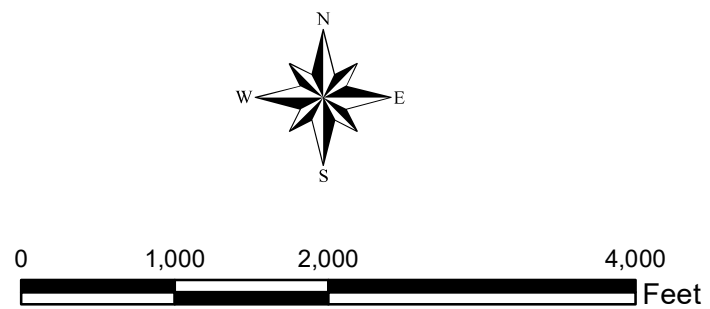
Alabama Power Company

SCALE	PROJ I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
1:24k		ES4061-S1	1		



Legend

- Ash Pond Boundary
- Geologic Units**
- Knox Group undifferentiated
- Newala Limestone
- Parkwood Formation and Floyd Shale undifferentiated
- Tuscumbia Limestone and Fort Payne Chert undifferentiated



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**PLANT GASTON
ASH POND
FIGURE 2
SITE GEOLOGIC MAP**



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

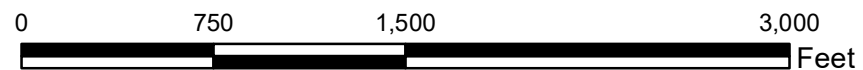
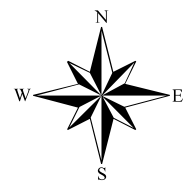
FOR

Alabama Power Company					
SCALE	PROJ I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
1:12k		ES4061-S2	1		



Legend

-  Monitoring Well Network
-  Ash Pond Boundary



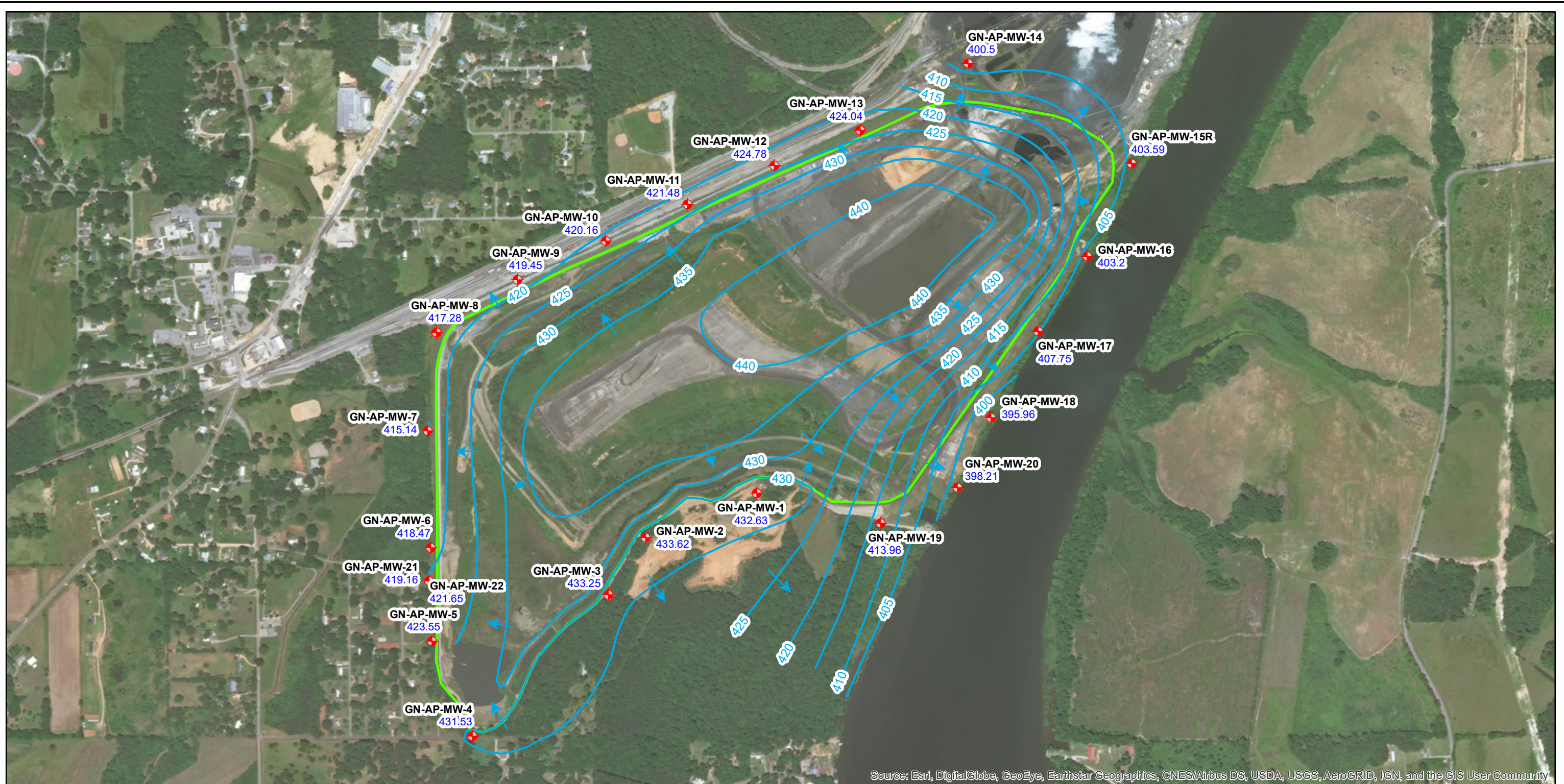
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**PLANT GASTON
ASH POND
FIGURE 3
MONITORING WELL LOCATION MAP**

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

FOR

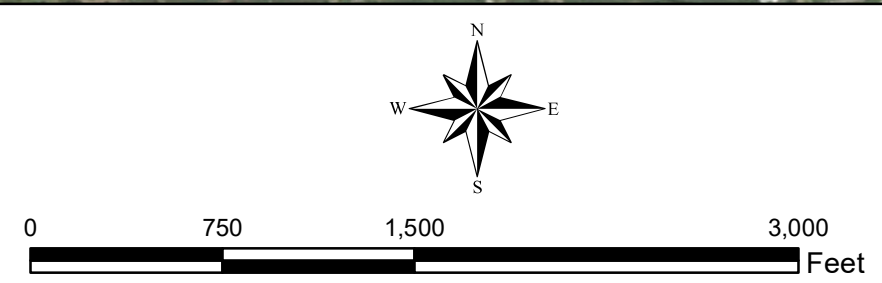
Alabama Power Company					
SCALE	PROJ. I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
1:9k		ES4061-S3	1		



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Legend

- + Monitoring Well **GN-AP-MW-1** Well ID
432.63 Groundwater Elevation
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- Ash Pond Boundary



NOTE: NAVD88 indicates North American Vertical Datum of 1988.

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Southern Company Generation
Earth Science and Environmental Engineering

FOR

PLANT GASTON
ASH POND
FIGURE 4
POTENTIOMETRIC SURFACE MAP
AUGUST 14, 2017

Alabama Power Company					
SCALE	PROJ. I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
1:9k		ES4061-S4	1		

Appendix A

Groundwater Analytical Data

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

 Alabama Power



Sample Group : WMWGASAP_18

Project/Site : Gaston Ash Pond
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:

Supervision:



Anions

Gaston Ash Pond

WMWGASAP_18

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>Chloride Batch ID</u>	<u>Fluoride Batch ID</u>	<u>Sulfate Batch ID</u>	<u>Project ID</u>
AW07982	564692	564693	564694	WMWGASAP_18
AW07983	564692	564693	564694	WMWGASAP_18
AW07985	564699	564700	564701	WMWGASAP_18
AW07986	564699	564700	564701	WMWGASAP_18
AW07987	564699	564700	564701	WMWGASAP_18
AW08181	564699	564700	564701	WMWGASAP_18
AW08182	564699	564700	564701	WMWGASAP_18
AW08183	564699	564700	564701	WMWGASAP_18
AW08184	564699	564700	564701	WMWGASAP_18
AW08185	564702	564704	564706	WMWGASAP_18
AW08186	564702	564704	564706	WMWGASAP_18
AW08187	564702	564704	564706	WMWGASAP_18
AW08250	564702	564704	564706	WMWGASAP_18
AW08251	564702	564704	564706	WMWGASAP_18
AW08253	564702	564704	564706	WMWGASAP_18
AW08254	564702	564704	564706	WMWGASAP_18
AW08255	564702	564704	564706	WMWGASAP_18
AW08256	564702	564704	564706	WMWGASAP_18
AW08257	564702	564704	564706	WMWGASAP_18
AW08258	564703	564705	564707	WMWGASAP_18
AW08259	564703	564705	564707	WMWGASAP_18
AW08261	564703	564705	564707	WMWGASAP_18
AW08263	564703	564705	564707	WMWGASAP_18
AW08264	564703	564705	564707	WMWGASAP_18
AW08598	564721	564722	564723	WMWGASAP_18
AW07984	564712	564715	564718	WMWGASAP_18
AW07988	564712	564715	564718	WMWGASAP_18
AW08252	564712	564715	564718	WMWGASAP_18
AW08262	564712	564715	564718	WMWGASAP_18



4. All of the above samples were analyzed and prepared by EPA 300.0.
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 instrument performance check (IPC) was analyzed and all criteria were met.
- All laboratory reagent blanks were less than the method detection limits for the requested anions.
- All laboratory fortified blanks (LFB) were within acceptance criteria for the anions requested, with the following exception: no closing LFB was listed for the dilution re-analysis for sulfate in batch 564718. Due to absence of LFB data, the reported result for the following sample dilution for sulfate is qualified as quantitatively estimated with indeterminate bias direction and magnitude: AW08252.
- It is noted that only one bracketing LFB was listed in Lab Works for batches 564692, 564693 and 564694; therefore all reported anion results should be conservatively considered as quantitatively estimated values with indeterminate bias direction and magnitude.
- The reported sulfate result for sample AW07982 exceeded the calibrated range of the detector, and should be considered as a quantitatively estimated value with indeterminate bias magnitude and direction. No dilution analysis was found for this sample.
- 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 laboratory fortified matrix sample was analyzed with each batch. All acceptance criteria for accuracy were met.
- A sample duplicate and/or laboratory fortified matrix duplicate were analyzed with each batch. All acceptance criteria for precision were met. It is noted that separate and distinct criteria for duplicate precision calculations, based on sample and duplicate anion concentrations, are used to assess precision compliance. These are as follow: if the sample and duplicate are both greater than 5x anion Reporting Limit (RL) concentration, the precision is calculated and reported as relative percent difference (RPD), with an acceptance range of 0 - 20%; if either the sample or duplicate are less than 5x anion RL, the precision is calculated and reported as the absolute value of the difference between the two concentrations, with an acceptance range of less than or equal to the anion RL value.



7. Samples AW08251, AW08253 and AW08254 were re-analyzed for chloride at a 5x dilution, samples AW08181, AW08182, AW08183, AW08185, AW08250, AW08251, AW08252, AW08253 and AW08254 were re-analyzed for sulfate at a 5x dilution, and sample AW08184 was re-analyzed for sulfate at a 10x dilution, due to undiluted results exceeding the calibrated range of the detector. The dilution results for sulfate for these samples should be used; reporting limit (RL) values are adjusted upward to reflect the dilution factor applied.

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AW08181	Sulfate	5X
AW08182	Sulfate	5X
AW08183	Sulfate	5X
AW08184	Sulfate	10X
AW08185	Sulfate	5X
AW08250	Sulfate	5X
AW08251	Chloride, Sulfate	5X
AW08253	Chloride, Sulfate	5X
AW08254	Chloride, Sulfate	5X
AW08252	Sulfate	5X

8. The raw data results are shown with dilution factors included, when dilutions are manually performed by the analyst.
 The raw data results are shown without dilution factor corrections, when dilutions are run automatically by the instrument.



Metals ICP

Gaston Ash Pond

WMWGASAP_18

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>
AW07982	20160408C/20160411A	WMWGASAP_18
AW07983	20160408C/20160411A	WMWGASAP_18
AW07985	20160408C/20160411A	WMWGASAP_18
AW07986	20160408D/20160413B	WMWGASAP_18
AW07987	20160408D/20160413B	WMWGASAP_18
AW08181	20160408D/20160413B	WMWGASAP_18
AW08182	20160408D/20160413B	WMWGASAP_18
AW08183	20160408D/20160413B	WMWGASAP_18
AW08184	20160408D/20160413B	WMWGASAP_18
AW08185	20160408D/20160413B	WMWGASAP_18
AW08186	20160408D/20160413B	WMWGASAP_18
AW08187	20160408D/20160413B	WMWGASAP_18
AW08250	20160408D/20160413B	WMWGASAP_18
AW08251	2160415B/20160503A	WMWGASAP_18
AW08253	2160415B/20160503A	WMWGASAP_18
AW08254	2160415B/20160503A	WMWGASAP_18
AW08255	2160415B/20160503A	WMWGASAP_18
AW08256	2160415B/20160503A	WMWGASAP_18
AW08257	2160415B/20160503A	WMWGASAP_18
AW08258	2160415B/20160503A	WMWGASAP_18
AW08259	2160415B/20160503A	WMWGASAP_18
AW08261	2160415B/20160503A	WMWGASAP_18
AW08263	2160415B/20160503A	WMWGASAP_18
AW08264	2160415C/20160503B	WMWGASAP_18
AW08598	2160415C/20160503B	WMWGASAP_18
AW07984	20160406	WMWGASAP_18
AW07988	20160406	WMWGASAP_18
AW08252	20160406	WMWGASAP_18
AW08262	20160406	WMWGASAP_18



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

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below half 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 half 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 with the exception of batch 20160406, which is a dissolved set and does not get digested.
- All laboratory control sample criteria were met except for the following:

<u>Analyte</u>	<u>Sample ID</u>
Boron	AW08263
Boron	AW08598

All samples in the batches 2160415B and 2160415C were re-prepared and analyzed in data packet 20160503A/20160503B. All criteria were met for Boron analysis from 20160503A/20160503B.

- 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 with the following exceptions:

Case Narrative



<u>Analyte</u>	<u>Sample ID</u>
Calcium	AW08250

The concentration of this analyte in the sample was greater than 3.3X the concentration of the matrix spike added during digestion, causing inaccurate spike recovery information. The laboratory control sample indicates that the digestion and analysis were in control.

- 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 without a dilution with the following exceptions: The following samples were diluted due to sample concentrations from the undiluted analysis were over the high standard of the calibration curve.

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AW07982	Calcium	10.15x
AW07983	Calcium	10.15x
AW08181	Calcium	10.15x
AW08182	Calcium	10.15x
AW08183	Calcium	10.15x
AW08184	Calcium	10.15x
AW08185	Calcium	10.15x
AW08187	Calcium	10.15x
AW08250	Calcium	10.15x
AW08250MS	Calcium	10.15x
AW08250MSD	Calcium	10.15x
AW08251	Calcium	10.15x
AW08253	Calcium	10.15x
AW08254	Calcium	10.15x
AW08255	Calcium	10.15x
AW08256	Calcium	10.15x
AW08259	Calcium	10.15x
AW08261	Calcium	10.15x
AW08264	Calcium	10.15x
AW07984	Calcium	10.15x
AW07988	Calcium	10.15x
AW08252	Calcium	10.15x
AW08262	Calcium	10.15x
AW08262MS	Calcium	10.15x
AW08262MSD	Calcium	10.15x

8. The raw data results include both results corrected for dilution and results not corrected for dilution.



Metals ICPMS

Gaston Ash Pond

WMWGASAP_18

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>
AW07982	561636	WMWGASAP_18
AW07983	561636	WMWGASAP_18
AW07985	561636	WMWGASAP_18
AW07986	561636	WMWGASAP_18
AW07987	561636	WMWGASAP_18
AW08181	561648	WMWGASAP_18
AW08182	561648	WMWGASAP_18
AW08183	561648	WMWGASAP_18
AW08184	561648	WMWGASAP_18
AW08185	561648	WMWGASAP_18
AW08186	561648	WMWGASAP_18
AW08187	561648	WMWGASAP_18
AW07984	561656	WMWGASAP_18
AW07988	561656	WMWGASAP_18
AW08250	561899	WMWGASAP_18
AW08251	561899	WMWGASAP_18
AW08253	561899	WMWGASAP_18
AW08254	561899	WMWGASAP_18
AW08255	561899	WMWGASAP_18
AW08256	561899	WMWGASAP_18
AW08257	561899	WMWGASAP_18
AW08258	561899	WMWGASAP_18
AW08259	561899	WMWGASAP_18
AW08261	561899	WMWGASAP_18
AW08263	561900	WMWGASAP_18
AW08264	561900	WMWGASAP_18
AW08252	562118	WMWGASAP_18
AW08262	562118	WMWGASAP_18
AW08598	562570	WMWGASAP_18



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.
7. The Cadmium MDL increased from 0.0001mg/L to 0.0002mg/L. Sample AW08181 is now Not Detected.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes. The highest point of the calibration curve in batches 561899 and 561900, (1.25ppm), was removed for Cr, Co, Mo, Cd, and Ba to improve linearity. The highest point of the calibration curve in batch 562118, (1.25ppm), was removed for Sb to improve linearity.
- 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 with the exception of batches 561656 and 562118, which were dissolved samples therefore do not get digested.
- 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.
8. All samples were analyzed at a dilution of 1 to 5 to compensate for any matrix effects.
 9. The raw data results are shown with dilution factors included.



Mercury

Gaston Ash Pond

WMWGASAP_18

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>
AW07982	562112	WMWGASAP_18
AW07983	562112	WMWGASAP_18
AW07985	562112	WMWGASAP_18
AW07986	562112	WMWGASAP_18
AW07987	562112	WMWGASAP_18
AW08181	562112	WMWGASAP_18
AW08182	562112	WMWGASAP_18
AW08183	562112	WMWGASAP_18
AW08184	562112	WMWGASAP_18
AW08185	562112	WMWGASAP_18
AW07984	562348	WMWGASAP_18
AW07988	562348	WMWGASAP_18
AW08252	562348	WMWGASAP_18
AW08262	562348	WMWGASAP_18
AW08186	562349	WMWGASAP_18
AW08187	562349	WMWGASAP_18
AW08250	562349	WMWGASAP_18
AW08251	562349	WMWGASAP_18
AW08253	562349	WMWGASAP_18
AW08254	562349	WMWGASAP_18
AW08255	562349	WMWGASAP_18
AW08256	562349	WMWGASAP_18
AW08257	562349	WMWGASAP_18
AW08258	562349	WMWGASAP_18
AW08259	562350	WMWGASAP_18
AW08261	562350	WMWGASAP_18
AW08263	562350	WMWGASAP_18
AW08264	562350	WMWGASAP_18
AW08598	562350	WMWGASAP_18

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 Ash Pond

WMWGASAP_18

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>
AW07982	561546	WMWGASAP_18
AW07983	561546	WMWGASAP_18
AW07985	561546	WMWGASAP_18
AW07986	561546	WMWGASAP_18
AW07987	561546	WMWGASAP_18
AW08181	561741	WMWGASAP_18
AW08182	561741	WMWGASAP_18
AW08183	561741	WMWGASAP_18
AW08184	561741	WMWGASAP_18
AW08185	561741	WMWGASAP_18
AW08186	561741	WMWGASAP_18
AW08187	561741	WMWGASAP_18
AW08250	561770	WMWGASAP_18
AW08251	561770	WMWGASAP_18
AW08253	561770	WMWGASAP_18
AW08254	561770	WMWGASAP_18
AW08255	561770	WMWGASAP_18
AW08256	561770	WMWGASAP_18
AW08257	561770	WMWGASAP_18
AW08258	561770	WMWGASAP_18
AW08259	561770	WMWGASAP_18
AW08261	561770	WMWGASAP_18
AW08263	561770	WMWGASAP_18
AW08264	561770	WMWGASAP_18
AW08598	562310	WMWGASAP_18

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.
7. The reporting limit for TDS was incorrectly listed as 25mg/L. This has been corrected based on project limits and filter volume. Sample AW08186 is now Not Detected.

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

 Alabama Power



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 0.5 mg 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 2.5 mg and 200 mg residue with the exception of AW07985, AW08186 and AW08263 which were <2.5mg.

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 29-Mar-16

Description: Gaston Ash Pond - MW-15

Laboratory ID Number: AW07982

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	J 0.000862	mg/L
* Arsenic, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	J 0.00122	mg/L
* Barium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	0.0856	mg/L
* Beryllium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	4/8/2016	EPA 200.7		1.015	0.02	0.1	0.103	mg/L
* Calcium, Total	HRG	4/13/2016	EPA 200.7		10.15	1.0	5.0	79.7	mg/L
* Cadmium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	J 0.00396	mg/L
* Chromium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/6/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/8/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	0.0126	mg/L
* Lead, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	3/30/2016	SM 2540C		1		25	426	mg/L
* Chloride, Total	SES	4/1/2016	EPA 300.0		1	0.04	0.25	21.9	mg/L
* Fluoride, Total	SES	4/1/2016	EPA 300.0		1	0.01	0.3	J 0.276	mg/L
* Sulfate, Total	SES	4/1/2016	EPA 300.0		4	1.2	4	147	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, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 29-Mar-16

Description: Gaston Ash Pond - MW-15

Laboratory ID Number: AW07982

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW07985 Boron, Total	mg/L	0.00230	0.044	1.000	0.980	1.12	0.928	0.85 to 1.15	98.0	70 to 130	13.3	20	
AW07987 Barium, Total	mg/L	0.0000116	0.0044	0.10	0.101	0.100	0.0865	0.085 to 0.115	89.4	70 to 130	1.24	20	
AW07985 Lithium, Total	mg/L	0.000213	0.022	0.200	0.215	0.203	0.210	0.17 to 0.23	108	70 to 130	5.74	20	
AW07987 Molybdenum, Total	mg/L	0.0000207	0.0044	0.10	0.102	0.102	0.0946	0.085 to 0.115	95.5	70 to 130	0.253	20	
AW07987 Selenium, Total	mg/L	0.000120	0.0044	0.10	0.0976	0.0966	0.104	0.085 to 0.115	97.6	70 to 130	0.971	20	
AW07987 Arsenic, Total	mg/L	0.0000136	0.0022	0.10	0.0930	0.0942	0.0977	0.085 to 0.115	93.0	70 to 130	1.23	20	
AW07987 Cobalt, Total	mg/L	0.0000131	0.0044	0.10	0.0927	0.0926	0.0911	0.085 to 0.115	92.7	70 to 130	0.0562	20	
AW07987 Lead, Total	mg/L	0.0000212	0.0022	0.10	0.0951	0.0935	0.0942	0.085 to 0.115	93.8	70 to 130	1.66	20	
AW07985 Calcium, Total	mg/L	-0.00476	0.22	5.000	5.15	4.84	5.05	4.25 to 5.75	103	70 to 130	6.21	20	
AW07987 Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.0949	0.0930	0.0928	0.085 to 0.115	94.9	70 to 130	2.05	20	
AW07987 Antimony, Total	mg/L	0.000257	0.00132	0.10	0.0903	0.0898	0.0910	0.085 to 0.115	90.3	70 to 130	0.503	20	
AW07987 Thallium, Total	mg/L	0.0000253	0.00044	0.10	0.0968	0.0958	0.0919	0.085 to 0.115	96.2	70 to 130	1.04	20	
AW08185 Mercury, Total by CVAA	mg/L	0.00005	0.0005	0.004	0.00365	0.00365	0.00393	0.0034 to 0.0046	91.2	70 to 130	0.00	20	
AW07987 Beryllium, Total	mg/L	0.0000437	0.00132	0.10	0.0988	0.0983	0.102	0.085 to 0.115	98.8	70 to 130	0.447	20	
AW07987 Chromium, Total	mg/L	0.0000153	0.0044	0.10	0.0936	0.0958	0.0926	0.085 to 0.115	93.6	70 to 130	2.31	20	

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Expiration: June 30, 2018

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 29-Mar-16

Description: Gaston Ash Pond - MW-15

Laboratory ID Number: AW07982

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW07982	Fluoride, Total	mg/L	0.00	0.3	2.0	2.30	0.270	2.08	1.8 to 2.2	101	80 to 120	2.20	20
AW07982	Chloride, Total	mg/L	0.00	0.25	10.0	31.8	21.8	10.7	9 to 11	99.0	80 to 120	0.458	20
AW07987	Solids, Dissolved	mg/L	5	25			161	50.0	40 to 60			4.55	5
AW07982	Sulfate, Total	mg/L	0.00	1.0	40.0	193	149	20.0	18 to 22	115	80 to 120	1.35	20

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Expiration: June 30, 2018

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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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 29-Mar-16

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AW07983

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	J 0.000985	mg/L
* Arsenic, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	J 0.00480	mg/L
* Barium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	0.0952	mg/L
* Beryllium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	J 0.00119	mg/L
* Boron, Total	HRG	4/8/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	4/13/2016	EPA 200.7		10.15	1.0	5.0	124	mg/L
* Cadmium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	0.00133	mg/L
* Cobalt, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	J 0.00969	mg/L
* Chromium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	J 0.00577	mg/L
* Mercury, Total by CVAA	MCW	4/6/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/8/2016	EPA 200.7		1.015	0.01	0.05	J 0.0107	mg/L
* Molybdenum, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	0.0202	mg/L
* Selenium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	3/30/2016	SM 2540C		1		25	308	mg/L
* Chloride, Total	SES	4/1/2016	EPA 300.0		1	0.04	0.25	2.11	mg/L
* Fluoride, Total	SES	4/1/2016	EPA 300.0		1	0.01	0.3	J 0.0840	mg/L
* Sulfate, Total	SES	4/1/2016	EPA 300.0		1	0.3	1	66.6	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.

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 29-Mar-16

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AW07983

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW07987 Barium, Total	mg/L	0.0000116	0.0044	0.10	0.101	0.100	0.0865	0.085 to 0.115		89.4	70 to 130	1.24	20
AW07985 Boron, Total	mg/L	0.00230	0.044	1.000	0.980	1.12	0.928	0.85 to 1.15		98.0	70 to 130	13.3	20
AW07987 Beryllium, Total	mg/L	0.0000437	0.00132	0.10	0.0988	0.0983	0.102	0.085 to 0.115		98.8	70 to 130	0.447	20
AW07987 Chromium, Total	mg/L	0.0000153	0.0044	0.10	0.0936	0.0958	0.0926	0.085 to 0.115		93.6	70 to 130	2.31	20
AW07985 Calcium, Total	mg/L	-0.00476	0.22	5.000	5.15	4.84	5.05	4.25 to 5.75		103	70 to 130	6.21	20
AW07987 Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.0949	0.0930	0.0928	0.085 to 0.115		94.9	70 to 130	2.05	20
AW07985 Lithium, Total	mg/L	0.000213	0.022	0.200	0.215	0.203	0.210	0.17 to 0.23		108	70 to 130	5.74	20
AW07987 Molybdenum, Total	mg/L	0.0000207	0.0044	0.10	0.102	0.102	0.0946	0.085 to 0.115		95.5	70 to 130	0.253	20
AW07987 Selenium, Total	mg/L	0.000120	0.0044	0.10	0.0976	0.0966	0.104	0.085 to 0.115		97.6	70 to 130	0.971	20
AW07987 Arsenic, Total	mg/L	0.0000136	0.0022	0.10	0.0930	0.0942	0.0977	0.085 to 0.115		93.0	70 to 130	1.23	20
AW07987 Cobalt, Total	mg/L	0.0000131	0.0044	0.10	0.0927	0.0926	0.0911	0.085 to 0.115		92.7	70 to 130	0.0562	20
AW07987 Lead, Total	mg/L	0.0000212	0.0022	0.10	0.0951	0.0935	0.0942	0.085 to 0.115		93.8	70 to 130	1.66	20
AW07987 Antimony, Total	mg/L	0.000257	0.00132	0.10	0.0903	0.0898	0.0910	0.085 to 0.115		90.3	70 to 130	0.503	20
AW07987 Thallium, Total	mg/L	0.0000253	0.00044	0.10	0.0968	0.0958	0.0919	0.085 to 0.115		96.2	70 to 130	1.04	20
AW08185 Mercury, Total by CVAA	mg/L	0.00005	0.0005	0.004	0.00365	0.00365	0.00393	0.0034 to 0.0046		91.2	70 to 130	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 29-Mar-16

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AW07983

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW07987	Solids, Dissolved	mg/L	5	25				161	50.0	40 to 60			4.55	5
AW07982	Chloride, Total	mg/L	0.00	0.25	10.0	31.8		21.8	10.7	9 to 11	99.0	80 to 120	0.458	20
AW07982	Fluoride, Total	mg/L	0.00	0.3	2.0	2.30		0.270	2.08	1.8 to 2.2	101	80 to 120	2.20	20
AW07982	Sulfate, Total	mg/L	0.00	1.0	40.0	193		149	20.0	18 to 22	115	80 to 120	1.35	20

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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, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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**

Revised Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 29-Mar-16

Description: Gaston Ash Pond - MW-14 DISS

Laboratory ID Number: AW07984

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Dissolved	ABB	4/1/2016	EPA 200.8		5.025	0.0006	0.003	J 0.000859	mg/L
* Arsenic, Dissolved	ABB	4/1/2016	EPA 200.8		5.025	0.001	0.005	J 0.00161	mg/L
* Barium, Dissolved	ABB	4/1/2016	EPA 200.8		5.025	0.002	0.01	0.0727	mg/L
* Beryllium, Dissolved	ABB	4/1/2016	EPA 200.8		5.025	0.0006	0.003	U Not Detected	mg/L
* Boron, Dissolved	HRG	4/4/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Dissolved	HRG	4/7/2016	EPA 200.7		10.15	1.0	5.0	74.0	mg/L
* Cadmium, Dissolved	ABB	4/1/2016	EPA 200.8		5.025	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Dissolved	ABB	4/1/2016	EPA 200.8		5.025	0.002	0.01	U Not Detected	mg/L
* Chromium, Dissolved	ABB	4/1/2016	EPA 200.8		5.025	0.002	0.01	U Not Detected	mg/L
* Mercury, Dissolved by CVAA	MCW	4/8/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Dissolved	HRG	4/4/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Dissolved	ABB	4/1/2016	EPA 200.8		5.025	0.002	0.01	U Not Detected	mg/L
* Lead, Dissolved	ABB	4/1/2016	EPA 200.8		5.025	0.001	0.005	U Not Detected	mg/L
* Selenium, Dissolved	ABB	4/1/2016	EPA 200.8		5.025	0.002	0.01	U Not Detected	mg/L
* Thallium, Dissolved	ABB	4/1/2016	EPA 200.8		5.025	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Chloride, Dissolved	SES	4/5/2016	EPA 300.0		1	0.04	0.25	2.13	mg/L
Fluoride, Dissolved	SES	4/5/2016	EPA 300.0		1	0.01	0.3	J 0.0780	mg/L
Sulfate, Dissolved	SES	4/5/2016	EPA 300.0		1	0.3	1	67.3	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: REVISED COPY: Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Revised Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 29-Mar-16

Description: Gaston Ash Pond - MW-14 DISS

Laboratory ID Number: AW07984

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB	Rec		Prec	Limit	
			Limit	Spike					Limit	Rec			
AW08262	Mercury, Dissolved by CVAA	mg/L	0.000159	0.0005	0.004	0.00414	0.004156	0.004068	0.0034 to 0.0046	104	70 to 130	0.386	20
AW07988	Cadmium, Dissolved	mg/L	0.00000861	0.00044	0.10	0.0956	0.0944			95.6	70 to 130	1.31	20
AW07988	Chromium, Dissolved	mg/L	0.00000892	0.0044	0.10	0.0976	0.0954			97.6	70 to 130	2.28	20
AW08262	Calcium, Dissolved	mg/L	0.00163	0.22	5.00	55.3	55.4	5.16	4.25 to 5.75	70.0	70 to 130	0.181	20
AW07988	Beryllium, Dissolved	mg/L	0.0000229	0.00132	0.10	0.105	0.105			105	70 to 130	0.0781	20
AW07988	Lead, Dissolved	mg/L	0.0000126	0.0022	0.10	0.0972	0.0971			97.2	70 to 130	0.0360	20
AW07988	Molybdenum, Dissolved	mg/L	0.0000157	0.0044	0.10	0.100	0.0989			93.2	70 to 130	1.53	20
AW07988	Arsenic, Dissolved	mg/L	0.0000115	0.0022	0.10	0.0978	0.0950			97.8	70 to 130	2.88	20
AW08262	Boron, Dissolved	mg/L	0.00144	0.044	1.00	1.16	1.12	0.988	0.85 to 1.15	97.1	70 to 130	3.51	20
AW08262	Lithium, Dissolved	mg/L	-0.000114	0.022	0.200	0.140	0.170	0.216	0.17 to 0.23	70.0	70 to 130	19.4	20
AW07988	Cobalt, Dissolved	mg/L	0.0000100	0.0044	0.10	0.0946	0.0934			94.6	70 to 130	1.37	20
AW07988	Selenium, Dissolved	mg/L	0.0000253	0.0044	0.10	0.106	0.106			106	70 to 130	0.156	20
AW07988	Thallium, Dissolved	mg/L	0.0000155	0.00044	0.10	0.101	0.0996			101	70 to 130	1.04	20
AW07988	Antimony, Dissolved	mg/L	0.000141	0.00132	0.10	0.0909	0.0893			90.9	70 to 130	1.69	20
AW07988	Barium, Dissolved	mg/L	0.0000110	0.0044	0.10	0.102	0.0998			90.9	70 to 130	2.67	20

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Batch QC Summary



Revised Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 29-Mar-16

Description: Gaston Ash Pond - MW-14 DISS

Laboratory ID Number: AW07984

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW07984	Sulfate, Dissolved	mg/L	0.133	1.0	20.0	84.4	67.2	19.9	18 to 22	85.5	80 to 120	0.149	20
AW07984	Chloride, Dissolved	mg/L	0.00	0.25	10.0	12.7	2.13	10.9	9 to 11	106	80 to 120	0.0938	20
AW07984	Fluoride, Dissolved	mg/L	0.00	0.3	2.0	1.99	0.078	2.10	1.8 to 2.2	95.6	80 to 120	0.00	20

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: REVISED COPY: Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/10/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 29-Mar-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW07985

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	4/8/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	4/8/2016	EPA 200.7		1.015	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/6/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/8/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	3/30/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	4/4/2016	EPA 300.0		1	0.04	0.25	J 0.0880	mg/L
* Fluoride, Total	SES	4/4/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	4/4/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 29-Mar-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW07985

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW07985 Boron, Total	mg/L	0.00230	0.044	1.000	0.980	1.12	0.928	0.85 to 1.15	98.0	70 to 130	13.3	20	
AW07987 Barium, Total	mg/L	0.0000116	0.0044	0.10	0.101	0.100	0.0865	0.085 to 0.115	89.4	70 to 130	1.24	20	
AW07987 Antimony, Total	mg/L	0.000257	0.00132	0.10	0.0903	0.0898	0.0910	0.085 to 0.115	90.3	70 to 130	0.503	20	
AW07987 Thallium, Total	mg/L	0.0000253	0.00044	0.10	0.0968	0.0958	0.0919	0.085 to 0.115	96.2	70 to 130	1.04	20	
AW08185 Mercury, Total by CVAA	mg/L	0.00005	0.0005	0.004	0.00365	0.00365	0.00393	0.0034 to 0.0046	91.2	70 to 130	0.00	20	
AW07985 Lithium, Total	mg/L	0.000213	0.022	0.200	0.215	0.203	0.210	0.17 to 0.23	108	70 to 130	5.74	20	
AW07987 Molybdenum, Total	mg/L	0.0000207	0.0044	0.10	0.102	0.102	0.0946	0.085 to 0.115	95.5	70 to 130	0.253	20	
AW07987 Selenium, Total	mg/L	0.000120	0.0044	0.10	0.0976	0.0966	0.104	0.085 to 0.115	97.6	70 to 130	0.971	20	
AW07987 Arsenic, Total	mg/L	0.0000136	0.0022	0.10	0.0930	0.0942	0.0977	0.085 to 0.115	93.0	70 to 130	1.23	20	
AW07987 Cobalt, Total	mg/L	0.0000131	0.0044	0.10	0.0927	0.0926	0.0911	0.085 to 0.115	92.7	70 to 130	0.0562	20	
AW07987 Lead, Total	mg/L	0.0000212	0.0022	0.10	0.0951	0.0935	0.0942	0.085 to 0.115	93.8	70 to 130	1.66	20	
AW07985 Calcium, Total	mg/L	-0.00476	0.22	5.000	5.15	4.84	5.05	4.25 to 5.75	103	70 to 130	6.21	20	
AW07987 Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.0949	0.0930	0.0928	0.085 to 0.115	94.9	70 to 130	2.05	20	
AW07987 Beryllium, Total	mg/L	0.0000437	0.00132	0.10	0.0988	0.0983	0.102	0.085 to 0.115	98.8	70 to 130	0.447	20	
AW07987 Chromium, Total	mg/L	0.0000153	0.0044	0.10	0.0936	0.0958	0.0926	0.085 to 0.115	93.6	70 to 130	2.31	20	

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 29-Mar-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW07985

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW08184	Fluoride, Total	mg/L	0.00	0.3	2.0	2.36	0.037	2.12	1.8 to 2.2	116	80 to 120	5.56	20
AW08184	Sulfate, Total	mg/L	0.139	1.0	200.0	792	554	20.5	18 to 22	118	80 to 120	0.360	20
AW07987	Solids, Dissolved	mg/L	5	25			161	50.0	40 to 60			4.55	5
AW08184	Chloride, Total	mg/L	0.00	0.25	10.0	27.5	17.2	10.7	9 to 11	103	80 to 120	0.00	20

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Expiration: June 30, 2018

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CC:

Reported: 7/10/2017
 Version: 2.0

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 29-Mar-16

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AW07986

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	J 0.00887	mg/L
* Beryllium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	4/8/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	4/8/2016	EPA 200.7		1.015	0.1	0.5	34.2	mg/L
* Cadmium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/6/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/8/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	J 0.00274	mg/L
* Lead, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	3/30/2016	SM 2540C		1		25	138	mg/L
* Chloride, Total	SES	4/4/2016	EPA 300.0		1	0.04	0.25	1.73	mg/L
* Fluoride, Total	SES	4/4/2016	EPA 300.0		1	0.01	0.3	J 0.0280	mg/L
* Sulfate, Total	SES	4/4/2016	EPA 300.0		1	0.3	1	2.09	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 29-Mar-16

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AW07986

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW07987 Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.0949	0.0930	0.0928	0.085 to 0.115	94.9	70 to 130	2.05	20	
AW07987 Barium, Total	mg/L	0.0000116	0.0044	0.10	0.101	0.100	0.0865	0.085 to 0.115	89.4	70 to 130	1.24	20	
AW08250 Calcium, Total	mg/L	-0.00606	0.22	5.00	99.7	100	5.03	4.25 to 5.75	66.0	70 to 130	4.37	20	
AW08250 Lithium, Total	mg/L	0.000180	0.022	0.200	0.229	0.249	0.209	0.17 to 0.23	114	70 to 130	8.37	20	
AW07987 Arsenic, Total	mg/L	0.0000136	0.0022	0.10	0.0930	0.0942	0.0977	0.085 to 0.115	93.0	70 to 130	1.23	20	
AW07987 Cobalt, Total	mg/L	0.0000131	0.0044	0.10	0.0927	0.0926	0.0911	0.085 to 0.115	92.7	70 to 130	0.0562	20	
AW07987 Lead, Total	mg/L	0.0000212	0.0022	0.10	0.0951	0.0935	0.0942	0.085 to 0.115	93.8	70 to 130	1.66	20	
AW07987 Antimony, Total	mg/L	0.000257	0.00132	0.10	0.0903	0.0898	0.0910	0.085 to 0.115	90.3	70 to 130	0.503	20	
AW07987 Thallium, Total	mg/L	0.0000253	0.00044	0.10	0.0968	0.0958	0.0919	0.085 to 0.115	96.2	70 to 130	1.04	20	
AW08185 Mercury, Total by CVAA	mg/L	0.00005	0.0005	0.004	0.00365	0.00365	0.00393	0.0034 to 0.0046	91.2	70 to 130	0.00	20	
AW07987 Beryllium, Total	mg/L	0.0000437	0.00132	0.10	0.0988	0.0983	0.102	0.085 to 0.115	98.8	70 to 130	0.447	20	
AW07987 Chromium, Total	mg/L	0.0000153	0.0044	0.10	0.0936	0.0958	0.0926	0.085 to 0.115	93.6	70 to 130	2.31	20	
AW07987 Molybdenum, Total	mg/L	0.0000207	0.0044	0.10	0.102	0.102	0.0946	0.085 to 0.115	95.5	70 to 130	0.253	20	
AW07987 Selenium, Total	mg/L	0.000120	0.0044	0.10	0.0976	0.0966	0.104	0.085 to 0.115	97.6	70 to 130	0.971	20	
AW08250 Boron, Total	mg/L	0.00278	0.044	1.000	2.85	2.62	0.925	0.85 to 1.15	100	70 to 130	8.41	20	

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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 29-Mar-16

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AW07986

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW08184	Fluoride, Total	mg/L	0.00	0.3	2.0	2.36		0.037	2.12	1.8 to 2.2	116	80 to 120	5.56	20
AW08184	Sulfate, Total	mg/L	0.139	1.0	200.0	792		554	20.5	18 to 22	118	80 to 120	0.360	20
AW07987	Solids, Dissolved	mg/L	5	25				161	50.0	40 to 60			4.55	5
AW08184	Chloride, Total	mg/L	0.00	0.25	10.0	27.5		17.2	10.7	9 to 11	103	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 29-Mar-16

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AW07987

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	0.0116	mg/L
* Beryllium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	4/8/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	4/8/2016	EPA 200.7		1.015	0.1	0.5	31.6	mg/L
* Cadmium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/6/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/8/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	J 0.00652	mg/L
* Lead, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	J 0.00128	mg/L
* Selenium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	J 0.000648	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	3/30/2016	SM 2540C		1		25	147	mg/L
* Chloride, Total	SES	4/4/2016	EPA 300.0		1	0.04	0.25	2.48	mg/L
* Fluoride, Total	SES	4/4/2016	EPA 300.0		1	0.01	0.3	J 0.0320	mg/L
* Sulfate, Total	SES	4/4/2016	EPA 300.0		1	0.3	1	7.57	mg/L

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 29-Mar-16

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AW07987

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW07987 Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.0949	0.0930	0.0928	0.085 to 0.115	94.9	70 to 130	2.05	20	
AW07987 Barium, Total	mg/L	0.0000116	0.0044	0.10	0.101	0.100	0.0865	0.085 to 0.115	89.4	70 to 130	1.24	20	
AW08250 Calcium, Total	mg/L	-0.00606	0.22	5.00	99.7	100	5.03	4.25 to 5.75	66.0	70 to 130	4.37	20	
AW08250 Lithium, Total	mg/L	0.000180	0.022	0.200	0.229	0.249	0.209	0.17 to 0.23	114	70 to 130	8.37	20	
AW07987 Molybdenum, Total	mg/L	0.0000207	0.0044	0.10	0.102	0.102	0.0946	0.085 to 0.115	95.5	70 to 130	0.253	20	
AW07987 Selenium, Total	mg/L	0.000120	0.0044	0.10	0.0976	0.0966	0.104	0.085 to 0.115	97.6	70 to 130	0.971	20	
AW08250 Boron, Total	mg/L	0.00278	0.044	1.000	2.85	2.62	0.925	0.85 to 1.15	100	70 to 130	8.41	20	
AW07987 Beryllium, Total	mg/L	0.0000437	0.00132	0.10	0.0988	0.0983	0.102	0.085 to 0.115	98.8	70 to 130	0.447	20	
AW07987 Chromium, Total	mg/L	0.0000153	0.0044	0.10	0.0936	0.0958	0.0926	0.085 to 0.115	93.6	70 to 130	2.31	20	
AW07987 Antimony, Total	mg/L	0.000257	0.00132	0.10	0.0903	0.0898	0.0910	0.085 to 0.115	90.3	70 to 130	0.503	20	
AW07987 Thallium, Total	mg/L	0.0000253	0.00044	0.10	0.0968	0.0958	0.0919	0.085 to 0.115	96.2	70 to 130	1.04	20	
AW08185 Mercury, Total by CVAA	mg/L	0.00005	0.0005	0.004	0.00365	0.00365	0.00393	0.0034 to 0.0046	91.2	70 to 130	0.00	20	
AW07987 Arsenic, Total	mg/L	0.0000136	0.0022	0.10	0.0930	0.0942	0.0977	0.085 to 0.115	93.0	70 to 130	1.23	20	
AW07987 Cobalt, Total	mg/L	0.0000131	0.0044	0.10	0.0927	0.0926	0.0911	0.085 to 0.115	92.7	70 to 130	0.0562	20	
AW07987 Lead, Total	mg/L	0.0000212	0.0022	0.10	0.0951	0.0935	0.0942	0.085 to 0.115	93.8	70 to 130	1.66	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 29-Mar-16

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AW07987

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW08184	Fluoride, Total	mg/L	0.00	0.3	2.0	2.36	0.037	2.12	1.8 to 2.2	116	80 to 120	5.56	20
AW08184	Sulfate, Total	mg/L	0.139	1.0	200.0	792	554	20.5	18 to 22	118	80 to 120	0.360	20
AW07987	Solids, Dissolved	mg/L	5	25			161	50.0	40 to 60			4.55	5
AW08184	Chloride, Total	mg/L	0.00	0.25	10.0	27.5	17.2	10.7	9 to 11	103	80 to 120	0.00	20

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/10/2017
 Version: 2.0

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**

Revised Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 29-Mar-16

Description: Gaston Ash Pond - MW-3 DISS

Laboratory ID Number: AW07988

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Dissolved	ABB	4/1/2016	EPA 200.8		5.025	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Dissolved	ABB	4/1/2016	EPA 200.8		5.025	0.001	0.005	U Not Detected	mg/L
* Barium, Dissolved	ABB	4/1/2016	EPA 200.8		5.025	0.002	0.01	0.0111	mg/L
* Beryllium, Dissolved	ABB	4/1/2016	EPA 200.8		5.025	0.0006	0.003	U Not Detected	mg/L
* Boron, Dissolved	HRG	4/4/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Dissolved	HRG	4/4/2016	EPA 200.7		1.015	0.10	0.5	30.2	mg/L
* Cadmium, Dissolved	ABB	4/1/2016	EPA 200.8		5.025	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Dissolved	ABB	4/1/2016	EPA 200.8		5.025	0.002	0.01	U Not Detected	mg/L
* Chromium, Dissolved	ABB	4/1/2016	EPA 200.8		5.025	0.002	0.01	U Not Detected	mg/L
* Mercury, Dissolved by CVAA	MCW	4/8/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Dissolved	HRG	4/4/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Dissolved	ABB	4/1/2016	EPA 200.8		5.025	0.002	0.01	J 0.00676	mg/L
* Lead, Dissolved	ABB	4/1/2016	EPA 200.8		5.025	0.001	0.005	U Not Detected	mg/L
* Selenium, Dissolved	ABB	4/1/2016	EPA 200.8		5.025	0.002	0.01	U Not Detected	mg/L
* Thallium, Dissolved	ABB	4/1/2016	EPA 200.8		5.025	0.0002	0.001	J 0.000298	mg/L
General Characteristics									
* Chloride, Dissolved	SES	4/5/2016	EPA 300.0		1	0.04	0.25	2.47	mg/L
Fluoride, Dissolved	SES	4/5/2016	EPA 300.0		1	0.01	0.3	J 0.0300	mg/L
Sulfate, Dissolved	SES	4/5/2016	EPA 300.0		1	0.3	1	7.52	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: REVISED COPY: Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Revised Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 29-Mar-16

Description: Gaston Ash Pond - MW-3 DISS

Laboratory ID Number: AW07988

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW08262	Mercury, Dissolved by CVAA	mg/L	0.000159	0.0005	0.004	0.00414	0.004156	0.004068	0.0034 to 0.0046	104	70 to 130	0.386	20
AW07988	Cobalt, Dissolved	mg/L	0.0000100	0.0044	0.10	0.0946	0.0934			94.6	70 to 130	1.37	20
AW07988	Selenium, Dissolved	mg/L	0.0000253	0.0044	0.10	0.106	0.106			106	70 to 130	0.156	20
AW07988	Thallium, Dissolved	mg/L	0.0000155	0.00044	0.10	0.101	0.0996			101	70 to 130	1.04	20
AW07988	Antimony, Dissolved	mg/L	0.000141	0.00132	0.10	0.0909	0.0893			90.9	70 to 130	1.69	20
AW07988	Barium, Dissolved	mg/L	0.0000110	0.0044	0.10	0.102	0.0998			90.9	70 to 130	2.67	20
AW07988	Beryllium, Dissolved	mg/L	0.0000229	0.00132	0.10	0.105	0.105			105	70 to 130	0.0781	20
AW07988	Lead, Dissolved	mg/L	0.0000126	0.0022	0.10	0.0972	0.0971			97.2	70 to 130	0.0360	20
AW07988	Molybdenum, Dissolved	mg/L	0.0000157	0.0044	0.10	0.100	0.0989			93.2	70 to 130	1.53	20
AW07988	Cadmium, Dissolved	mg/L	0.00000861	0.00044	0.10	0.0956	0.0944			95.6	70 to 130	1.31	20
AW07988	Chromium, Dissolved	mg/L	0.00000892	0.0044	0.10	0.0976	0.0954			97.6	70 to 130	2.28	20
AW08262	Calcium, Dissolved	mg/L	0.00163	0.22	5.00	55.3	55.4	5.16	4.25 to 5.75	70.0	70 to 130	0.181	20
AW07988	Arsenic, Dissolved	mg/L	0.0000115	0.0022	0.10	0.0978	0.0950			97.8	70 to 130	2.88	20
AW08262	Boron, Dissolved	mg/L	0.00144	0.044	1.00	1.16	1.12	0.988	0.85 to 1.15	97.1	70 to 130	3.51	20
AW08262	Lithium, Dissolved	mg/L	-0.000114	0.022	0.200	0.140	0.170	0.216	0.17 to 0.23	70.0	70 to 130	19.4	20

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Batch QC Summary



Revised Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 29-Mar-16

Description: Gaston Ash Pond - MW-3 DISS

Laboratory ID Number: AW07988

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW07984	Sulfate, Dissolved	mg/L	0.133	1.0	20.0	84.4	67.2	19.9	18 to 22	85.5	80 to 120	0.149	20	
AW07984	Chloride, Dissolved	mg/L	0.00	0.25	10.0	12.7	2.13	10.9	9 to 11	106	80 to 120	0.0938	20	
AW07984	Fluoride, Dissolved	mg/L	0.00	0.3	2.0	1.99	0.078	2.10	1.8 to 2.2	95.6	80 to 120	0.00	20	

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CC:

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Certificate Of Analysis  **Alabama Power**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 30-Mar-16

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AW08181

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	J 0.000838	mg/L
* Arsenic, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	J 0.00385	mg/L
* Barium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	0.0310	mg/L
* Beryllium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	4/8/2016	EPA 200.7		1.015	0.02	0.1	1.32	mg/L
* Calcium, Total	HRG	4/13/2016	EPA 200.7		10.15	1.0	5.0	43.2	mg/L
* Cadmium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/6/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/8/2016	EPA 200.7		1.015	0.01	0.05	0.0774	mg/L
* Molybdenum, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	0.288	mg/L
* Lead, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/1/2016	SM 2540C		1		25	277	mg/L
* Chloride, Total	SES	4/4/2016	EPA 300.0		1	0.04	0.25	10.8	mg/L
* Fluoride, Total	SES	4/4/2016	EPA 300.0		1	0.01	0.3	J 0.118	mg/L
* Sulfate, Total	SES	4/5/2016	EPA 300.0		5	1.5	5	146	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. The result for Cd has been corrected to Not Detected. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 30-Mar-16

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AW08181

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW08185 Mercury, Total by CVAA	mg/L	0.00005	0.0005	0.004	0.00365	0.00365	0.00393	0.0034 to 0.0046	91.2	70 to 130	0.00	20	
AW08187 Arsenic, Total	mg/L	0.0000278	0.0022	0.10	0.105	0.106	0.0945	0.085 to 0.115	101	70 to 130	1.01	20	
AW08187 Selenium, Total	mg/L	0.0000849	0.0044	0.10	0.106	0.108	0.100	0.085 to 0.115	106	70 to 130	1.96	20	
AW08250 Boron, Total	mg/L	0.00278	0.044	1.000	2.85	2.62	0.925	0.85 to 1.15	100	70 to 130	8.41	20	
AW08187 Antimony, Total	mg/L	0.000258	0.00132	0.10	0.0951	0.0967	0.0903	0.085 to 0.115	94.0	70 to 130	1.65	20	
AW08187 Beryllium, Total	mg/L	0.0000594	0.00132	0.10	0.104	0.110	0.107	0.085 to 0.115	104	70 to 130	5.17	20	
AW08187 Molybdenum, Total	mg/L	0.0000413	0.0044	0.10	0.143	0.149	0.0963	0.085 to 0.115	96.7	70 to 130	3.71	20	
AW08187 Barium, Total	mg/L	0.0000981	0.0044	0.10	0.112	0.113	0.0907	0.085 to 0.115	95.0	70 to 130	1.28	20	
AW08187 Lead, Total	mg/L	0.0000323	0.0022	0.10	0.0986	0.104	0.101	0.085 to 0.115	98.6	70 to 130	5.72	20	
AW08187 Thallium, Total	mg/L	0.0000349	0.00044	0.10	0.101	0.106	0.0983	0.085 to 0.115	101	70 to 130	4.15	20	
AW08187 Cadmium, Total	mg/L	0.0000164	0.00044	0.10	0.101	0.101	0.0966	0.085 to 0.115	101	70 to 130	0.0875	20	
AW08187 Chromium, Total	mg/L	0.000250	0.0044	0.10	0.105	0.106	0.0973	0.085 to 0.115	103	70 to 130	1.55	20	
AW08187 Cobalt, Total	mg/L	0.0000186	0.0044	0.10	0.0990	0.101	0.0970	0.085 to 0.115	99.0	70 to 130	2.38	20	
AW08250 Calcium, Total	mg/L	-0.00606	0.22	5.00	99.7	100	5.03	4.25 to 5.75	66.0	70 to 130	4.37	20	
AW08250 Lithium, Total	mg/L	0.000180	0.022	0.200	0.229	0.249	0.209	0.17 to 0.23	114	70 to 130	8.37	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. The result for Cd has been corrected to Not Detected. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 30-Mar-16

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AW08181

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW08184	Fluoride, Total	mg/L	0.00	0.3	2.0	2.36	0.037	2.12	1.8 to 2.2	116	80 to 120	5.56	20
AW08184	Sulfate, Total	mg/L	0.139	1.0	200.0	792	554	20.5	18 to 22	118	80 to 120	0.360	20
AW08184	Chloride, Total	mg/L	0.00	0.25	10.0	27.5	17.2	10.7	9 to 11	103	80 to 120	0.00	20
AW08183	Solids, Dissolved	mg/L	13	25			457	52.0	40 to 60			0.661	5

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Expiration: June 30, 2018

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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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 30-Mar-16

Description: Gaston Ash Pond - MW-16 DUP

Laboratory ID Number: AW08182

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	J 0.00364	mg/L
* Barium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	0.0304	mg/L
* Beryllium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	4/8/2016	EPA 200.7		1.015	0.02	0.1	1.32	mg/L
* Calcium, Total	HRG	4/13/2016	EPA 200.7		10.15	1.0	5.0	42.6	mg/L
* Cadmium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/6/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/8/2016	EPA 200.7		1.015	0.01	0.05	0.0775	mg/L
* Molybdenum, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	0.293	mg/L
* Lead, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/1/2016	SM 2540C		1		25	271	mg/L
* Chloride, Total	SES	4/4/2016	EPA 300.0		1	0.04	0.25	10.8	mg/L
* Fluoride, Total	SES	4/4/2016	EPA 300.0		1	0.01	0.3	J 0.118	mg/L
* Sulfate, Total	SES	4/5/2016	EPA 300.0		5	1.5	5	145	mg/L

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Expiration: June 30, 2018

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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 30-Mar-16

Description: Gaston Ash Pond - MW-16 DUP

Laboratory ID Number: AW08182

Sample Analysis	Units	MB	MB				LFB			Rec		Prec
			Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AW08187 Arsenic, Total	mg/L	0.0000278	0.0022	0.10	0.105	0.106	0.0945	0.085 to 0.115	101	70 to 130	1.01	20
AW08185 Mercury, Total by CVAA	mg/L	0.00005	0.0005	0.004	0.00365	0.00365	0.00393	0.0034 to 0.0046	91.2	70 to 130	0.00	20
AW08187 Selenium, Total	mg/L	0.0000849	0.0044	0.10	0.106	0.108	0.100	0.085 to 0.115	106	70 to 130	1.96	20
AW08250 Boron, Total	mg/L	0.00278	0.044	1.000	2.85	2.62	0.925	0.85 to 1.15	100	70 to 130	8.41	20
AW08187 Cadmium, Total	mg/L	0.0000164	0.00044	0.10	0.101	0.101	0.0966	0.085 to 0.115	101	70 to 130	0.0875	20
AW08187 Chromium, Total	mg/L	0.000250	0.0044	0.10	0.105	0.106	0.0973	0.085 to 0.115	103	70 to 130	1.55	20
AW08187 Cobalt, Total	mg/L	0.0000186	0.0044	0.10	0.0990	0.101	0.0970	0.085 to 0.115	99.0	70 to 130	2.38	20
AW08250 Calcium, Total	mg/L	-0.00606	0.22	5.00	99.7	100	5.03	4.25 to 5.75	66.0	70 to 130	4.37	20
AW08250 Lithium, Total	mg/L	0.000180	0.022	0.200	0.229	0.249	0.209	0.17 to 0.23	114	70 to 130	8.37	20
AW08187 Barium, Total	mg/L	0.0000981	0.0044	0.10	0.112	0.113	0.0907	0.085 to 0.115	95.0	70 to 130	1.28	20
AW08187 Lead, Total	mg/L	0.0000323	0.0022	0.10	0.0986	0.104	0.101	0.085 to 0.115	98.6	70 to 130	5.72	20
AW08187 Thallium, Total	mg/L	0.0000349	0.00044	0.10	0.101	0.106	0.0983	0.085 to 0.115	101	70 to 130	4.15	20
AW08187 Antimony, Total	mg/L	0.000258	0.00132	0.10	0.0951	0.0967	0.0903	0.085 to 0.115	94.0	70 to 130	1.65	20
AW08187 Beryllium, Total	mg/L	0.0000594	0.00132	0.10	0.104	0.110	0.107	0.085 to 0.115	104	70 to 130	5.17	20
AW08187 Molybdenum, Total	mg/L	0.0000413	0.0044	0.10	0.143	0.149	0.0963	0.085 to 0.115	96.7	70 to 130	3.71	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 30-Mar-16

Description: Gaston Ash Pond - MW-16 DUP

Laboratory ID Number: AW08182

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW08184	Sulfate, Total	mg/L	0.139	1.0	200.0	792	554	20.5	18 to 22	118	80 to 120	0.360	20
AW08184	Fluoride, Total	mg/L	0.00	0.3	2.0	2.36	0.037	2.12	1.8 to 2.2	116	80 to 120	5.56	20
AW08183	Solids, Dissolved	mg/L	13	25			457	52.0	40 to 60			0.661	5
AW08184	Chloride, Total	mg/L	0.00	0.25	10.0	27.5	17.2	10.7	9 to 11	103	80 to 120	0.00	20

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/10/2017
 Version: 2.0

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 30-Mar-16

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AW08183

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	J 0.00107	mg/L
* Arsenic, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	0.0125	mg/L
* Barium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	0.0849	mg/L
* Beryllium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	4/8/2016	EPA 200.7		1.015	0.02	0.1	3.04	mg/L
* Calcium, Total	HRG	4/13/2016	EPA 200.7		10.15	1.0	5.0	77.4	mg/L
* Cadmium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	J 0.000357	mg/L
* Cobalt, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/6/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/8/2016	EPA 200.7		1.015	0.01	0.05	0.646	mg/L
* Molybdenum, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	2.19	mg/L
* Lead, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/1/2016	SM 2540C		1		25	451	mg/L
* Chloride, Total	SES	4/4/2016	EPA 300.0		1	0.04	0.25	14.7	mg/L
* Fluoride, Total	SES	4/4/2016	EPA 300.0		1	0.01	0.3	J 0.221	mg/L
* Sulfate, Total	SES	4/5/2016	EPA 300.0		5	1.5	5	254	mg/L

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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 30-Mar-16

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AW08183

Sample Analysis	Units	MB	MB				LFB			Rec		Prec
			Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AW08187 Arsenic, Total	mg/L	0.0000278	0.0022	0.10	0.105	0.106	0.0945	0.085 to 0.115	101	70 to 130	1.01	20
AW08185 Mercury, Total by CVAA	mg/L	0.00005	0.0005	0.004	0.00365	0.00365	0.00393	0.0034 to 0.0046	91.2	70 to 130	0.00	20
AW08187 Selenium, Total	mg/L	0.0000849	0.0044	0.10	0.106	0.108	0.100	0.085 to 0.115	106	70 to 130	1.96	20
AW08250 Boron, Total	mg/L	0.00278	0.044	1.000	2.85	2.62	0.925	0.85 to 1.15	100	70 to 130	8.41	20
AW08187 Barium, Total	mg/L	0.0000981	0.0044	0.10	0.112	0.113	0.0907	0.085 to 0.115	95.0	70 to 130	1.28	20
AW08187 Lead, Total	mg/L	0.0000323	0.0022	0.10	0.0986	0.104	0.101	0.085 to 0.115	98.6	70 to 130	5.72	20
AW08187 Thallium, Total	mg/L	0.0000349	0.00044	0.10	0.101	0.106	0.0983	0.085 to 0.115	101	70 to 130	4.15	20
AW08187 Cadmium, Total	mg/L	0.0000164	0.00044	0.10	0.101	0.101	0.0966	0.085 to 0.115	101	70 to 130	0.0875	20
AW08187 Chromium, Total	mg/L	0.000250	0.0044	0.10	0.105	0.106	0.0973	0.085 to 0.115	103	70 to 130	1.55	20
AW08187 Cobalt, Total	mg/L	0.0000186	0.0044	0.10	0.0990	0.101	0.0970	0.085 to 0.115	99.0	70 to 130	2.38	20
AW08250 Calcium, Total	mg/L	-0.00606	0.22	5.00	99.7	100	5.03	4.25 to 5.75	66.0	70 to 130	4.37	20
AW08250 Lithium, Total	mg/L	0.000180	0.022	0.200	0.229	0.249	0.209	0.17 to 0.23	114	70 to 130	8.37	20
AW08187 Antimony, Total	mg/L	0.000258	0.00132	0.10	0.0951	0.0967	0.0903	0.085 to 0.115	94.0	70 to 130	1.65	20
AW08187 Beryllium, Total	mg/L	0.0000594	0.00132	0.10	0.104	0.110	0.107	0.085 to 0.115	104	70 to 130	5.17	20
AW08187 Molybdenum, Total	mg/L	0.0000413	0.0044	0.10	0.143	0.149	0.0963	0.085 to 0.115	96.7	70 to 130	3.71	20

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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 30-Mar-16

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AW08183

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW08184	Chloride, Total	mg/L	0.00	0.25	10.0	27.5	17.2	10.7	9 to 11	103	80 to 120	0.00	20
AW08184	Fluoride, Total	mg/L	0.00	0.3	2.0	2.36	0.037	2.12	1.8 to 2.2	116	80 to 120	5.56	20
AW08184	Sulfate, Total	mg/L	0.139	1.0	200.0	792	554	20.5	18 to 22	118	80 to 120	0.360	20
AW08183	Solids, Dissolved	mg/L	13	25			457	52.0	40 to 60			0.661	5

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 30-Mar-16

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AW08184

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	J 0.00424	mg/L
* Barium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	0.0691	mg/L
* Beryllium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	4/8/2016	EPA 200.7		1.015	0.02	0.1	3.48	mg/L
* Calcium, Total	HRG	4/13/2016	EPA 200.7		10.15	1.0	5.0	163	mg/L
* Cadmium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/6/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/8/2016	EPA 200.7		1.015	0.01	0.05	0.118	mg/L
* Molybdenum, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	0.637	mg/L
* Lead, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/1/2016	SM 2540C		1		50	862	mg/L
* Chloride, Total	SES	4/4/2016	EPA 300.0		1	0.04	0.25	17.2	mg/L
* Fluoride, Total	SES	4/4/2016	EPA 300.0		1	0.01	0.3	J 0.0350	mg/L
* Sulfate, Total	SES	4/5/2016	EPA 300.0		10	3.0	10	556	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: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 30-Mar-16

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AW08184

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW08185 Mercury, Total by CVAA	mg/L	0.00005	0.0005	0.004	0.00365	0.00365	0.00393	0.0034 to 0.0046	91.2	70 to 130	0.00	20	
AW08187 Arsenic, Total	mg/L	0.0000278	0.0022	0.10	0.105	0.106	0.0945	0.085 to 0.115	101	70 to 130	1.01	20	
AW08187 Antimony, Total	mg/L	0.000258	0.00132	0.10	0.0951	0.0967	0.0903	0.085 to 0.115	94.0	70 to 130	1.65	20	
AW08187 Beryllium, Total	mg/L	0.0000594	0.00132	0.10	0.104	0.110	0.107	0.085 to 0.115	104	70 to 130	5.17	20	
AW08187 Molybdenum, Total	mg/L	0.0000413	0.0044	0.10	0.143	0.149	0.0963	0.085 to 0.115	96.7	70 to 130	3.71	20	
AW08187 Cadmium, Total	mg/L	0.0000164	0.00044	0.10	0.101	0.101	0.0966	0.085 to 0.115	101	70 to 130	0.0875	20	
AW08187 Chromium, Total	mg/L	0.000250	0.0044	0.10	0.105	0.106	0.0973	0.085 to 0.115	103	70 to 130	1.55	20	
AW08187 Cobalt, Total	mg/L	0.0000186	0.0044	0.10	0.0990	0.101	0.0970	0.085 to 0.115	99.0	70 to 130	2.38	20	
AW08250 Calcium, Total	mg/L	-0.00606	0.22	5.00	99.7	100	5.03	4.25 to 5.75	66.0	70 to 130	4.37	20	
AW08250 Lithium, Total	mg/L	0.000180	0.022	0.200	0.229	0.249	0.209	0.17 to 0.23	114	70 to 130	8.37	20	
AW08187 Selenium, Total	mg/L	0.0000849	0.0044	0.10	0.106	0.108	0.100	0.085 to 0.115	106	70 to 130	1.96	20	
AW08250 Boron, Total	mg/L	0.00278	0.044	1.000	2.85	2.62	0.925	0.85 to 1.15	100	70 to 130	8.41	20	
AW08187 Barium, Total	mg/L	0.0000981	0.0044	0.10	0.112	0.113	0.0907	0.085 to 0.115	95.0	70 to 130	1.28	20	
AW08187 Lead, Total	mg/L	0.0000323	0.0022	0.10	0.0986	0.104	0.101	0.085 to 0.115	98.6	70 to 130	5.72	20	
AW08187 Thallium, Total	mg/L	0.0000349	0.00044	0.10	0.101	0.106	0.0983	0.085 to 0.115	101	70 to 130	4.15	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 30-Mar-16

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AW08184

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW08183	Solids, Dissolved	mg/L	13	25				457	52.0	40 to 60			0.661	5
AW08184	Chloride, Total	mg/L	0.00	0.25	10.0	27.5		17.2	10.7	9 to 11	103	80 to 120	0.00	20
AW08184	Fluoride, Total	mg/L	0.00	0.3	2.0	2.36		0.037	2.12	1.8 to 2.2	116	80 to 120	5.56	20
AW08184	Sulfate, Total	mg/L	0.139	1.0	200.0	792		554	20.5	18 to 22	118	80 to 120	0.360	20

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 30-Mar-16

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AW08185

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	J 0.00273	mg/L
* Barium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	0.0435	mg/L
* Beryllium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	4/8/2016	EPA 200.7		1.015	0.02	0.1	1.33	mg/L
* Calcium, Total	HRG	4/13/2016	EPA 200.7		10.15	1.0	5.0	104	mg/L
* Cadmium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/6/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/8/2016	EPA 200.7		1.015	0.01	0.05	J 0.0396	mg/L
* Molybdenum, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	0.0170	mg/L
* Lead, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	J 0.000428	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/1/2016	SM 2540C		1		50	560	mg/L
* Chloride, Total	SES	4/5/2016	EPA 300.0		1	0.04	0.25	11.1	mg/L
* Fluoride, Total	SES	4/5/2016	EPA 300.0		1	0.01	0.3	J 0.0400	mg/L
* Sulfate, Total	SES	4/5/2016	EPA 300.0		5	1.5	5	163	mg/L

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 30-Mar-16

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AW08185

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW08185 Mercury, Total by CVAA	mg/L	0.00005	0.0005	0.004	0.00365	0.00365	0.00393	0.0034 to 0.0046	91.2	70 to 130	0.00	20	
AW08187 Arsenic, Total	mg/L	0.0000278	0.0022	0.10	0.105	0.106	0.0945	0.085 to 0.115	101	70 to 130	1.01	20	
AW08187 Barium, Total	mg/L	0.0000981	0.0044	0.10	0.112	0.113	0.0907	0.085 to 0.115	95.0	70 to 130	1.28	20	
AW08187 Lead, Total	mg/L	0.0000323	0.0022	0.10	0.0986	0.104	0.101	0.085 to 0.115	98.6	70 to 130	5.72	20	
AW08187 Thallium, Total	mg/L	0.0000349	0.00044	0.10	0.101	0.106	0.0983	0.085 to 0.115	101	70 to 130	4.15	20	
AW08187 Cadmium, Total	mg/L	0.0000164	0.00044	0.10	0.101	0.101	0.0966	0.085 to 0.115	101	70 to 130	0.0875	20	
AW08187 Chromium, Total	mg/L	0.000250	0.0044	0.10	0.105	0.106	0.0973	0.085 to 0.115	103	70 to 130	1.55	20	
AW08187 Cobalt, Total	mg/L	0.0000186	0.0044	0.10	0.0990	0.101	0.0970	0.085 to 0.115	99.0	70 to 130	2.38	20	
AW08250 Calcium, Total	mg/L	-0.00606	0.22	5.00	99.7	100	5.03	4.25 to 5.75	66.0	70 to 130	4.37	20	
AW08250 Lithium, Total	mg/L	0.000180	0.022	0.200	0.229	0.249	0.209	0.17 to 0.23	114	70 to 130	8.37	20	
AW08187 Selenium, Total	mg/L	0.0000849	0.0044	0.10	0.106	0.108	0.100	0.085 to 0.115	106	70 to 130	1.96	20	
AW08250 Boron, Total	mg/L	0.00278	0.044	1.000	2.85	2.62	0.925	0.85 to 1.15	100	70 to 130	8.41	20	
AW08187 Antimony, Total	mg/L	0.000258	0.00132	0.10	0.0951	0.0967	0.0903	0.085 to 0.115	94.0	70 to 130	1.65	20	
AW08187 Beryllium, Total	mg/L	0.0000594	0.00132	0.10	0.104	0.110	0.107	0.085 to 0.115	104	70 to 130	5.17	20	
AW08187 Molybdenum, Total	mg/L	0.0000413	0.0044	0.10	0.143	0.149	0.0963	0.085 to 0.115	96.7	70 to 130	3.71	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 30-Mar-16

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AW08185

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW08257	Fluoride, Total	mg/L	0.00	0.3	2.0	2.14	0.050	2.12	1.8 to 2.2	104	80 to 120	3.92	20
AW08257	Sulfate, Total	mg/L	0.133	1.0	20.0	30.0	9.89	20.1	18 to 22	100	80 to 120	0.202	20
AW08183	Solids, Dissolved	mg/L	13	25			457	52.0	40 to 60			0.661	5
AW08257	Chloride, Total	mg/L	0.00	0.25	10.0	15.3	4.59	10.8	9 to 11	107	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/10/2017
 Version: 2.0

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPEB
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 30-Mar-16

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AW08186

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	4/8/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	4/8/2016	EPA 200.7		1.015	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/8/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/8/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/1/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	4/5/2016	EPA 300.0		1	0.04	0.25	J 0.0880	mg/L
* Fluoride, Total	SES	4/5/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	4/5/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected.
 The result for TDS has been changed to Not Detected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPEB
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 30-Mar-16

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AW08186

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	Spike				Limit	Rec	Limit	Prec			
AW08187 Arsenic, Total	mg/L	0.0000278	0.0022	0.10	0.105	0.106	0.0945	0.085 to 0.115		101	70 to 130		1.01	20
AW08258 Mercury, Total by CVAA	mg/L	0.000147	0.0005	0.004	0.004159	0.004159	0.004114	0.0034 to 0.0046		104	70 to 130		0.00	20
AW08187 Selenium, Total	mg/L	0.0000849	0.0044	0.10	0.106	0.108	0.100	0.085 to 0.115		106	70 to 130		1.96	20
AW08250 Boron, Total	mg/L	0.00278	0.044	1.000	2.85	2.62	0.925	0.85 to 1.15		100	70 to 130		8.41	20
AW08187 Antimony, Total	mg/L	0.000258	0.00132	0.10	0.0951	0.0967	0.0903	0.085 to 0.115		94.0	70 to 130		1.65	20
AW08187 Beryllium, Total	mg/L	0.0000594	0.00132	0.10	0.104	0.110	0.107	0.085 to 0.115		104	70 to 130		5.17	20
AW08187 Molybdenum, Total	mg/L	0.0000413	0.0044	0.10	0.143	0.149	0.0963	0.085 to 0.115		96.7	70 to 130		3.71	20
AW08187 Cadmium, Total	mg/L	0.0000164	0.00044	0.10	0.101	0.101	0.0966	0.085 to 0.115		101	70 to 130		0.0875	20
AW08187 Chromium, Total	mg/L	0.000250	0.0044	0.10	0.105	0.106	0.0973	0.085 to 0.115		103	70 to 130		1.55	20
AW08187 Cobalt, Total	mg/L	0.0000186	0.0044	0.10	0.0990	0.101	0.0970	0.085 to 0.115		99.0	70 to 130		2.38	20
AW08250 Calcium, Total	mg/L	-0.00606	0.22	5.00	99.7	100	5.03	4.25 to 5.75		66.0	70 to 130		4.37	20
AW08250 Lithium, Total	mg/L	0.000180	0.022	0.200	0.229	0.249	0.209	0.17 to 0.23		114	70 to 130		8.37	20
AW08187 Barium, Total	mg/L	0.0000981	0.0044	0.10	0.112	0.113	0.0907	0.085 to 0.115		95.0	70 to 130		1.28	20
AW08187 Lead, Total	mg/L	0.0000323	0.0022	0.10	0.0986	0.104	0.101	0.085 to 0.115		98.6	70 to 130		5.72	20
AW08187 Thallium, Total	mg/L	0.0000349	0.00044	0.10	0.101	0.106	0.0983	0.085 to 0.115		101	70 to 130		4.15	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected.
 The result for TDS has been changed to Not Detected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Reported: 7/10/2017
 Version: 2.0

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPEB
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 30-Mar-16

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AW08186

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW08257	Fluoride, Total	mg/L	0.00	0.3	2.0	2.14	0.050	2.12	1.8 to 2.2	104	80 to 120	3.92	20
AW08257	Chloride, Total	mg/L	0.00	0.25	10.0	15.3	4.59	10.8	9 to 11	107	80 to 120	0.00	20
AW08257	Sulfate, Total	mg/L	0.133	1.0	20.0	30.0	9.89	20.1	18 to 22	100	80 to 120	0.202	20
AW08183	Solids, Dissolved	mg/L	13	25			457	52.0	40 to 60			0.661	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, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected.
 The result for TDS has been changed to Not Detected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/10/2017
 Version: 2.0

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

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 30-Mar-16

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AW08187

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	J 0.00112	mg/L
* Arsenic, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	J 0.00412	mg/L
* Barium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	0.0170	mg/L
* Beryllium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	4/8/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	4/13/2016	EPA 200.7		10.15	1.0	5.0	45.6	mg/L
* Cadmium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	J 0.00233	mg/L
* Mercury, Total by CVAA	MCW	4/8/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/8/2016	EPA 200.7		1.015	0.01	0.05	J 0.0182	mg/L
* Molybdenum, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	0.0463	mg/L
* Lead, Total	ABB	4/1/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/1/2016	SM 2540C		1		25	274	mg/L
* Chloride, Total	SES	4/5/2016	EPA 300.0		1	0.04	0.25	2.16	mg/L
* Fluoride, Total	SES	4/5/2016	EPA 300.0		1	0.01	0.3	J 0.0580	mg/L
* Sulfate, Total	SES	4/5/2016	EPA 300.0		1	0.3	1	15.9	mg/L

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Reported: 7/10/2017
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Alabama Power General Test Laboratory
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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 30-Mar-16

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AW08187

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	Spike				Limit	Rec	Limit	Prec			
AW08187 Arsenic, Total	mg/L	0.0000278	0.0022	0.10	0.105	0.106	0.0945	0.085 to 0.115		101	70 to 130		1.01	20
AW08258 Mercury, Total by CVAA	mg/L	0.000147	0.0005	0.004	0.004159	0.004159	0.004114	0.0034 to 0.0046		104	70 to 130		0.00	20
AW08187 Antimony, Total	mg/L	0.000258	0.00132	0.10	0.0951	0.0967	0.0903	0.085 to 0.115		94.0	70 to 130		1.65	20
AW08187 Beryllium, Total	mg/L	0.0000594	0.00132	0.10	0.104	0.110	0.107	0.085 to 0.115		104	70 to 130		5.17	20
AW08187 Molybdenum, Total	mg/L	0.0000413	0.0044	0.10	0.143	0.149	0.0963	0.085 to 0.115		96.7	70 to 130		3.71	20
AW08187 Selenium, Total	mg/L	0.0000849	0.0044	0.10	0.106	0.108	0.100	0.085 to 0.115		106	70 to 130		1.96	20
AW08250 Boron, Total	mg/L	0.00278	0.044	1.000	2.85	2.62	0.925	0.85 to 1.15		100	70 to 130		8.41	20
AW08187 Cadmium, Total	mg/L	0.0000164	0.00044	0.10	0.101	0.101	0.0966	0.085 to 0.115		101	70 to 130		0.0875	20
AW08187 Chromium, Total	mg/L	0.000250	0.0044	0.10	0.105	0.106	0.0973	0.085 to 0.115		103	70 to 130		1.55	20
AW08187 Cobalt, Total	mg/L	0.0000186	0.0044	0.10	0.0990	0.101	0.0970	0.085 to 0.115		99.0	70 to 130		2.38	20
AW08250 Calcium, Total	mg/L	-0.00606	0.22	5.00	99.7	100	5.03	4.25 to 5.75		66.0	70 to 130		4.37	20
AW08250 Lithium, Total	mg/L	0.000180	0.022	0.200	0.229	0.249	0.209	0.17 to 0.23		114	70 to 130		8.37	20
AW08187 Barium, Total	mg/L	0.0000981	0.0044	0.10	0.112	0.113	0.0907	0.085 to 0.115		95.0	70 to 130		1.28	20
AW08187 Lead, Total	mg/L	0.0000323	0.0022	0.10	0.0986	0.104	0.101	0.085 to 0.115		98.6	70 to 130		5.72	20
AW08187 Thallium, Total	mg/L	0.0000349	0.00044	0.10	0.101	0.106	0.0983	0.085 to 0.115		101	70 to 130		4.15	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 30-Mar-16

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AW08187

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW08257	Chloride, Total	mg/L	0.00	0.25	10.0	15.3	4.59	10.8	9 to 11	107	80 to 120	0.00	20
AW08257	Sulfate, Total	mg/L	0.133	1.0	20.0	30.0	9.89	20.1	18 to 22	100	80 to 120	0.202	20
AW08257	Fluoride, Total	mg/L	0.00	0.3	2.0	2.14	0.050	2.12	1.8 to 2.2	104	80 to 120	3.92	20
AW08183	Solids, Dissolved	mg/L	13	25			457	52.0	40 to 60			0.661	5

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CC:

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

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AW08250

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	0.0250	mg/L
* Beryllium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	4/8/2016	EPA 200.7		1.015	0.02	0.1	1.85	mg/L
* Calcium, Total	HRG	4/13/2016	EPA 200.7		10.15	1.0	5.0	96.4	mg/L
* Cadmium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/8/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/8/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/4/2016	SM 2540C		1		25	472	mg/L
* Chloride, Total	SES	4/5/2016	EPA 300.0		1	0.04	0.25	16.9	mg/L
* Fluoride, Total	SES	4/5/2016	EPA 300.0		1	0.01	0.3	J 0.0340	mg/L
* Sulfate, Total	SES	4/5/2016	EPA 300.0		5	1.5	5	215	mg/L

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17
 Matrix Spike recovery for Calcium is out of range.
 Spike amount is less than 30% sample amount, therefore will not be qualified.
 SGC 10/11/16

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AW08250

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AW08261	Chromium, Total	mg/L	0.00000316	0.0044	0.10	0.0883	0.0917	0.0854	0.085 to 0.115	85.1	70 to 130	3.76	20
AW08258	Mercury, Total by CVAA	mg/L	0.000147	0.0005	0.004	0.004159	0.004159	0.004114	0.0034 to 0.0046	104	70 to 130	0.00	20
AW08261	Antimony, Total	mg/L	0.000140	0.00132	0.10	0.0765	0.0772	0.0973	0.085 to 0.115	76.5	70 to 130	0.877	20
AW08261	Arsenic, Total	mg/L	0.00000605	0.0022	0.10	0.0763	0.0781	0.0963	0.085 to 0.115	74.3	70 to 130	2.28	20
AW08250	Boron, Total	mg/L	0.00278	0.044	1.000	2.85	2.62	0.925	0.85 to 1.15	100	70 to 130	8.41	20
AW08261	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.117	0.118	0.0907	0.085 to 0.115	95.1	70 to 130	0.916	20
AW08261	Molybdenum, Total	mg/L	0.00000402	0.0044	0.10	0.0702	0.0716	0.0978	0.085 to 0.115	70.2	70 to 130	1.86	20
AW08261	Selenium, Total	mg/L	0.0000271	0.0044	0.10	0.0768	0.0775	0.0921	0.085 to 0.115	76.8	70 to 130	0.933	20
AW08250	Calcium, Total	mg/L	-0.00606	0.22	5.00	99.7	100	5.03	4.25 to 5.75	66.0	70 to 130	4.37	20
AW08250	Lithium, Total	mg/L	0.000180	0.022	0.200	0.229	0.249	0.209	0.17 to 0.23	114	70 to 130	8.37	20
AW08261	Cadmium, Total	mg/L	-0.00000143	0.00044	0.10	0.0921	0.0943	0.0932	0.085 to 0.115	92.1	70 to 130	2.31	20
AW08261	Cobalt, Total	mg/L	-0.000000586	0.0044	0.10	0.0856	0.0863	0.0882	0.085 to 0.115	85.6	70 to 130	0.808	20
AW08261	Beryllium, Total	mg/L	0.00000467	0.00132	0.10	0.0883	0.0893	0.0967	0.085 to 0.115	88.3	70 to 130	1.08	20
AW08261	Lead, Total	mg/L	0.00000455	0.0022	0.10	0.0923	0.0930	0.0887	0.085 to 0.115	89.8	70 to 130	0.756	20
AW08261	Thallium, Total	mg/L	0.00000255	0.00044	0.10	0.0904	0.0912	0.0871	0.085 to 0.115	90.4	70 to 130	0.937	20

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Expiration: June 30, 2018

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 Matrix Spike recovery for Calcium is out of range.
 Spike amount is less than 30% sample amount, therefore will not be qualified.
 SGC 10/11/16

Alabama Power General Test Laboratory
 744 County Road 87, GSC#8
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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AW08250

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW08258	Solids, Dissolved	mg/L	12	25				194	58.0	40 to 60			2.65	5
AW08257	Fluoride, Total	mg/L	0.00	0.3	2.0	2.14		0.050	2.12	1.8 to 2.2	104	80 to 120	3.92	20
AW08257	Sulfate, Total	mg/L	0.133	1.0	20.0	30.0		9.89	20.1	18 to 22	100	80 to 120	0.202	20
AW08257	Chloride, Total	mg/L	0.00	0.25	10.0	15.3		4.59	10.8	9 to 11	107	80 to 120	0.00	20

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 Matrix Spike recovery for Calcium is out of range.
 Spike amount is less than 30% sample amount, therefore will not be qualified.
 SGC 10/11/16

CC:

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

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AW08251

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	J 0.00105	mg/L
* Barium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	0.0277	mg/L
* Beryllium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/3/2016	EPA 200.7		1.015	0.02	0.1	2.89	mg/L
* Calcium, Total	HRG	4/15/2016	EPA 200.7		10.15	1.0	5.0	75.7	mg/L
* Cadmium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/8/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/15/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	0.0186	mg/L
* Lead, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/4/2016	SM 2540C		1		25	430	mg/L
* Chloride, Total	SES	4/5/2016	EPA 300.0		1	0.04	0.25	30.8	mg/L
* Fluoride, Total	SES	4/5/2016	EPA 300.0		1	0.01	0.3	J 0.0560	mg/L
* Sulfate, Total	SES	4/5/2016	EPA 300.0		5	1.5	5	204	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AW08251

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW08258	Mercury, Total by CVAA	mg/L	0.000147	0.0005	0.004	0.004159	0.004159	0.004114	0.0034 to 0.0046	104	70 to 130	0.00	20
AW08261	Antimony, Total	mg/L	0.000140	0.00132	0.10	0.0765	0.0772	0.0973	0.085 to 0.115	76.5	70 to 130	0.877	20
AW08261	Arsenic, Total	mg/L	0.00000605	0.0022	0.10	0.0763	0.0781	0.0963	0.085 to 0.115	74.3	70 to 130	2.28	20
AW08263	Boron, Total	mg/L	0.00111	0.044	1.00	0.837	0.837	1.00	0.85 to 1.15	83.7	70 to 130	0.976	20
AW08263	Lithium, Total	mg/L	-0.000198	0.022	0.20	0.202	0.201	0.201	0.17 to 0.23	101	70 to 130	0.496	20
AW08261	Beryllium, Total	mg/L	0.00000467	0.00132	0.10	0.0883	0.0893	0.0967	0.085 to 0.115	88.3	70 to 130	1.08	20
AW08261	Lead, Total	mg/L	0.00000455	0.0022	0.10	0.0923	0.0930	0.0887	0.085 to 0.115	89.8	70 to 130	0.756	20
AW08261	Thallium, Total	mg/L	0.00000255	0.00044	0.10	0.0904	0.0912	0.0871	0.085 to 0.115	90.4	70 to 130	0.937	20
AW08261	Cadmium, Total	mg/L	-0.00000143	0.00044	0.10	0.0921	0.0943	0.0932	0.085 to 0.115	92.1	70 to 130	2.31	20
AW08261	Cobalt, Total	mg/L	-0.000000586	0.0044	0.10	0.0856	0.0863	0.0882	0.085 to 0.115	85.6	70 to 130	0.808	20
AW08261	Chromium, Total	mg/L	0.00000316	0.0044	0.10	0.0883	0.0917	0.0854	0.085 to 0.115	85.1	70 to 130	3.76	20
AW08263	Calcium, Total	mg/L	-0.00156	0.22	5.00	5.12	5.05	5.04	4.25 to 5.75	102	70 to 130	1.38	20
AW08261	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.117	0.118	0.0907	0.085 to 0.115	95.1	70 to 130	0.916	20
AW08261	Molybdenum, Total	mg/L	0.00000402	0.0044	0.10	0.0702	0.0716	0.0978	0.085 to 0.115	70.2	70 to 130	1.86	20
AW08261	Selenium, Total	mg/L	0.0000271	0.0044	0.10	0.0768	0.0775	0.0921	0.085 to 0.115	76.8	70 to 130	0.933	20

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AW08251

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW08257	Fluoride, Total	mg/L	0.00	0.3	2.0	2.14	0.050	2.12	1.8 to 2.2	104	80 to 120	3.92	20
AW08257	Chloride, Total	mg/L	0.00	0.25	10.0	15.3	4.59	10.8	9 to 11	107	80 to 120	0.00	20
AW08258	Solids, Dissolved	mg/L	12	25			194	58.0	40 to 60			2.65	5
AW08257	Sulfate, Total	mg/L	0.133	1.0	20.0	30.0	9.89	20.1	18 to 22	100	80 to 120	0.202	20

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CC:

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

Revised Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-6 DISS

Laboratory ID Number: AW08252

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Dissolved	ABB	4/7/2016	EPA 200.8		5.025	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Dissolved	ABB	4/7/2016	EPA 200.8		5.025	0.001	0.005	U Not Detected	mg/L
* Barium, Dissolved	ABB	4/7/2016	EPA 200.8		5.025	0.002	0.01	0.0275	mg/L
* Beryllium, Dissolved	ABB	4/7/2016	EPA 200.8		5.025	0.0006	0.003	U Not Detected	mg/L
* Boron, Dissolved	HRG	4/4/2016	EPA 200.7		1.015	0.02	0.1	2.74	mg/L
* Calcium, Dissolved	HRG	4/7/2016	EPA 200.7		10.15	1.0	5.0	72.6	mg/L
* Cadmium, Dissolved	ABB	4/7/2016	EPA 200.8		5.025	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Dissolved	ABB	4/7/2016	EPA 200.8		5.025	0.002	0.01	U Not Detected	mg/L
* Chromium, Dissolved	ABB	4/7/2016	EPA 200.8		5.025	0.002	0.01	U Not Detected	mg/L
* Mercury, Dissolved by CVAA	MCW	4/8/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Dissolved	HRG	4/4/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Dissolved	ABB	4/7/2016	EPA 200.8		5.025	0.002	0.01	0.0202	mg/L
* Lead, Dissolved	ABB	4/7/2016	EPA 200.8		5.025	0.001	0.005	U Not Detected	mg/L
* Selenium, Dissolved	ABB	4/7/2016	EPA 200.8		5.025	0.002	0.01	U Not Detected	mg/L
* Thallium, Dissolved	ABB	4/7/2016	EPA 200.8		5.025	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Chloride, Dissolved	SES	4/5/2016	EPA 300.0		1	0.04	0.25	30.3	mg/L
Fluoride, Dissolved	SES	4/5/2016	EPA 300.0		1	0.01	0.3	J 0.0490	mg/L
Sulfate, Dissolved	SES	4/6/2016	EPA 300.0		5	1.5	5	200	mg/L

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: REVISED COPY: Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Revised Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-6 DISS

Laboratory ID Number: AW08252

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW08262 Beryllium, Dissolved	mg/L	-0.00000270	0.00132	0.10	0.0987	0.101			98.7	70 to 130	2.27	20	
AW08262 Cobalt, Dissolved	mg/L	0.00000109	0.0044	0.10	0.111	0.112			111	70 to 130	0.936	20	
AW08262 Arsenic, Dissolved	mg/L	0.00000255	0.0022	0.10	0.0970	0.0986			97.0	70 to 130	1.59	20	
AW08262 Mercury, Dissolved by CVAA	mg/L	0.000159	0.0005	0.004	0.00414	0.004156	0.004068	0.0034 to 0.0046	104	70 to 130	0.386	20	
AW08262 Calcium, Dissolved	mg/L	0.00163	0.22	5.00	55.3	55.4	5.16	4.25 to 5.75	70.0	70 to 130	0.181	20	
AW08262 Selenium, Dissolved	mg/L	0.0000133	0.0044	0.10	0.100	0.102			100	70 to 130	1.79	20	
AW08262 Thallium, Dissolved	mg/L	0.000000172	0.00044	0.10	0.104	0.106			104	70 to 130	1.40	20	
AW08262 Boron, Dissolved	mg/L	0.00144	0.044	1.00	1.16	1.12	0.988	0.85 to 1.15	97.1	70 to 130	3.51	20	
AW08262 Lithium, Dissolved	mg/L	-0.000114	0.022	0.200	0.140	0.170	0.216	0.17 to 0.23	70.0	70 to 130	19.4	20	
AW08262 Molybdenum, Dissolved	mg/L	0.00000274	0.0044	0.10	0.113	0.115			113	70 to 130	1.93	20	
AW08262 Antimony, Dissolved	mg/L	0.0000432	0.00132	0.10	0.0937	0.0948			93.7	70 to 130	1.12	20	
AW08262 Cadmium, Dissolved	mg/L	-0.000000942	0.00044	0.10	0.0965	0.0990			96.5	70 to 130	2.53	20	
AW08262 Chromium, Dissolved	mg/L	-0.000000681	0.0044	0.10	0.0988	0.101			96.6	70 to 130	1.87	20	
AW08262 Barium, Dissolved	mg/L	0.00000496	0.0044	0.10	0.115	0.118			97.5	70 to 130	2.70	20	
AW08262 Lead, Dissolved	mg/L	0.00000165	0.0022	0.10	0.107	0.108			107	70 to 130	1.66	20	

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Batch QC Summary



Revised Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-6 DISS

Laboratory ID Number: AW08252

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW07984	Sulfate, Dissolved	mg/L	0.133	1.0	20.0	84.4	67.2	19.9	18 to 22	85.5	80 to 120	0.149	20	
AW07984	Chloride, Dissolved	mg/L	0.00	0.25	10.0	12.7	2.13	10.9	9 to 11	106	80 to 120	0.0938	20	
AW07984	Fluoride, Dissolved	mg/L	0.00	0.3	2.0	1.99	0.078	2.10	1.8 to 2.2	95.6	80 to 120	0.00	20	

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CC:

Reported: 7/10/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AW08253

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	0.0339	mg/L
* Beryllium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/3/2016	EPA 200.7		1.015	0.02	0.1	1.82	mg/L
* Calcium, Total	HRG	4/15/2016	EPA 200.7		10.15	1.0	5.0	68.3	mg/L
* Cadmium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/8/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/15/2016	EPA 200.7		1.015	0.01	0.05	J 0.0307	mg/L
* Molybdenum, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	0.205	mg/L
* Lead, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/4/2016	SM 2540C		1		25	398	mg/L
* Chloride, Total	SES	4/5/2016	EPA 300.0		1	0.04	0.25	31.9	mg/L
* Fluoride, Total	SES	4/5/2016	EPA 300.0		1	0.01	0.3	J 0.0480	mg/L
* Sulfate, Total	SES	4/5/2016	EPA 300.0		5	1.5	5	146	mg/L

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AW08253

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	Spike				Limit	Rec	Limit	Prec			
AW08258 Mercury, Total by CVAA	mg/L	0.000147	0.0005	0.004	0.004159	0.004159	0.004114	0.0034 to 0.0046		104	70 to 130		0.00	20
AW08261 Cadmium, Total	mg/L	-0.00000143	0.00044	0.10	0.0921	0.0943	0.0932	0.085 to 0.115		92.1	70 to 130		2.31	20
AW08261 Cobalt, Total	mg/L	-0.000000586	0.0044	0.10	0.0856	0.0863	0.0882	0.085 to 0.115		85.6	70 to 130		0.808	20
AW08261 Barium, Total	mg/L	0.00000779	0.0044	0.10	0.117	0.118	0.0907	0.085 to 0.115		95.1	70 to 130		0.916	20
AW08261 Molybdenum, Total	mg/L	0.00000402	0.0044	0.10	0.0702	0.0716	0.0978	0.085 to 0.115		70.2	70 to 130		1.86	20
AW08261 Selenium, Total	mg/L	0.0000271	0.0044	0.10	0.0768	0.0775	0.0921	0.085 to 0.115		76.8	70 to 130		0.933	20
AW08261 Beryllium, Total	mg/L	0.00000467	0.00132	0.10	0.0883	0.0893	0.0967	0.085 to 0.115		88.3	70 to 130		1.08	20
AW08261 Lead, Total	mg/L	0.00000455	0.0022	0.10	0.0923	0.0930	0.0887	0.085 to 0.115		89.8	70 to 130		0.756	20
AW08261 Thallium, Total	mg/L	0.00000255	0.00044	0.10	0.0904	0.0912	0.0871	0.085 to 0.115		90.4	70 to 130		0.937	20
AW08261 Antimony, Total	mg/L	0.000140	0.00132	0.10	0.0765	0.0772	0.0973	0.085 to 0.115		76.5	70 to 130		0.877	20
AW08261 Arsenic, Total	mg/L	0.00000605	0.0022	0.10	0.0763	0.0781	0.0963	0.085 to 0.115		74.3	70 to 130		2.28	20
AW08263 Boron, Total	mg/L	0.00111	0.044	1.00	0.837	0.837	1.00	0.85 to 1.15		83.7	70 to 130		0.976	20
AW08263 Lithium, Total	mg/L	-0.000198	0.022	0.20	0.202	0.201	0.201	0.17 to 0.23		101	70 to 130		0.496	20
AW08261 Chromium, Total	mg/L	0.00000316	0.0044	0.10	0.0883	0.0917	0.0854	0.085 to 0.115		85.1	70 to 130		3.76	20
AW08263 Calcium, Total	mg/L	-0.00156	0.22	5.00	5.12	5.05	5.04	4.25 to 5.75		102	70 to 130		1.38	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AW08253

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW08257	Sulfate, Total	mg/L	0.133	1.0	20.0	30.0	9.89	20.1	18 to 22	100	80 to 120	0.202	20
AW08257	Chloride, Total	mg/L	0.00	0.25	10.0	15.3	4.59	10.8	9 to 11	107	80 to 120	0.00	20
AW08258	Solids, Dissolved	mg/L	12	25			194	58.0	40 to 60			2.65	5
AW08257	Fluoride, Total	mg/L	0.00	0.3	2.0	2.14	0.050	2.12	1.8 to 2.2	104	80 to 120	3.92	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/10/2017
 Version: 2.0

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-5 DUP

Laboratory ID Number: AW08254

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	0.0353	mg/L
* Beryllium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/3/2016	EPA 200.7		1.015	0.02	0.1	1.83	mg/L
* Calcium, Total	HRG	4/15/2016	EPA 200.7		10.15	1.0	5.0	62.6	mg/L
* Cadmium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/8/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/15/2016	EPA 200.7		1.015	0.01	0.05	J 0.0310	mg/L
* Molybdenum, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	0.208	mg/L
* Lead, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/4/2016	SM 2540C		1		25	405	mg/L
* Chloride, Total	SES	4/5/2016	EPA 300.0		1	0.04	0.25	31.9	mg/L
* Fluoride, Total	SES	4/5/2016	EPA 300.0		1	0.01	0.3	J 0.0490	mg/L
* Sulfate, Total	SES	4/5/2016	EPA 300.0		5	1.5	5	147	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-5 DUP

Laboratory ID Number: AW08254

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW08258	Mercury, Total by CVAA	mg/L	0.000147	0.0005	0.004	0.004159	0.004159	0.004114	0.0034 to 0.0046	104	70 to 130	0.00	20
AW08261	Cadmium, Total	mg/L	-0.00000143	0.00044	0.10	0.0921	0.0943	0.0932	0.085 to 0.115	92.1	70 to 130	2.31	20
AW08261	Cobalt, Total	mg/L	-0.000000586	0.0044	0.10	0.0856	0.0863	0.0882	0.085 to 0.115	85.6	70 to 130	0.808	20
AW08261	Antimony, Total	mg/L	0.000140	0.00132	0.10	0.0765	0.0772	0.0973	0.085 to 0.115	76.5	70 to 130	0.877	20
AW08261	Arsenic, Total	mg/L	0.00000605	0.0022	0.10	0.0763	0.0781	0.0963	0.085 to 0.115	74.3	70 to 130	2.28	20
AW08263	Boron, Total	mg/L	0.00111	0.044	1.00	0.837	0.837	1.00	0.85 to 1.15	83.7	70 to 130	0.976	20
AW08263	Lithium, Total	mg/L	-0.000198	0.022	0.20	0.202	0.201	0.201	0.17 to 0.23	101	70 to 130	0.496	20
AW08261	Beryllium, Total	mg/L	0.00000467	0.00132	0.10	0.0883	0.0893	0.0967	0.085 to 0.115	88.3	70 to 130	1.08	20
AW08261	Lead, Total	mg/L	0.00000455	0.0022	0.10	0.0923	0.0930	0.0887	0.085 to 0.115	89.8	70 to 130	0.756	20
AW08261	Thallium, Total	mg/L	0.00000255	0.00044	0.10	0.0904	0.0912	0.0871	0.085 to 0.115	90.4	70 to 130	0.937	20
AW08261	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.117	0.118	0.0907	0.085 to 0.115	95.1	70 to 130	0.916	20
AW08261	Molybdenum, Total	mg/L	0.00000402	0.0044	0.10	0.0702	0.0716	0.0978	0.085 to 0.115	70.2	70 to 130	1.86	20
AW08261	Selenium, Total	mg/L	0.0000271	0.0044	0.10	0.0768	0.0775	0.0921	0.085 to 0.115	76.8	70 to 130	0.933	20
AW08261	Chromium, Total	mg/L	0.00000316	0.0044	0.10	0.0883	0.0917	0.0854	0.085 to 0.115	85.1	70 to 130	3.76	20
AW08263	Calcium, Total	mg/L	-0.00156	0.22	5.00	5.12	5.05	5.04	4.25 to 5.75	102	70 to 130	1.38	20

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-5 DUP

Laboratory ID Number: AW08254

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW08258	Solids, Dissolved	mg/L	12	25				194	58.0	40 to 60			2.65	5
AW08257	Fluoride, Total	mg/L	0.00	0.3	2.0	2.14		0.050	2.12	1.8 to 2.2	104	80 to 120	3.92	20
AW08257	Sulfate, Total	mg/L	0.133	1.0	20.0	30.0		9.89	20.1	18 to 22	100	80 to 120	0.202	20
AW08257	Chloride, Total	mg/L	0.00	0.25	10.0	15.3		4.59	10.8	9 to 11	107	80 to 120	0.00	20

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CC:

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

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AW08255

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	J 0.00463	mg/L
* Barium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	0.0370	mg/L
* Beryllium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/3/2016	EPA 200.7		1.015	0.02	0.1	J 0.0538	mg/L
* Calcium, Total	HRG	4/15/2016	EPA 200.7		10.15	1.0	5.0	46.0	mg/L
* Cadmium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/8/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/15/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	0.0157	mg/L
* Lead, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/4/2016	SM 2540C		1		25	213	mg/L
* Chloride, Total	SES	4/5/2016	EPA 300.0		1	0.04	0.25	9.86	mg/L
* Fluoride, Total	SES	4/5/2016	EPA 300.0		1	0.01	0.3	J 0.0830	mg/L
* Sulfate, Total	SES	4/5/2016	EPA 300.0		1	0.3	1	16.8	mg/L

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AW08255

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW08258 Mercury, Total by CVAA	mg/L	0.000147	0.0005	0.004	0.004159	0.004159	0.004114	0.0034 to 0.0046	104	70 to 130	0.00	20	
AW08261 Cadmium, Total	mg/L	-0.00000143	0.00044	0.10	0.0921	0.0943	0.0932	0.085 to 0.115	92.1	70 to 130	2.31	20	
AW08261 Cobalt, Total	mg/L	-0.000000586	0.0044	0.10	0.0856	0.0863	0.0882	0.085 to 0.115	85.6	70 to 130	0.808	20	
AW08261 Barium, Total	mg/L	0.00000779	0.0044	0.10	0.117	0.118	0.0907	0.085 to 0.115	95.1	70 to 130	0.916	20	
AW08261 Molybdenum, Total	mg/L	0.00000402	0.0044	0.10	0.0702	0.0716	0.0978	0.085 to 0.115	70.2	70 to 130	1.86	20	
AW08261 Selenium, Total	mg/L	0.0000271	0.0044	0.10	0.0768	0.0775	0.0921	0.085 to 0.115	76.8	70 to 130	0.933	20	
AW08261 Beryllium, Total	mg/L	0.00000467	0.00132	0.10	0.0883	0.0893	0.0967	0.085 to 0.115	88.3	70 to 130	1.08	20	
AW08261 Lead, Total	mg/L	0.00000455	0.0022	0.10	0.0923	0.0930	0.0887	0.085 to 0.115	89.8	70 to 130	0.756	20	
AW08261 Thallium, Total	mg/L	0.00000255	0.00044	0.10	0.0904	0.0912	0.0871	0.085 to 0.115	90.4	70 to 130	0.937	20	
AW08261 Chromium, Total	mg/L	0.00000316	0.0044	0.10	0.0883	0.0917	0.0854	0.085 to 0.115	85.1	70 to 130	3.76	20	
AW08263 Calcium, Total	mg/L	-0.00156	0.22	5.00	5.12	5.05	5.04	4.25 to 5.75	102	70 to 130	1.38	20	
AW08261 Antimony, Total	mg/L	0.000140	0.00132	0.10	0.0765	0.0772	0.0973	0.085 to 0.115	76.5	70 to 130	0.877	20	
AW08261 Arsenic, Total	mg/L	0.00000605	0.0022	0.10	0.0763	0.0781	0.0963	0.085 to 0.115	74.3	70 to 130	2.28	20	
AW08263 Boron, Total	mg/L	0.00111	0.044	1.00	0.837	0.837	1.00	0.85 to 1.15	83.7	70 to 130	0.976	20	
AW08263 Lithium, Total	mg/L	-0.000198	0.022	0.20	0.202	0.201	0.201	0.17 to 0.23	101	70 to 130	0.496	20	

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 28-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AW08255

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW08257	Fluoride, Total	mg/L	0.00	0.3	2.0	2.14	0.050	2.12	1.8 to 2.2	104	80 to 120	3.92	20
AW08257	Sulfate, Total	mg/L	0.133	1.0	20.0	30.0	9.89	20.1	18 to 22	100	80 to 120	0.202	20
AW08257	Chloride, Total	mg/L	0.00	0.25	10.0	15.3	4.59	10.8	9 to 11	107	80 to 120	0.00	20
AW08258	Solids, Dissolved	mg/L	12	25			194	58.0	40 to 60			2.65	5

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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CC:

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

Certificate Of Analysis  **Alabama Power**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AW08256

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	J 0.00238	mg/L
* Arsenic, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	J 0.00155	mg/L
* Barium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	0.0277	mg/L
* Beryllium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/3/2016	EPA 200.7		1.015	0.02	0.1	0.161	mg/L
* Calcium, Total	HRG	4/15/2016	EPA 200.7		10.15	1.0	5.0	58.2	mg/L
* Cadmium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/8/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/15/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	J 0.00420	mg/L
* Lead, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/4/2016	SM 2540C		1		25	290	mg/L
* Chloride, Total	SES	4/5/2016	EPA 300.0		1	0.04	0.25	5.14	mg/L
* Fluoride, Total	SES	4/5/2016	EPA 300.0		1	0.01	0.3	J 0.104	mg/L
* Sulfate, Total	SES	4/5/2016	EPA 300.0		1	0.3	1	29.9	mg/L

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Alabama Power General Test Laboratory
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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AW08256

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW08258	Mercury, Total by CVAA	mg/L	0.000147	0.0005	0.004	0.004159	0.004159	0.004114	0.0034 to 0.0046	104	70 to 130	0.00	20
AW08261	Cadmium, Total	mg/L	-0.00000143	0.00044	0.10	0.0921	0.0943	0.0932	0.085 to 0.115	92.1	70 to 130	2.31	20
AW08261	Cobalt, Total	mg/L	-0.000000586	0.0044	0.10	0.0856	0.0863	0.0882	0.085 to 0.115	85.6	70 to 130	0.808	20
AW08261	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.117	0.118	0.0907	0.085 to 0.115	95.1	70 to 130	0.916	20
AW08261	Molybdenum, Total	mg/L	0.00000402	0.0044	0.10	0.0702	0.0716	0.0978	0.085 to 0.115	70.2	70 to 130	1.86	20
AW08261	Selenium, Total	mg/L	0.0000271	0.0044	0.10	0.0768	0.0775	0.0921	0.085 to 0.115	76.8	70 to 130	0.933	20
AW08261	Antimony, Total	mg/L	0.000140	0.00132	0.10	0.0765	0.0772	0.0973	0.085 to 0.115	76.5	70 to 130	0.877	20
AW08261	Arsenic, Total	mg/L	0.00000605	0.0022	0.10	0.0763	0.0781	0.0963	0.085 to 0.115	74.3	70 to 130	2.28	20
AW08263	Boron, Total	mg/L	0.00111	0.044	1.00	0.837	0.837	1.00	0.85 to 1.15	83.7	70 to 130	0.976	20
AW08263	Lithium, Total	mg/L	-0.000198	0.022	0.20	0.202	0.201	0.201	0.17 to 0.23	101	70 to 130	0.496	20
AW08261	Chromium, Total	mg/L	0.00000316	0.0044	0.10	0.0883	0.0917	0.0854	0.085 to 0.115	85.1	70 to 130	3.76	20
AW08263	Calcium, Total	mg/L	-0.00156	0.22	5.00	5.12	5.05	5.04	4.25 to 5.75	102	70 to 130	1.38	20
AW08261	Beryllium, Total	mg/L	0.00000467	0.00132	0.10	0.0883	0.0893	0.0967	0.085 to 0.115	88.3	70 to 130	1.08	20
AW08261	Lead, Total	mg/L	0.00000455	0.0022	0.10	0.0923	0.0930	0.0887	0.085 to 0.115	89.8	70 to 130	0.756	20
AW08261	Thallium, Total	mg/L	0.00000255	0.00044	0.10	0.0904	0.0912	0.0871	0.085 to 0.115	90.4	70 to 130	0.937	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 29-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AW08256

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW08258	Solids, Dissolved	mg/L	12	25				194	58.0	40 to 60			2.65	5
AW08257	Sulfate, Total	mg/L	0.133	1.0	20.0	30.0		9.89	20.1	18 to 22	100	80 to 120	0.202	20
AW08257	Fluoride, Total	mg/L	0.00	0.3	2.0	2.14		0.050	2.12	1.8 to 2.2	104	80 to 120	3.92	20
AW08257	Chloride, Total	mg/L	0.00	0.25	10.0	15.3		4.59	10.8	9 to 11	107	80 to 120	0.00	20

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Expiration: June 30, 2018

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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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AW08257

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	J 0.00105	mg/L
* Barium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	0.0139	mg/L
* Beryllium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/3/2016	EPA 200.7		1.015	0.02	0.1	J 0.0291	mg/L
* Calcium, Total	HRG	4/15/2016	EPA 200.7		1.015	0.1	0.5	38.2	mg/L
* Cadmium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/8/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/15/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/4/2016	SM 2540C		1		25	195	mg/L
* Chloride, Total	SES	4/5/2016	EPA 300.0		1	0.04	0.25	4.59	mg/L
* Fluoride, Total	SES	4/5/2016	EPA 300.0		1	0.01	0.3	J 0.0520	mg/L
* Sulfate, Total	SES	4/5/2016	EPA 300.0		1	0.3	1	9.91	mg/L

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AW08257

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	MB					Limit	Rec	Limit	Prec			
AW08258	Mercury, Total by CVAA	mg/L	0.000147	0.0005	0.004	0.004159	0.004159	0.004114	0.0034 to 0.0046		104	70 to 130		0.00	20
AW08261	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.117	0.118	0.0907	0.085 to 0.115		95.1	70 to 130		0.916	20
AW08261	Molybdenum, Total	mg/L	0.00000402	0.0044	0.10	0.0702	0.0716	0.0978	0.085 to 0.115		70.2	70 to 130		1.86	20
AW08261	Selenium, Total	mg/L	0.0000271	0.0044	0.10	0.0768	0.0775	0.0921	0.085 to 0.115		76.8	70 to 130		0.933	20
AW08261	Cadmium, Total	mg/L	-0.00000143	0.00044	0.10	0.0921	0.0943	0.0932	0.085 to 0.115		92.1	70 to 130		2.31	20
AW08261	Cobalt, Total	mg/L	-0.000000586	0.0044	0.10	0.0856	0.0863	0.0882	0.085 to 0.115		85.6	70 to 130		0.808	20
AW08261	Antimony, Total	mg/L	0.000140	0.00132	0.10	0.0765	0.0772	0.0973	0.085 to 0.115		76.5	70 to 130		0.877	20
AW08261	Arsenic, Total	mg/L	0.00000605	0.0022	0.10	0.0763	0.0781	0.0963	0.085 to 0.115		74.3	70 to 130		2.28	20
AW08263	Boron, Total	mg/L	0.00111	0.044	1.00	0.837	0.837	1.00	0.85 to 1.15		83.7	70 to 130		0.976	20
AW08263	Lithium, Total	mg/L	-0.000198	0.022	0.20	0.202	0.201	0.201	0.17 to 0.23		101	70 to 130		0.496	20
AW08261	Beryllium, Total	mg/L	0.00000467	0.00132	0.10	0.0883	0.0893	0.0967	0.085 to 0.115		88.3	70 to 130		1.08	20
AW08261	Lead, Total	mg/L	0.00000455	0.0022	0.10	0.0923	0.0930	0.0887	0.085 to 0.115		89.8	70 to 130		0.756	20
AW08261	Thallium, Total	mg/L	0.00000255	0.00044	0.10	0.0904	0.0912	0.0871	0.085 to 0.115		90.4	70 to 130		0.937	20
AW08261	Chromium, Total	mg/L	0.00000316	0.0044	0.10	0.0883	0.0917	0.0854	0.085 to 0.115		85.1	70 to 130		3.76	20
AW08263	Calcium, Total	mg/L	-0.00156	0.22	5.00	5.12	5.05	5.04	4.25 to 5.75		102	70 to 130		1.38	20

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Expiration: June 30, 2018

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AW08257

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW08257	Fluoride, Total	mg/L	0.00	0.3	2.0	2.14	0.050	2.12	1.8 to 2.2	104	80 to 120	3.92	20
AW08257	Chloride, Total	mg/L	0.00	0.25	10.0	15.3	4.59	10.8	9 to 11	107	80 to 120	0.00	20
AW08257	Sulfate, Total	mg/L	0.133	1.0	20.0	30.0	9.89	20.1	18 to 22	100	80 to 120	0.202	20
AW08258	Solids, Dissolved	mg/L	12	25			194	58.0	40 to 60			2.65	5

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Certificate Of Analysis  **Alabama Power**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AW08258

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	J 0.00993	mg/L
* Beryllium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/3/2016	EPA 200.7		1.015	0.02	0.1	0.112	mg/L
* Calcium, Total	HRG	4/15/2016	EPA 200.7		1.015	0.1	0.5	36.4	mg/L
* Cadmium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/8/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/15/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/4/2016	SM 2540C		1		25	184	mg/L
* Chloride, Total	SES	4/5/2016	EPA 300.0		1	0.04	0.25	6.36	mg/L
* Fluoride, Total	SES	4/5/2016	EPA 300.0		1	0.01	0.3	J 0.0260	mg/L
* Sulfate, Total	SES	4/5/2016	EPA 300.0		1	0.3	1	32.2	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AW08258

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	Spike				Limit	Rec	Limit	Prec			
AW08258 Mercury, Total by CVAA	mg/L	0.000147	0.0005	0.004	0.004159	0.004159	0.004114	0.0034 to 0.0046		104	70 to 130		0.00	20
AW08261 Chromium, Total	mg/L	0.00000316	0.0044	0.10	0.0883	0.0917	0.0854	0.085 to 0.115		85.1	70 to 130		3.76	20
AW08263 Calcium, Total	mg/L	-0.00156	0.22	5.00	5.12	5.05	5.04	4.25 to 5.75		102	70 to 130		1.38	20
AW08261 Barium, Total	mg/L	0.00000779	0.0044	0.10	0.117	0.118	0.0907	0.085 to 0.115		95.1	70 to 130		0.916	20
AW08261 Molybdenum, Total	mg/L	0.00000402	0.0044	0.10	0.0702	0.0716	0.0978	0.085 to 0.115		70.2	70 to 130		1.86	20
AW08261 Selenium, Total	mg/L	0.0000271	0.0044	0.10	0.0768	0.0775	0.0921	0.085 to 0.115		76.8	70 to 130		0.933	20
AW08261 Beryllium, Total	mg/L	0.00000467	0.00132	0.10	0.0883	0.0893	0.0967	0.085 to 0.115		88.3	70 to 130		1.08	20
AW08261 Lead, Total	mg/L	0.00000455	0.0022	0.10	0.0923	0.0930	0.0887	0.085 to 0.115		89.8	70 to 130		0.756	20
AW08261 Thallium, Total	mg/L	0.00000255	0.00044	0.10	0.0904	0.0912	0.0871	0.085 to 0.115		90.4	70 to 130		0.937	20
AW08261 Cadmium, Total	mg/L	-0.00000143	0.00044	0.10	0.0921	0.0943	0.0932	0.085 to 0.115		92.1	70 to 130		2.31	20
AW08261 Cobalt, Total	mg/L	-0.000000586	0.0044	0.10	0.0856	0.0863	0.0882	0.085 to 0.115		85.6	70 to 130		0.808	20
AW08261 Antimony, Total	mg/L	0.000140	0.00132	0.10	0.0765	0.0772	0.0973	0.085 to 0.115		76.5	70 to 130		0.877	20
AW08261 Arsenic, Total	mg/L	0.00000605	0.0022	0.10	0.0763	0.0781	0.0963	0.085 to 0.115		74.3	70 to 130		2.28	20
AW08263 Boron, Total	mg/L	0.00111	0.044	1.00	0.837	0.837	1.00	0.85 to 1.15		83.7	70 to 130		0.976	20
AW08263 Lithium, Total	mg/L	-0.000198	0.022	0.20	0.202	0.201	0.201	0.17 to 0.23		101	70 to 130		0.496	20

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Alabama Power General Test Laboratory
 744 County Road 87, GSC#8
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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AW08258

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW08264	Chloride, Total	mg/L	0.00	0.25	10.0	31.5	21.4	10.8	9 to 11	101	80 to 120	0.00	20
AW08264	Fluoride, Total	mg/L	0.00	0.3	2.0	2.09	0.039	2.10	1.8 to 2.2	103	80 to 120	0.00	20
AW08258	Solids, Dissolved	mg/L	12	25			194	58.0	40 to 60			2.65	5
AW08264	Sulfate, Total	mg/L	0.133	1.0	20.0	102	85.1	20.1	18 to 22	85.0	80 to 120	0.118	20

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CC:

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

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AW08259

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	0.0337	mg/L
* Beryllium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/3/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	4/15/2016	EPA 200.7		10.15	1.0	5.0	46.6	mg/L
* Cadmium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/8/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/15/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/4/2016	SM 2540C		1		25	202	mg/L
* Chloride, Total	SES	4/5/2016	EPA 300.0		1	0.04	0.25	4.69	mg/L
* Fluoride, Total	SES	4/5/2016	EPA 300.0		1	0.01	0.3	J 0.0420	mg/L
* Sulfate, Total	SES	4/5/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AW08259

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AW08261	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.117	0.118	0.0907	0.085 to 0.115	95.1	70 to 130	0.916	20
AW08261	Molybdenum, Total	mg/L	0.00000402	0.0044	0.10	0.0702	0.0716	0.0978	0.085 to 0.115	70.2	70 to 130	1.86	20
AW08261	Selenium, Total	mg/L	0.0000271	0.0044	0.10	0.0768	0.0775	0.0921	0.085 to 0.115	76.8	70 to 130	0.933	20
AW08261	Chromium, Total	mg/L	0.00000316	0.0044	0.10	0.0883	0.0917	0.0854	0.085 to 0.115	85.1	70 to 130	3.76	20
AW08263	Calcium, Total	mg/L	-0.00156	0.22	5.00	5.12	5.05	5.04	4.25 to 5.75	102	70 to 130	1.38	20
AW08264	Mercury, Total by CVAA	mg/L	0.000151	0.0005	0.004	0.004122	0.003999	0.004055	0.0034 to 0.0046	103	70 to 130	3.03	20
AW08261	Beryllium, Total	mg/L	0.00000467	0.00132	0.10	0.0883	0.0893	0.0967	0.085 to 0.115	88.3	70 to 130	1.08	20
AW08261	Lead, Total	mg/L	0.00000455	0.0022	0.10	0.0923	0.0930	0.0887	0.085 to 0.115	89.8	70 to 130	0.756	20
AW08261	Thallium, Total	mg/L	0.00000255	0.00044	0.10	0.0904	0.0912	0.0871	0.085 to 0.115	90.4	70 to 130	0.937	20
AW08261	Antimony, Total	mg/L	0.000140	0.00132	0.10	0.0765	0.0772	0.0973	0.085 to 0.115	76.5	70 to 130	0.877	20
AW08261	Arsenic, Total	mg/L	0.00000605	0.0022	0.10	0.0763	0.0781	0.0963	0.085 to 0.115	74.3	70 to 130	2.28	20
AW08263	Boron, Total	mg/L	0.00111	0.044	1.00	0.837	0.837	1.00	0.85 to 1.15	83.7	70 to 130	0.976	20
AW08263	Lithium, Total	mg/L	-0.000198	0.022	0.20	0.202	0.201	0.201	0.17 to 0.23	101	70 to 130	0.496	20
AW08261	Cadmium, Total	mg/L	-0.00000143	0.00044	0.10	0.0921	0.0943	0.0932	0.085 to 0.115	92.1	70 to 130	2.31	20
AW08261	Cobalt, Total	mg/L	-0.000000586	0.0044	0.10	0.0856	0.0863	0.0882	0.085 to 0.115	85.6	70 to 130	0.808	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AW08259

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW08264	Chloride, Total	mg/L	0.00	0.25	10.0	31.5	21.4	10.8	9 to 11	101	80 to 120	0.00	20
AW08264	Fluoride, Total	mg/L	0.00	0.3	2.0	2.09	0.039	2.10	1.8 to 2.2	103	80 to 120	0.00	20
AW08258	Solids, Dissolved	mg/L	12	25			194	58.0	40 to 60			2.65	5
AW08264	Sulfate, Total	mg/L	0.133	1.0	20.0	102	85.1	20.1	18 to 22	85.0	80 to 120	0.118	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/10/2017
 Version: 2.0

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AW08261

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	J 0.00200	mg/L
* Barium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	0.0219	mg/L
* Beryllium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/3/2016	EPA 200.7		1.015	0.02	0.1	0.193	mg/L
* Calcium, Total	HRG	4/15/2016	EPA 200.7		10.15	1.0	5.0	53.6	mg/L
* Cadmium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	J 0.00322	mg/L
* Mercury, Total by CVAA	MCW	4/8/2016	EPA 245.1		1	0.00025	0.0005	J 0.000278	mg/L
* Lithium, Total	HRG	4/15/2016	EPA 200.7		1.015	0.01	0.05	J 0.0150	mg/L
* Molybdenum, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	J 0.00247	mg/L
* Selenium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/4/2016	SM 2540C		1		25	339	mg/L
* Chloride, Total	SES	4/5/2016	EPA 300.0		1	0.04	0.25	12.9	mg/L
* Fluoride, Total	SES	4/5/2016	EPA 300.0		1	0.01	0.3	J 0.0230	mg/L
* Sulfate, Total	SES	4/5/2016	EPA 300.0		1	0.3	1	24.9	mg/L

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AW08261

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit						Limit	Rec	Limit	Prec		
AW08261	Cadmium, Total	mg/L	-0.00000143	0.00044	0.10	0.0921	0.0943	0.0932	0.085 to 0.115	92.1	70 to 130	2.31	20	
AW08261	Cobalt, Total	mg/L	-0.000000586	0.0044	0.10	0.0856	0.0863	0.0882	0.085 to 0.115	85.6	70 to 130	0.808	20	
AW08261	Beryllium, Total	mg/L	0.00000467	0.00132	0.10	0.0883	0.0893	0.0967	0.085 to 0.115	88.3	70 to 130	1.08	20	
AW08261	Lead, Total	mg/L	0.00000455	0.0022	0.10	0.0923	0.0930	0.0887	0.085 to 0.115	89.8	70 to 130	0.756	20	
AW08261	Thallium, Total	mg/L	0.00000255	0.00044	0.10	0.0904	0.0912	0.0871	0.085 to 0.115	90.4	70 to 130	0.937	20	
AW08261	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.117	0.118	0.0907	0.085 to 0.115	95.1	70 to 130	0.916	20	
AW08261	Molybdenum, Total	mg/L	0.00000402	0.0044	0.10	0.0702	0.0716	0.0978	0.085 to 0.115	70.2	70 to 130	1.86	20	
AW08261	Selenium, Total	mg/L	0.0000271	0.0044	0.10	0.0768	0.0775	0.0921	0.085 to 0.115	76.8	70 to 130	0.933	20	
AW08261	Chromium, Total	mg/L	0.00000316	0.0044	0.10	0.0883	0.0917	0.0854	0.085 to 0.115	85.1	70 to 130	3.76	20	
AW08263	Calcium, Total	mg/L	-0.00156	0.22	5.00	5.12	5.05	5.04	4.25 to 5.75	102	70 to 130	1.38	20	
AW08264	Mercury, Total by CVAA	mg/L	0.000151	0.0005	0.004	0.004122	0.003999	0.004055	0.0034 to 0.0046	103	70 to 130	3.03	20	
AW08261	Antimony, Total	mg/L	0.000140	0.00132	0.10	0.0765	0.0772	0.0973	0.085 to 0.115	76.5	70 to 130	0.877	20	
AW08261	Arsenic, Total	mg/L	0.00000605	0.0022	0.10	0.0763	0.0781	0.0963	0.085 to 0.115	74.3	70 to 130	2.28	20	
AW08263	Boron, Total	mg/L	0.00111	0.044	1.00	0.837	0.837	1.00	0.85 to 1.15	83.7	70 to 130	0.976	20	
AW08263	Lithium, Total	mg/L	-0.000198	0.022	0.20	0.202	0.201	0.201	0.17 to 0.23	101	70 to 130	0.496	20	

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AW08261

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW08264	Chloride, Total	mg/L	0.00	0.25	10.0	31.5	21.4	10.8	9 to 11	101	80 to 120	0.00	20
AW08264	Fluoride, Total	mg/L	0.00	0.3	2.0	2.09	0.039	2.10	1.8 to 2.2	103	80 to 120	0.00	20
AW08258	Solids, Dissolved	mg/L	12	25			194	58.0	40 to 60			2.65	5
AW08264	Sulfate, Total	mg/L	0.133	1.0	20.0	102	85.1	20.1	18 to 22	85.0	80 to 120	0.118	20

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CC:

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

Revised Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-4 DISS

Laboratory ID Number: AW08262

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Dissolved	ABB	4/7/2016	EPA 200.8		5.025	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Dissolved	ABB	4/7/2016	EPA 200.8		5.025	0.001	0.005	U Not Detected	mg/L
* Barium, Dissolved	ABB	4/7/2016	EPA 200.8		5.025	0.002	0.01	0.0175	mg/L
* Beryllium, Dissolved	ABB	4/7/2016	EPA 200.8		5.025	0.0006	0.003	U Not Detected	mg/L
* Boron, Dissolved	HRG	4/4/2016	EPA 200.7		1.015	0.02	0.1	0.189	mg/L
* Calcium, Dissolved	HRG	4/7/2016	EPA 200.7		10.15	1.0	5.0	51.8	mg/L
* Cadmium, Dissolved	ABB	4/7/2016	EPA 200.8		5.025	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Dissolved	ABB	4/7/2016	EPA 200.8		5.025	0.002	0.01	U Not Detected	mg/L
* Chromium, Dissolved	ABB	4/7/2016	EPA 200.8		5.025	0.002	0.01	J 0.00221	mg/L
* Mercury, Dissolved by CVAA	MCW	4/8/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Dissolved	HRG	4/4/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Dissolved	ABB	4/7/2016	EPA 200.8		5.025	0.002	0.01	U Not Detected	mg/L
* Lead, Dissolved	ABB	4/7/2016	EPA 200.8		5.025	0.001	0.005	U Not Detected	mg/L
* Selenium, Dissolved	ABB	4/7/2016	EPA 200.8		5.025	0.002	0.01	U Not Detected	mg/L
* Thallium, Dissolved	ABB	4/7/2016	EPA 200.8		5.025	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Chloride, Dissolved	SES	4/5/2016	EPA 300.0		1	0.04	0.25	12.8	mg/L
Fluoride, Dissolved	SES	4/5/2016	EPA 300.0		1	0.01	0.3	J 0.0210	mg/L
Sulfate, Dissolved	SES	4/5/2016	EPA 300.0		1	0.3	1	25.2	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: REVISED COPY: Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Revised Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-4 DISS

Laboratory ID Number: AW08262

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW08262 Beryllium, Dissolved	mg/L	-0.00000270	0.00132	0.10	0.0987	0.101			98.7	70 to 130	2.27	20	
AW08262 Cobalt, Dissolved	mg/L	0.00000109	0.0044	0.10	0.111	0.112			111	70 to 130	0.936	20	
AW08262 Calcium, Dissolved	mg/L	0.00163	0.22	5.00	55.3	55.4	5.16	4.25 to 5.75	70.0	70 to 130	0.181	20	
AW08262 Selenium, Dissolved	mg/L	0.0000133	0.0044	0.10	0.100	0.102			100	70 to 130	1.79	20	
AW08262 Thallium, Dissolved	mg/L	0.000000172	0.00044	0.10	0.104	0.106			104	70 to 130	1.40	20	
AW08262 Antimony, Dissolved	mg/L	0.0000432	0.00132	0.10	0.0937	0.0948			93.7	70 to 130	1.12	20	
AW08262 Cadmium, Dissolved	mg/L	-0.000000942	0.00044	0.10	0.0965	0.0990			96.5	70 to 130	2.53	20	
AW08262 Chromium, Dissolved	mg/L	-0.000000681	0.0044	0.10	0.0988	0.101			96.6	70 to 130	1.87	20	
AW08262 Barium, Dissolved	mg/L	0.00000496	0.0044	0.10	0.115	0.118			97.5	70 to 130	2.70	20	
AW08262 Lead, Dissolved	mg/L	0.00000165	0.0022	0.10	0.107	0.108			107	70 to 130	1.66	20	
AW08262 Arsenic, Dissolved	mg/L	0.00000255	0.0022	0.10	0.0970	0.0986			97.0	70 to 130	1.59	20	
AW08262 Mercury, Dissolved by CVAA	mg/L	0.000159	0.0005	0.004	0.00414	0.004156	0.004068	0.0034 to 0.0046	104	70 to 130	0.386	20	
AW08262 Boron, Dissolved	mg/L	0.00144	0.044	1.00	1.16	1.12	0.988	0.85 to 1.15	97.1	70 to 130	3.51	20	
AW08262 Lithium, Dissolved	mg/L	-0.000114	0.022	0.200	0.140	0.170	0.216	0.17 to 0.23	70.0	70 to 130	19.4	20	
AW08262 Molybdenum, Dissolved	mg/L	0.00000274	0.0044	0.10	0.113	0.115			113	70 to 130	1.93	20	

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Batch QC Summary



Revised Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-4 DISS

Laboratory ID Number: AW08262

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW07984	Sulfate, Dissolved	mg/L	0.133	1.0	20.0	84.4	67.2	19.9	18 to 22	85.5	80 to 120	0.149	20
AW07984	Chloride, Dissolved	mg/L	0.00	0.25	10.0	12.7	2.13	10.9	9 to 11	106	80 to 120	0.0938	20
AW07984	Fluoride, Dissolved	mg/L	0.00	0.3	2.0	1.99	0.078	2.10	1.8 to 2.2	95.6	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: REVISED COPY: Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/10/2017
 Version: 2.0

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW08263

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/3/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	4/15/2016	EPA 200.7		1.015	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/8/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/15/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/4/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	4/5/2016	EPA 300.0		1	0.04	0.25	J 0.0870	mg/L
* Fluoride, Total	SES	4/5/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	4/5/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW08263

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW08264 Arsenic, Total	mg/L	0.00000605	0.0022	0.10	0.0843	0.0865	0.0963	0.085 to 0.115	82.8	70 to 130	2.64	20	
AW08264 Molybdenum, Total	mg/L	0.00000402	0.0044	0.10	0.0937	0.0980	0.0978	0.085 to 0.115	93.7	70 to 130	4.48	20	
AW08263 Calcium, Total	mg/L	-0.00156	0.22	5.00	5.12	5.05	5.04	4.25 to 5.75	102	70 to 130	1.38	20	
AW08264 Chromium, Total	mg/L	0.00000316	0.0044	0.10	0.0813	0.0831	0.0854	0.085 to 0.115	81.3	70 to 130	2.15	20	
AW08264 Mercury, Total by CVAA	mg/L	0.000151	0.0005	0.004	0.004122	0.003999	0.004055	0.0034 to 0.0046	103	70 to 130	3.03	20	
AW08264 Barium, Total	mg/L	0.00000779	0.0044	0.10	0.153	0.158	0.0907	0.085 to 0.115	88.6	70 to 130	3.32	20	
AW08264 Beryllium, Total	mg/L	0.00000467	0.00132	0.10	0.0821	0.0863	0.0967	0.085 to 0.115	82.1	70 to 130	4.99	20	
AW08263 Boron, Total	mg/L	0.00111	0.044	1.00	0.837	0.837	1.00	0.85 to 1.15	83.7	70 to 130	0.976	20	
AW08263 Lithium, Total	mg/L	-0.000198	0.022	0.20	0.202	0.201	0.201	0.17 to 0.23	101	70 to 130	0.496	20	
AW08264 Antimony, Total	mg/L	0.000140	0.00132	0.10	0.0914	0.0947	0.0973	0.085 to 0.115	91.4	70 to 130	3.50	20	
AW08264 Cadmium, Total	mg/L	-0.00000143	0.00044	0.10	0.0871	0.0883	0.0932	0.085 to 0.115	87.1	70 to 130	1.33	20	
AW08264 Selenium, Total	mg/L	0.0000271	0.0044	0.10	0.0879	0.0896	0.0921	0.085 to 0.115	87.9	70 to 130	1.87	20	
AW08264 Thallium, Total	mg/L	0.00000255	0.00044	0.10	0.0851	0.0885	0.0871	0.085 to 0.115	85.1	70 to 130	3.95	20	
AW08264 Cobalt, Total	mg/L	-0.000000586	0.0044	0.10	0.0788	0.0815	0.0882	0.085 to 0.115	78.8	70 to 130	3.43	20	
AW08264 Lead, Total	mg/L	0.00000455	0.0022	0.10	0.0840	0.0875	0.0887	0.085 to 0.115	84.0	70 to 130	4.02	20	

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW08263

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW08258	Solids, Dissolved	mg/L	12	25			194	58.0	40 to 60			2.65	5
AW08264	Sulfate, Total	mg/L	0.133	1.0	20.0	102	85.1	20.1	18 to 22	85.0	80 to 120	0.118	20
AW08264	Chloride, Total	mg/L	0.00	0.25	10.0	31.5	21.4	10.8	9 to 11	101	80 to 120	0.00	20
AW08264	Fluoride, Total	mg/L	0.00	0.3	2.0	2.09	0.039	2.10	1.8 to 2.2	103	80 to 120	0.00	20

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CC:

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

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AW08264

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	J 0.00148	mg/L
* Barium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	0.0644	mg/L
* Beryllium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/3/2016	EPA 200.7		1.015	0.02	0.1	0.287	mg/L
* Calcium, Total	HRG	4/15/2016	EPA 200.7		10.15	1.0	5.0	63.4	mg/L
* Cadmium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/8/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/15/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	4/4/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/4/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/4/2016	SM 2540C		1		25	353	mg/L
* Chloride, Total	SES	4/5/2016	EPA 300.0		1	0.04	0.25	21.4	mg/L
* Fluoride, Total	SES	4/5/2016	EPA 300.0		1	0.01	0.3	J 0.0390	mg/L
* Sulfate, Total	SES	4/5/2016	EPA 300.0		1	0.3	1	85.0	mg/L

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Expiration: June 30, 2018

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AW08264

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW08264 Arsenic, Total	mg/L	0.00000605	0.0022	0.10	0.0843	0.0865	0.0963	0.085 to 0.115	82.8	70 to 130	2.64	20	
AW08598 Lithium, Total	mg/L	-0.000317	0.022	0.20	0.224	0.226	0.202	0.17 to 0.23	112	70 to 130	0.889	20	
AW08264 Molybdenum, Total	mg/L	0.00000402	0.0044	0.10	0.0937	0.0980	0.0978	0.085 to 0.115	93.7	70 to 130	4.48	20	
AW08598 Calcium, Total	mg/L	-0.00294	0.22	5.00	37.2	37.3	5.05	4.25 to 5.75	98.0	70 to 130	0.268	20	
AW08264 Barium, Total	mg/L	0.00000779	0.0044	0.10	0.153	0.158	0.0907	0.085 to 0.115	88.6	70 to 130	3.32	20	
AW08264 Beryllium, Total	mg/L	0.00000467	0.00132	0.10	0.0821	0.0863	0.0967	0.085 to 0.115	82.1	70 to 130	4.99	20	
AW08264 Cobalt, Total	mg/L	-0.000000586	0.0044	0.10	0.0788	0.0815	0.0882	0.085 to 0.115	78.8	70 to 130	3.43	20	
AW08264 Lead, Total	mg/L	0.00000455	0.0022	0.10	0.0840	0.0875	0.0887	0.085 to 0.115	84.0	70 to 130	4.02	20	
AW08598 Boron, Total	mg/L	-0.00107	0.044	1.00	1.27	1.27	0.989	0.85 to 1.15	127	70 to 130	0.00	20	
AW08264 Chromium, Total	mg/L	0.00000316	0.0044	0.10	0.0813	0.0831	0.0854	0.085 to 0.115	81.3	70 to 130	2.15	20	
AW08264 Mercury, Total by CVAA	mg/L	0.000151	0.0005	0.004	0.004122	0.003999	0.004055	0.0034 to 0.0046	103	70 to 130	3.03	20	
AW08264 Antimony, Total	mg/L	0.000140	0.00132	0.10	0.0914	0.0947	0.0973	0.085 to 0.115	91.4	70 to 130	3.50	20	
AW08264 Cadmium, Total	mg/L	-0.00000143	0.00044	0.10	0.0871	0.0883	0.0932	0.085 to 0.115	87.1	70 to 130	1.33	20	
AW08264 Selenium, Total	mg/L	0.0000271	0.0044	0.10	0.0879	0.0896	0.0921	0.085 to 0.115	87.9	70 to 130	1.87	20	
AW08264 Thallium, Total	mg/L	0.00000255	0.00044	0.10	0.0851	0.0885	0.0871	0.085 to 0.115	85.1	70 to 130	3.95	20	

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Expiration: June 30, 2018

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Alabama Power General Test Laboratory
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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 30-Mar-16
 Customer ID:
 Delivery Date: 31-Mar-16

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AW08264

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW08258	Solids, Dissolved	mg/L	12	25				194	58.0	40 to 60			2.65	5
AW08264	Sulfate, Total	mg/L	0.133	1.0	20.0	102		85.1	20.1	18 to 22	85.0	80 to 120	0.118	20
AW08264	Chloride, Total	mg/L	0.00	0.25	10.0	31.5		21.4	10.8	9 to 11	101	80 to 120	0.00	20
AW08264	Fluoride, Total	mg/L	0.00	0.3	2.0	2.09		0.039	2.10	1.8 to 2.2	103	80 to 120	0.00	20

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CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 04-Apr-16
 Customer ID:
 Delivery Date: 05-Apr-16

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AW08598

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/11/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	4/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	4/14/2016	EPA 200.8		5.075	0.001	0.005	J 0.00191	mg/L
* Barium, Total	ABB	4/14/2016	EPA 200.8		5.075	0.002	0.01	0.0789	mg/L
* Beryllium, Total	ABB	4/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/3/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	4/15/2016	EPA 200.7		1.015	0.1	0.5	32.3	mg/L
* Cadmium, Total	ABB	4/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	4/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	4/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/8/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/15/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	4/14/2016	EPA 200.8		5.075	0.002	0.01	J 0.00344	mg/L
* Lead, Total	ABB	4/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	4/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	4/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/8/2016	SM 2540C		1		25	182	mg/L
* Chloride, Total	SES	4/8/2016	EPA 300.0		1	0.04	0.25	5.89	mg/L
* Fluoride, Total	SES	4/8/2016	EPA 300.0		1	0.01	0.3	J 0.109	mg/L
* Sulfate, Total	SES	4/8/2016	EPA 300.0		1	0.3	1	13.5	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 04-Apr-16
 Customer ID:
 Delivery Date: 05-Apr-16

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AW08598

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	Spike				Limit	Rec	Limit	Prec			
AW08598 Lithium, Total	mg/L	-0.000317	0.022	0.20	0.224	0.226	0.202	0.17 to 0.23		112	70 to 130		0.889	20
AW08264 Mercury, Total by CVAA	mg/L	0.000151	0.0005	0.004	0.004122	0.003999	0.004055	0.0034 to 0.0046		103	70 to 130		3.03	20
AW08598 Lead, Total	mg/L	0.0000909	0.0022	0.10	0.0921	0.0923	0.100	0.085 to 0.115		92.1	70 to 130		0.136	20
AW08598 Antimony, Total	mg/L	0.000187	0.00132	0.10	0.0920	0.0914	0.0904	0.085 to 0.115		92.0	70 to 130		0.616	20
AW08598 Chromium, Total	mg/L	0.0000124	0.0044	0.10	0.0967	0.0958	0.0983	0.085 to 0.115		96.7	70 to 130		0.928	20
AW08598 Cadmium, Total	mg/L	0.0000723	0.00044	0.10	0.0986	0.0986	0.0981	0.085 to 0.115		98.6	70 to 130		0.0128	20
AW08598 Thallium, Total	mg/L	0.0000109	0.00044	0.10	0.0938	0.0942	0.101	0.085 to 0.115		93.8	70 to 130		0.400	20
AW08598 Beryllium, Total	mg/L	-0.0000693	0.00132	0.10	0.0982	0.101	0.101	0.085 to 0.115		98.2	70 to 130		3.25	20
AW08598 Calcium, Total	mg/L	-0.00294	0.22	5.00	37.2	37.3	5.05	4.25 to 5.75		98.0	70 to 130		0.268	20
AW08598 Cobalt, Total	mg/L	0.00000391	0.0044	0.10	0.0913	0.0914	0.0948	0.085 to 0.115		91.3	70 to 130		0.0884	20
AW08598 Molybdenum, Total	mg/L	0.0000181	0.0044	0.10	0.0954	0.0954	0.0946	0.085 to 0.115		92.0	70 to 130		0.0002620	20
AW08598 Selenium, Total	mg/L	0.000105	0.0044	0.10	0.106	0.107	0.101	0.085 to 0.115		106	70 to 130		1.24	20
AW08598 Arsenic, Total	mg/L	0.0000156	0.0022	0.10	0.102	0.102	0.0974	0.085 to 0.115		100	70 to 130		0.729	20
AW08598 Barium, Total	mg/L	0.00000533	0.0044	0.10	0.169	0.170	0.0918	0.085 to 0.115		90.1	70 to 130		0.532	20
AW08598 Boron, Total	mg/L	-0.00107	0.044	1.00	1.27	1.27	0.989	0.85 to 1.15		127	70 to 130		0.00	20

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 04-Apr-16
 Customer ID:
 Delivery Date: 05-Apr-16

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AW08598

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW08598	Fluoride, Total	mg/L	0.00	0.3	2.0	2.08	0.108	2.09	1.8 to 2.2	98.6	80 to 120	0.922	20
AW08598	Solids, Dissolved	mg/L	12	25			178	50.0	40 to 60			1.11	5
AW08598	Chloride, Total	mg/L	0.00	0.25	10.0	15.9	5.91	10.1	9 to 11	100	80 to 120	0.339	20
AW08598	Sulfate, Total	mg/L	0.00	1.0	20.0	33.7	13.5	19.1	18 to 22	101	80 to 120	0.00	20

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

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Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Definitions



Abbreviation	Description
DF	Dilution Factor
LFB	Lab Fortified Blank
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 03/29/2016 08:30

Requested Complete Date	<input type="text" value="Routine"/>	Results To	<input type="text" value="Dustin Brooks"/>
Site Representative	<input type="text" value="Byron Corina"/>	Requested By	<input type="text" value="Greg Dyer"/>
Collector	<input type="text" value="Nick Pitts"/>	Location	<input type="text" value="Gaston Ash Pond"/>

Analysis Requested	<input type="text" value="Bottle 3: Metals and Hg (1) 500 mL bottle, Bottle 4: TDS and Anions (1) 500 mL bottle, Bottles 1&2: Radiological (2) 2 L bottles"/>
Comments	<input type="text" value="Filtered sample was preserved using 3.0 mL (HNO3) for the Metals and Hg, and 5.0 mL (HNO3) for the Radiologicals"/>

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-15	03/28/2016	13:30	4	Groundwater		4950-25061-10-1	1.0	AW07982
MW-14	03/28/2016	16:15	4	Groundwater		4950-25061-10-1	1.0	AW07983
MW-14 Filt	03/28/2016	16:15	4	Groundwater	<input checked="" type="checkbox"/>	4950-25061-10-1	1.0	AW07984
FB-1	03/28/2016	18:15	4	Field Blank		4950-25061-10-1	1.0	AW07985

Relinquished By	Received By	Date/Time
		03/29/2016 08:25

SmarTroll ID	4696-23441-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	3901-20010-2-2	Thermometer ID
		1506-3968-4-4
		pH Strip ID
		4831-24384-20-11



Chain of Custody

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Field Complete
 Lab Complete

Lab ETA **03/30/2016 08:15**

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Nick Pitts	Location	Gaston Ash Pond
Analysis Requested	Bottle 3: Metals and Hg (1) 500 mL bottle, Bottle 4: TDS and Anions (1) 500 mL bottle, Bottles 1&2: Radiological (2) 2 L bottles		
Comments			

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-16	03/29/2016	11:25	4	Groundwater		4950-25065-10-5	2.5	AW08181
MW-16 Du	03/29/2016	11:25	4	Sample Duplicate		4950-25065-10-5	2.5	AW08182
MW-17	03/29/2016	12:50	4	Groundwater		4950-25065-10-5	2.5	AW08183
MW-20	03/29/2016	15:10	4	Groundwater		4950-25064-10-4	4.7	AW08184
MW-18	03/29/2016	16:40	4	Groundwater		4950-25064-10-4	4.7	AW08185
EB-1	03/29/2016	17:20	4	Equipment Blank		4950-25064-10-4	4.7	AW08186

Relinquished By	Received By	Date/Time
		03/30/2016 08:11

SmarTroll ID	4696-23441-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	4677-23343-4-2	
Thermometer ID	1506-3968-4-4	
pH Strip ID	4826-24363-2-1	



Chain of Custody
Groundwater
 APC General Testing Laboratory
 General Service Complex Building 8

- Field Complete
- Lab Complete

Lab ETA 03/30/2016 08:00

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Jason Rouss	Location	Gaston Ash Pond
Analysis Requested	Bottle 3: Metals and Hg (1) 500 mL bottle, Bottle 4: TDS and Anions (1) 500 mL bottle, Bottles 1&2: Radiological (2) 2 L bottles		
Comments			

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-1	03/29/2016	17:00	4	Groundwater		4950-25064-10-4	4.7	AW08187

Relinquished By	Received By	Date/Time
		03/30/2016 07:58
		03/30/2016 08:10

SmarTroll ID 4696-23444-3-3	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID 4677-23342-4-1	Thermometer ID 1506-3968-4-4
	pH Strip ID 4826-24363-2-1



Chain of Custody

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Field Complete

Lab Complete

Lab ETA 03/31/2016 08:00

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Nick Pitts	Location	Gaston Ash Pond

Analysis Requested	Bottle 3: Metals and Hg (1) 500 mL bottle, Bottle 4: TDS and Anions (1) 500 mL bottle, Bottles 1&2: Radiological (2) 2 L bottles		
Comments	Added 3.0 mL (HNO ₃) to Metals and Hg, and 5.0mL (HNO ₃) to Radiologicals after lab filter. 4/1/16 SGC		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-7	03/30/2016	10:35	4	Groundwater		4950-25066-10-6	2.0	AW08250
MW-6	03/30/2016	13:45	4	Groundwater		4950-25063-10-3	1.2	AW08251
MW-6 Filte	03/30/2016	13:45	4	Groundwater	✓	4950-25063-10-3	1.2	AW08252
MW-5	03/30/2016	16:18	4	Groundwater		4950-25063-10-3	1.2	AW08253
MW-5 Dup	03/30/2016	16:18	4	Sample Duplicate		4950-25063-10-3	1.2	AW08254

Relinquished By	Received By	Date/Time
<i>[Signature]</i>	<i>[Signature]</i>	03/31/2016 08:46

SmarTroll ID	4696-23441-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/> Thermometer ID 1506-3968-4-4 pH Strip ID 4826-24363-2-1
Turbidity ID	4677-23343-4-2	



Chain of Custody

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

 Field Complete

 Lab Complete

 Lab ETA 03/31/2016 09:01

Requested Complete Date	Routine
Site Representative	Byron Corina
Collector	Clarence Specht

Results To	Dustin Brooks
Requested By	Greg Dyer
Location	Gaston Ash Pond

Analysis Requested	Bottle 3: Metals and Hg (1) 500 mL bottle, Bottle 4: TDS and Anions (1) 500 mL bottle, Bottles 1&2: Radiological (2) 2 L bottles
Comments	AW08260 deleted-Radiological QC only. SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-19	03/28/2016	16:29	4	Groundwater		4950-25068-10-8	2.0	AW08255
MW-8	03/29/2016	13:51	4	Groundwater		4950-25068-10-8	2.0	AW08256
MW-10	03/30/2016	11:05	4	Groundwater		4950-25068-10-8	2.0	AW08257
MW-11	03/30/2016	14:10	4	Groundwater		4950-25068-10-8	2.0	AW08258
MW-13	03/30/2016	17:44	4	Groundwater		4950-25062-10-2	0.7	AW08259

Relinquished By	Received By	Date/Time
<i>C. Specht</i>	<i>Greg Dyer</i>	03/31/2016 09:01

SmarTroll ID	4696-23443-3-2	All metals and radiological bottles have pH < 2	<input checked="" type="checkbox"/>
Turbidity ID	4696-23443-3-2	Thermometer ID	1506-3968-4-4
		pH Strip ID	4826-24363-2-1



Chain of Custody

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Field Complete

Lab Complete

Lab ETA 03/31/2016 08:15

Requested Complete Date	<input type="text" value="Routine"/>	Results To	<input type="text" value="Dustin Brooks"/>
Site Representative	<input type="text" value="Byron Corina"/>	Requested By	<input type="text" value="Greg Dyer"/>
Collector	<input type="text" value="Jason Rouss"/>	Location	<input type="text" value="Gaston Ash Pond"/>
Analysis Requested	<input type="text" value="Bottle 3: Metals and Hg (1) 500 mL bottle, Bottle 4: TDS and Anions (1) 500 mL bottle, Bottles 1&2: Radiological (2) 2 L bottles"/>		
Comments	<input type="text" value="Added 3.0 mL (HNO3) to Metals and Hg, and 5.0 mL (HNO3) to Radiologicals after filtering. 4/1/16 SGC"/>		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-4	03/30/2016	12:05	4	Groundwater		4950-25069-10-9	1.6	AW08261
MW-4 dissol	03/30/2016	12:05	4	Groundwater	<input checked="" type="checkbox"/>	4950-25069-10-9	1.6	AW08262
FB-2	03/30/2016	13:32	4	Field Blank		4950-25069-10-9	1.6	AW08263
MW-12	03/30/2016	15:22	4	Groundwater		4950-25069-10-9	1.6	AW08264

Relinquished By	Received By	Date/Time
		03/31/2016 08:56

SmarTroll ID	<input type="text" value="4696-23444-3-3"/>	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	<input type="text" value="4677-23342-4-1"/>	Thermometer ID <input type="text" value="1506-3968-4-4"/>
		pH Strip ID <input type="text" value="4826-24363-2-1"/>



Chain of Custody

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

- Field Complete
- Lab Complete

Lab ETA

Requested Complete Date	<input type="text" value="Routine"/>	Results To	<input type="text" value="Dustin Brooks"/>
Site Representative	<input type="text" value="Byron Corina"/>	Requested By	<input type="text" value="Greg Dyer"/>
Collector	<input type="text" value="Clarence Specht"/>	Location	<input type="text" value="Gaston Ash Pond"/>
Analysis Requested	<input type="text" value="Bottle 3: Metals and Hg (1) 500 mL bottle, Bottle 4: TDS and Anions (1) 500 mL bottle, Bottles 1&2: Radiological (2) 2 L bottles"/>		
Comments	<input type="text"/>		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-9	04/04/2016	11:59	4	Groundwater		1	1.4	AW08598

Relinquished By	Received By	Date/Time
		04/04/2016 16:13

SmarTroll ID <input type="text" value="4696-23443-3-2"/>	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID <input type="text" value="3901-20009-2-1"/>	Thermometer ID <input type="text" value="1506-3968-4-4"/>
	pH Strip ID <input type="text" value="4826-24363-2-1"/>



Chain of Custody

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Field Complete

Lab Complete

Lab ETA 03/29/2016 08:30

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Jason Rouss	Location	Gaston Ash Pond

Analysis Requested	Bottle 3: Metals and Hg (1) 500 mL bottle, Bottle 4: TDS and Anions (1) 500 mL bottle, Bottles 1&2: Radiological (2) 2 L bottles
Comments	Filtered sample was preserved using 3.0mL (HNO3) for Metals and Hg, and 5.0 mL (HNO3) for Radiologicals

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-2	03/28/2016	14:05	4	Groundwater		4950-25062-10-2	1.4	AW07986
MW-3	03/28/2016	18:20	4	Groundwater		4950-25062-10-2	1.4	AW07987
MW-3 dissol	03/28/2016	18:20	4	Groundwater	<input checked="" type="checkbox"/>	4950-25062-10-2	1.4	AW07988

Relinquished By	Received By	Date/Time
		03/29/2016 08:26

SmarTroll ID	4696-23444-3-3	All metals and radiological bottles have pH < 2	<input checked="" type="checkbox"/>
Turbidity ID	4677-23342-4-1	Thermometer ID	1506-3968-4-4
		pH Strip ID	4831-24384-20-11

Report To Sarah Copeland
 APC GSC Building 8

Sample #	Location	Sample Description	Customer Sample ID	Date Collected	Test Method
102638001	Gaston Ash Pond	MW-15	AW07982, Water	3/28/2016 1:30:00 PM	Ga Tech
102638002	Gaston Ash Pond	MW-14	AW07983, Water	3/28/2016 4:15:00 PM	Ga Tech
102638003	Gaston Ash Pond	MW-14 Filtered	AW07984, Water	3/28/2016 4:15:00 PM	Ga Tech
102638004	Gaston Ash Pond	FB-1 Field Blnak	AW07985, Water	3/28/2016 6:15:00 PM	Ga Tech
102638005	Gaston Ash Pond	MW-2	AW07986, Water	3/28/2016 4:05:00 PM	Ga Tech
102638006	Gaston Ash Pond	MW-3	AW07987, Water	3/28/2016 6:20:00 PM	Ga Tech
102638007	Gaston Ash Pond	MW-3 Filtered	AW07988, Water	3/28/2016 6:20:00 PM	Ga Tech
102638008	Gaston Ash Pond	MW-16	AW08181, Water	3/29/2016 11:25:00 AM	Ga Tech
102638009	Gaston Ash Pond	MW-16 DUP	AW08182, Water	3/29/2016 11:25:00 AM	Ga Tech
102638010	Gaston Ash Pond	MW-17	AW08183, Water	3/29/2016 12:50:00 PM	Ga Tech
102638011	Gaston Ash Pond	MW-20	AW08184, Water	3/29/2016 3:10:00 PM	Ga Tech
102638012	Gaston Ash Pond	MW-18	AW08185, Water	3/29/2016 4:40:00 PM	Ga Tech
102638013	Gaston Ash Pond	EB-1 Equipment	AW08186, Water	3/29/2016 5:20:00 PM	Ga Tech
102638014	Gaston Ash Pond	MW-1	AW08187, Water	3/29/2016 5:00:00 PM	Ga Tech

Certification

Data approved by Gary Smith
 Georgia Power Company

Georgia Power Company
 2480 Maner Road
 Atlanta, Ga. 30339
 (404) 799-2100 fax (404) 799-2141

Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102638001
 Collection Date 3/28/2016 1:30:00 PM
 Sampling Media Water
 Station AW07982
 Sample ID MW-15 Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.89E-01
Ra-228	Ga Tech	pCi/L			6.70E-01

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Report To Sarah Copeland
APC GSC Building 8

Location APC Lab
Sample Number 102638002
Collection Date 3/28/2016 4:15:00 PM
Sampling Media Water
Station AW07983
Sample ID MW-14 Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.10E-01
Ra-228	Ga Tech	pCi/L			6.49E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102638003
 Collection Date 3/28/2016 4:15:00 PM
 Sampling Media Water
 Station AW07984
 Sample ID MW-14 Filtered Gaston Ash
 Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.69E-01
Ra-228	Ga Tech	pCi/L			6.91E-01

Georgia Power Company
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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102638004
 Collection Date 3/28/2016 6:15:00 PM
 Sampling Media Water
 Station AW07985
 Sample ID FB-1 Field Blnak Gaston Ash
 Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.48E-01
Ra-228	Ga Tech	pCi/L			6.47E-01

Georgia Power Company
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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102638005
 Collection Date 3/28/2016 4:05:00 PM
 Sampling Media Water
 Station AW07986
 Sample ID MW-2 Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.78E-01
Ra-228	Ga Tech	pCi/L			5.36E-01

Georgia Power Company
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 Atlanta, Ga. 30339
 (404) 799-2100 fax (404) 799-2141

Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102638006
 Collection Date 3/28/2016 6:20:00 PM
 Sampling Media Water
 Station AW07987
 Sample ID MW-3 Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.61E-01
Ra-228	Ga Tech	pCi/L			3.81E-01

Georgia Power Company
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 Atlanta, Ga. 30339
 (404) 799-2100 fax (404) 799-2141

Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102638007
 Collection Date 3/28/2016 6:20:00 PM
 Sampling Media Water
 Station AW07988
 Sample ID MW-3 Filtered Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.79E-01
Ra-228	Ga Tech	pCi/L			6.66E-01

Georgia Power Company
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 Atlanta, Ga. 30339
 (404) 799-2100 fax (404) 799-2141

Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102638008
 Collection Date 3/29/2016 11:25:00 AM
 Sampling Media Water
 Station AW08181
 Sample ID MW-16 Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L	2.84E+00	+/- 7.71E-01	
Ra-228	Ga Tech	pCi/L			8.18E-01
Total Isotopic Radium	Ga Tech	pCi/L	2.84E+00		

Georgia Power Company
 2480 Maner Road
 Atlanta, Ga. 30339
 (404) 799-2100 fax (404) 799-2141

Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102638009
 Collection Date 3/29/2016 11:25:00 AM
 Sampling Media Water
 Station AW08182
 Sample ID MW-16 DUP Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L	2.21E+00	+/- 7.51E-01	
Ra-228	Ga Tech	pCi/L			6.96E-01
Total Isotopic Radium	Ga Tech	pCi/L	2.21E+00		

Georgia Power Company
 2480 Maner Road
 Atlanta, Ga. 30339
 (404) 799-2100 fax (404) 799-2141

Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102638010
 Collection Date 3/29/2016 12:50:00 PM
 Sampling Media Water
 Station AW08183
 Sample ID MW-17 Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.69E-01
Ra-228	Ga Tech	pCi/L			6.65E-01

Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102638011
 Collection Date 3/29/2016 3:10:00 PM
 Sampling Media Water
 Station AW08184
 Sample ID MW-20 Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L	1.72E+01	+/- 2.19E+00	
Ra-228	Ga Tech	pCi/L			8.27E-01
Total Isotopic Radium	Ga Tech	pCi/L	1.72E+01		

Georgia Power Company
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 Atlanta, Ga. 30339
 (404) 799-2100 fax (404) 799-2141

Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102638012
 Collection Date 3/29/2016 4:40:00 PM
 Sampling Media Water
 Station AW08185
 Sample ID MW-18 Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.40E-01
Ra-228	Ga Tech	pCi/L			5.79E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102638013
 Collection Date 3/29/2016 5:20:00 PM
 Sampling Media Water
 Station AW08186
 Sample ID EB-1 Equipment Blank Gaston
 Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.38E-01
Ra-228	Ga Tech	pCi/L			5.93E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102638014
 Collection Date 3/29/2016 5:00:00 PM
 Sampling Media Water
 Station AW08187
 Sample ID MW-1 Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.89E-01
Ra-228	Ga Tech	pCi/L			5.23E-01

Georgia Power Environmental Laboratory
 2480 Maner Road, Bin 38110
 Atlanta, Georgia 30338
 Phone: (404) 799-2100
 Company: 8-530-2100

**ANALYSIS REQUEST AND
 CHAIN OF CUSTODY RECORD**

LAB USE ONLY
 Work Order No. 102638
 Reviewed By: [Signature] 4-4-16

12 Page 1 of 2
 13 Standard Turnaround Time
 # of Business Days (Rush)
 (Must be cleared through Env. Lab. prior to shipment)

Company: Alabama Power Company
 Report To: Sarah Copeland
 Address: sgcopela@athenico.com

Sample Shipment Date: 3/31/16
 Sampled By: NP. J.P.R.
 Print Name

Phone/Fax: 205-1664-1612
 Contact: Sarah Copeland
 Project Location: Gaston Ash Pond
 Account Number: 5
 Special Instructions: 7

Signature
 Sample Received Date: 10 4/16 @ 11:00
 Sample Received By: [Signature]
 Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

PRESERVATIVE	Sample Type (See 2)	
	G-Spec G-GWR	E-Composite
N	Surface Water	
	Enrichment Water	
ANALYSIS REQUESTED	DO	
	SR	
	SR-Suite	
	SR-Suite	
	SR-Suite	
	SR-Suite	
	SR-Suite	
	SR-Suite	
	SR-Suite	
	SR-Suite	

LAB USE ONLY LAB ID	Sample Number	Collection		Sample Description	Matrix	No. of Containers			LAB USE ONLY Comments
		Date	Time			18	19	20	
<u>102638</u>	<u>AN07982</u>	<u>3/28</u>	<u>1330</u>	<u>MW-15</u>	<u>GW</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>Pa-2216</u>
	<u>AN07983</u>	<u>3/28</u>	<u>1615</u>	<u>MW-14</u>	<u>GW</u>	<u>2</u>	<u>2</u>	<u>2</u>	<u>Pa-2208</u>
	<u>AN07984</u>	<u>3/28</u>	<u>1615</u>	<u>MW-14 Filtered</u>	<u>GW</u>	<u>2</u>	<u>2</u>	<u>2</u>	
	<u>AN07985</u>	<u>3/28</u>	<u>1815</u>	<u>FB-1 Field Blank</u>	<u>GW</u>	<u>2</u>	<u>2</u>	<u>2</u>	
	<u>AN07986</u>	<u>3/28</u>	<u>1605</u>	<u>MW-2</u>	<u>GW</u>	<u>2</u>	<u>2</u>	<u>2</u>	
	<u>AN07987</u>	<u>3/28</u>	<u>1820</u>	<u>MW-3</u>	<u>GW</u>	<u>2</u>	<u>2</u>	<u>2</u>	
<u>V</u>	<u>AN07988</u>	<u>3/28</u>	<u>1820</u>	<u>MW-3 Filtered</u>	<u>GW</u>	<u>2</u>	<u>2</u>	<u>2</u>	

FOR CHAIN OF CUSTODY USE ONLY
 Relinquished by: [Signature] Date/Time 3/31/16 0800
 Received by: [Signature] Date/Time 3/31/16 0800
 Relinquished by: ALG Date/Time 4/14/16
 Received by: _____ Date/Time _____

Georgia Power Environmental Laboratory
 2480 Maner Road, Bm 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

**ANALYSIS REQUEST AND
 CHAIN OF CUSTODY RECORD**

**LAB
 USE
 ONLY**

Work Order No. 102238
 Reviewed By: [Signature] 4-4-16

12 Page 2 of 2
 13 Standard Turnaround Time

of Business Days (Rush)
 (Must be cleared through Env. Lab prior to shipment)

Company: 1 APC
 Report To: sgropele@smthemco.com
 Address: 2

Sample Shipment Date: 3/31/16
 Sampled By: N.P. J.R. Print Name
 Signature
 Sample Received Date: 10/11/16 @ 11:00
 Sample Received By: [Signature]
 Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise

Project Location: 5 Gaston Ash Pond
 Account Number: 6
 Special Instructions: 7

PRESERVATIVE Z1		Sample Type Key Z2	
<input checked="" type="checkbox"/>	N	G-Grab	C-Domestic
ANALYSIS REQUESTED Z2		Matrix Key Z5	
		S-Solid	SVS-Surface Water
		SL-Sludge	DW-Drinking Water
		W-Water	WW-Waste Water
		W-Veget	BW-Drinking Water
		L-Liquid	DW-Drinking Water
		Preservative Key Z6	
		H-Hydrochloric Acid	
		N-Nitric Acid	
		S-Sulfuric Acid	
		SP-Sodium Peroxide	
		P-Phosphoric Acid	
		ST-Sodium Thiosulfate	
		U-Urea	
		U-Ureterect	
		U-Ureterect	

LAB USE ONLY 14 LAB ID	Sample Number 15	Collection 16		Sample Description 17	Matrix	No. of Containers			LAB USE ONLY 26 Comments	
		Date	Time			18	19	20		
	AWD8181	3/29	1125	MW-10	GW	2			X	RA-226
	AWD8182	3/29	1125	MW-10 DUP	GW	2			X	RA-228
	AWD8183	3/29	1250	MW-17	GW	2			X	
	AWD8184	3/29	1510	MW-20	GW	2			X	
	AWD8185	3/29	1640	MW-18	GW	2			X	
	AWD8186	3/29	1720	ER-1 Equipment Blank	GW	2			X	
	AWD8187	3/29	1700	MW-1	GW	2			X	

FOR CHAIN OF CUSTODY USE ONLY 27

Relinquished by: [Signature] Date/Time 3/31/16 0800
 Received by: [Signature] Date/Time 3/31/16 1047
 Relinquished by: [Signature] Date/Time 3/31/16
 Received by: [Signature] Date/Time 3/31/16

Sample Receipt Checklist



Client: APC Lab
 Workorder No.: 102638
 Carrier: COURIER

of Samples: 14
 Tracking No:

Question	Answer	Comment
Radioactivity wasn't checked or is <= background as measured by a survey meter	True	
Custody seals were present on cooler	False	
Custody seals were present on sample	False	
The cooler or samples do not appear to have been compromised or tampered with	True	
Samples were received on ice	True False	
Cooler temperature is acceptable	True	
Cooler temperature is recorded	True	21.5
COC is present	True	
COC is filled out in ink and is legible	True	Missing collection year on COC, samples were logged in based on sample container labels.
COC is filled out with pertinent information	True	
The field sampler's name is on the COC	True	
Sample containers have legible labels	True	
Information on the sample label agrees with information on the COC	True	
Samples are received within holding times	True	
Containers are not broken or leaking	True	
Sample collection date/times are present	True	
Appropriate sample containers are used	True	
Sample bottles are completely filled	True	
Sample preservation is checked	True	
Sample preservation is acceptable	True	
There is sufficient sample volume for all requested analyses	True	
Containers requiring zero headspace have no headspace or the bubble is < 6mm (1/4 inch)	True	
Multiphasic samples are not present	True	
Samples do not require splitting or compositing	True	

Receiving Narrative:

QUALITY CONTROL DATA

Workorders: 102638, 102623, 102643, 102701,

QC Batch: 16944

Analysis Method: Ga Tech

QC Batch Method: Ga Tech

Associated Lab Samples: 102638013-014, 102623001-002, 102643001-005, 102701001-011

METHOD BLANK:

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Radium-226	pCi/l	<4.673E-01	1.0	
Radium-228	pCi/l	<5.607E-01	1.0	

Laboratory Control Sample:

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Radium-226	pCi/l	4.810	5.006	104	70-130	
Radium-228	pCi/l	4.884	5.014	103	70-130	

Laboratory Control Sample Duplicate:

Parameter	Units	RPD	Max RPD	Qualifiers
Radium-226	pCi/l	9.2	20	
Radium-228	pCi/l	0.97	20	

Sample Duplicate:

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
Radium-226	pCi/l	ND	ND	NA	20	
Radium-228	pCi/l	ND	ND	NA	20	

QUALITY CONTROL DATA

Workorders: 102606, 102638

QC Batch: 16950

Analysis Method: Ga Tech

QC Batch Method: Ga Tech

Associated Lab Samples: 102606012-018, 102638001-012

METHOD BLANK:

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Radium-226	pCi/l	<3.586E-01	1.0	
Radium-228	pCi/l	<7.348E-01	1.0	

Laboratory Control Sample:

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Radium-226	pCi/l	4.742	5.882	124	70-130	
Radium-228	pCi/l	4.889	5.707	117	70-130	

Laboratory Control Sample Duplicate:

Parameter	Units	RPD	Max RPD	Qualifiers
Radium-226	pCi/l	12.9	20	
Radium-228	pCi/l	16.2	20	

Report To Sarah Copeland
 APC GSC Building 8

Sample #	Location	Sample Description	Customer Sample ID	Date Collected	Test Method
102701001	Gaston Ash Pond	MW-1	AW08250, Water	3/30/2016 10:35:00 AM	Ga Tech
102701002	Gaston Ash Pond	MW-6	AW08251, Water	3/30/2016 1:45:00 PM	Ga Tech
102701003	Gaston Ash Pond	MW-6 Filtered	AW08252, Water	3/30/2016 1:45:00 PM	Ga Tech
102701004	Gaston Ash Pond	MW-5	AW08253, Water	3/30/2016 4:18:00 PM	Ga Tech
102701005	Gaston Ash Pond	MW-5 DUP	AW08254, Water	3/30/2016 4:18:00 PM	Ga Tech
102701006	Gaston Ash Pond	MW-19	AW08255, Water	3/28/2016 4:29:00 PM	Ga Tech
102701007	Gaston Ash Pond	MW-8	AW08256, Water	3/29/2016 5:58:00 PM	Ga Tech
102701008	Gaston Ash Pond	MW-10	AW08257, Water	3/30/2016 11:05:00 AM	Ga Tech
102701009	Gaston Ash Pond	MW-11	AW08258, Water	3/30/2016 2:10:00 PM	Ga Tech
102701010	Gaston Ash Pond	MW-13	AW08259, Water	3/30/2016 5:44:00 PM	Ga Tech
102701012	Gaston Ash Pond	MW-4	AW08261, Water	3/30/2016 12:05:00 PM	Ga Tech
102701013	Gaston Ash Pond	MW-4 Filtered	AW08262, Water	3/30/2016 12:05:00 PM	Ga Tech
102701014	Gaston Ash Pond	FB-2 Field Blank	AW08263, Water	3/30/2016 1:32:00 PM	Ga Tech
102701015	Gaston Ash Pond	MW-12	AW08264, Water	3/30/2016 3:22:00 PM	Ga Tech
102701016	Gaston Ash Pond	MW-9	AW08598, Water	4/4/2016 11:59:00 AM	Ga Tech

Certification

Data approved by Gary Smith
 Georgia Power Company

Georgia Power Company
 2480 Maner Road
 Atlanta, Ga. 30339
 (404) 799-2100 fax (404) 799-2141

Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102701001
 Collection Date 3/30/2016 10:35:00 AM
 Sampling Media Water
 Station AW08250
 Sample ID MW-1 Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.36E-01
Ra-228	Ga Tech	pCi/L			5.57E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102701002
 Collection Date 3/30/2016 1:45:00 PM
 Sampling Media Water
 Station AW08251
 Sample ID MW-6 Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			3.49E-01
Ra-228	Ga Tech	pCi/L			6.33E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102701003
 Collection Date 3/30/2016 1:45:00 PM
 Sampling Media Water
 Station AW08252
 Sample ID MW-6 Filtered Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.50E-01
Ra-228	Ga Tech	pCi/L			5.54E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102701004
 Collection Date 3/30/2016 4:18:00 PM
 Sampling Media Water
 Station AW08253
 Sample ID MW-5 Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.74E-01
Ra-228	Ga Tech	pCi/L			6.85E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102701005
 Collection Date 3/30/2016 4:18:00 PM
 Sampling Media Water
 Station AW08254
 Sample ID MW-5 DUP Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.08E-01
Ra-228	Ga Tech	pCi/L			5.84E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102701006
 Collection Date 3/28/2016 4:29:00 PM
 Sampling Media Water
 Station AW08255
 Sample ID MW-19 Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.24E-01
Ra-228	Ga Tech	pCi/L			6.85E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102701007
 Collection Date 3/29/2016 5:58:00 PM
 Sampling Media Water
 Station AW08256
 Sample ID MW-8 Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.67E-01
Ra-228	Ga Tech	pCi/L			4.59E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102701008
 Collection Date 3/30/2016 11:05:00 AM
 Sampling Media Water
 Station AW08257
 Sample ID MW-10 Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.30E-01
Ra-228	Ga Tech	pCi/L			5.65E-01

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Report To Sarah Copeland
APC GSC Building 8

Location APC Lab
Sample Number 102701009
Collection Date 3/30/2016 2:10:00 PM
Sampling Media Water
Station AW08258
Sample ID MW-11 Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			2.92E-01
Ra-228	Ga Tech	pCi/L			3.16E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102701010
 Collection Date 3/30/2016 5:44:00 PM
 Sampling Media Water
 Station AW08259
 Sample ID MW-13 Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.22E-01
Ra-228	Ga Tech	pCi/L			6.90E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102701012
 Collection Date 3/30/2016 12:05:00 PM
 Sampling Media Water
 Station AW08261
 Sample ID MW-4 Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.26E-01
Ra-228	Ga Tech	pCi/L			7.29E-01

Georgia Power Company
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 Atlanta, Ga. 30339
 (404) 799-2100 fax (404) 799-2141

Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102701013
 Collection Date 3/30/2016 12:05:00 PM
 Sampling Media Water
 Station AW08262
 Sample ID MW-4 Filtered Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.39E-01
Ra-228	Ga Tech	pCi/L			7.57E-01

Georgia Power Company
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 Atlanta, Ga. 30339
 (404) 799-2100 fax (404) 799-2141

Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102701014
 Collection Date 3/30/2016 1:32:00 PM
 Sampling Media Water
 Station AW08263
 Sample ID FB-2 Field Blank Gaston Ash
 Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.50E-01
Ra-228	Ga Tech	pCi/L			7.87E-01

Georgia Power Company
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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102701015
 Collection Date 3/30/2016 3:22:00 PM
 Sampling Media Water
 Station AW08264
 Sample ID MW-12 Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.37E-01
Ra-228	Ga Tech	pCi/L			5.93E-01

Georgia Power Company
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 Atlanta, Ga. 30339
 (404) 799-2100 fax (404) 799-2141

Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102701016
 Collection Date 4/4/2016 11:59:00 AM
 Sampling Media Water
 Station AW08598
 Sample ID MW-9 Gaston Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.56E-01
Ra-228	Ga Tech	pCi/L			7.93E-01

Georgia Power Environmental Laboratory

2480 Maner Road, Bin 38110
Atlanta, Georgia 30339
Phone: (404) 799-2100
Company: 8-530-2100

ANALYSIS REQUEST AND
CHAIN OF CUSTODY RECORD

LAB USE ONLY
Work Order No. 102701
Reviewed By: [Signature]
12 Page 1 of 2
13 Standard Turnaround Time
of Business Days (Rush)
(Must be cleared through Env. Lab. prior to shipment)

Company: 1 Alabama Power Company
Report To: sgopela@southenco.com
Address: 2

Sample Shipment Date: 8 4/5/16
Sampled By: 9 N.P. / C.S.
Print Name

Sample Received Date: 10 4/16/16 @ 10:00
Signature [Signature]
Sample Received By: 11 [Signature]
Authorization to subcontract analysis will be assumed acceptable by
customer unless stated otherwise.

Sample Description 17
Sample Type 18
Matrix
No. of Containers 20

LAB USE ONLY 14 LAB ID	Sample Number 15	Collection Date 16	Time	Sample Description 17
102701001	AW08250	3/30	1035	MW-7
2	AW08251	3/30	1345	MW-10
3	AW08252	3/30	1345	MW-10 Filtered
4	AW08253	3/30	1418	MW-5
5	AW08254	3/30	1418	MW-5 DUP
6	AW08255	3/28	1429	MW-19
7	AW08256	3/29	1758	MW-8
8	AW08257	3/30	1105	MW-10
9	AW08258	3/30	1410	MW-11
10	AW08259	3/30	1744	MW-13

Relinquished by: 28 [Signature] Date/Time 4/5/16 1030
Received by: 29 [Signature] Date/Time 4/5/16 1030
Relinquished by: Date/Time
Received by: Date/Time

LAB USE ONLY: Sample Receipt Information 30
Date/Time 4/5/16 1030
Signature [Signature]

LAB USE ONLY 25
Comments
RA-228
RA-226



Georgia Power Environmental Laboratory
 2480 Maner Road, Bin 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2100

**ANALYSIS REQUEST AND
 CHAIN OF CUSTODY RECORD**

**LAB
 USE
 ONLY**

Work Order No. 102701

Reviewed By: [Signature]

12 Page 2 of 2

13 Standard Turnaround Time

of Business Days (Rush)
 (Must be cleared through Env. Lab. prior to shipment)

Company: Alabama Power Company
 Report To: Sgropela@alpower.com
 Address: 2

Sample Shipment Date: 4/5/16
 Sampled By: C.S. / J.P.R.
 Print Name

Phone/Fax: 205-1064-10121
 Contact: Saran Copeland
 Project Location: Gaston Ash Pond
 Account Number: 6
 Special Instructions: 7

Signature [Signature]
 Sample Received Date: 4/5/16 @ 10:00
 Sample Received By: [Signature]
 Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise

PRESERVATIVE Z1		Sample Type Key: Z3	
ANALYSIS REQUESTED Z2		0. None	1. Composite
N		Matrix Key Z4	0. Surface Water 1. Sediment 2. Sludge 3. Solid 4. Gas 5. Other 6. Other (Specify)
		Pressure Key Z5	1. Hydrochloric Acid 2. Nitric Acid 3. Sulfuric Acid 4. Hydrofluoric Acid 5. Perchloric Acid 6. Other (Specify)

LAB USE ONLY 14 LAB ID	Sample Number 15	Collection 16 Date	Time	Sample Description 17	Sample Type 18	Matrix 19	No. of Containers 20	LAB USE ONLY 26 Comments
102701	AW082100	3/30	1750	RD-1 Radiological DTP	GW	Z	2	Ra-226 Ra-228
	AW082101	3/30	1205	MW-4	GW	Z	2	
	AW082102	3/30	1205	MW-4 Filtered	GW	Z	2	
	AW082103	3/30	1332	FB-2 Field Blank	GW	Z	2	
	AW082104	3/30	1522	MW-12	GW	Z	2	
	AW08590	4/4	1159	MW-9	GW	Z	2	

FOR CHAIN OF CUSTODY USE ONLY 27

Relinquished by: [Signature] Date/Time 4/5/16 1030 2150 (CET) (R-3PL) Date. expires in good condition, no seal

Received by: [Signature] Date/Time 4/5/16 PHK, Counsel.

Relinquished by: [Signature] Date/Time 4/5/16

Received by: [Signature] Date/Time 4/5/16

Sample Receipt Checklist



Client: APC Lab
 Workorder No.: 102701
 Carrier: HAND

of Samples: 16
 Tracking No:

Question	Answer	Comment
Radioactivity wasn't checked or is <= background as measured by a survey meter	True	
Custody seals were present on cooler	False	
Custody seals were present on sample	False	
The cooler or samples do not appear to have been compromised or tampered with	True	
Samples were received on ice	True ^{AMJ 8/2/16} False	
Cooler temperature is acceptable	True	
Cooler temperature is recorded	True	21.5
COC is present	True	
COC is filled out in ink and is legible	True	
COC is filled out with pertinent information	True	
The field sampler's name is on the COC	False	Multiple collectors listed on sample container labels.
Sample containers have legible labels	True	
Information on the sample label agrees with information on the COC	False	Sample AW08256 the collection time was different on two labels on sample container, sample was logged in based on the information provided on COC.
Samples are received within holding times	True	
Containers are not broken or leaking	True	
Sample collection date/times are present	True	
Appropriate sample containers are used	True	
Sample bottles are completely filled	False	Sample AW08263 one of the sample containers leaked out during transportation.
Sample preservation is checked	True	
Sample preservation is acceptable	True	
There is sufficient sample volume for all requested analyses	True	
Containers requiring zero headspace have no headspace or the bubble is < 6mm (1/4 inch)	True	
Multiphasic samples are not present	True	
Samples do not require splitting or compositing	True	

Receiving Narrative:

Jassim, Ayssar

From: Copeland, Sarah Garst
Sent: Tuesday, April 05, 2016 5:26 PM
To: Jassim, Ayssar
Subject: AW08263

Good afternoon,

Our mail room notified us this afternoon that one of the Radium samples leaked during transport. I will try to help prevent this from reoccurring by packing the boxes next time. It was only one of the 2L, so there will be a second 2L remaining. The sample is a field blank. I'm not positive how much of the sample actually spilt. I'm so sorry for any inconvenience this may cause!

Thanks!

Sarah Copeland

Environmental Affairs Specialist
APC GSC Building 8
Ext: 205-664-6121/ Int: 8-255-6121
Mobile: 205-910-3511
sgcopela@southernco.com

QUALITY CONTROL DATA

Workorders: 102638, 102623, 102643, 102701,

QC Batch: 16944

Analysis Method: Ga Tech

QC Batch Method: Ga Tech

Associated Lab Samples: 102638013-014, 102623001-002, 102643001-005, 102701001-011

METHOD BLANK:

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Radium-226	pCi/l	<4.673E-01	1.0	
Radium-228	pCi/l	<5.607E-01	1.0	

Laboratory Control Sample:

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Radium-226	pCi/l	4.810	5.006	104	70-130	
Radium-228	pCi/l	4.884	5.014	103	70-130	

Laboratory Control Sample Duplicate:

Parameter	Units	RPD	Max RPD	Qualifiers
Radium-226	pCi/l	9.2	20	
Radium-228	pCi/l	0.97	20	

Sample Duplicate:

Parameter	Units	Original Result	DUP Result	RPD	Max RPD	Qualifiers
Radium-226	pCi/l	ND	ND	NA	20	
Radium-228	pCi/l	ND	ND	NA	20	

QUALITY CONTROL DATA

Workorders: 102701, 102661, 102699, 102727, 102737

QC Batch: 16962

Analysis Method: Ga Tech

QC Batch Method: Ga Tech

Associated Lab Samples: 102701012-016, 102661001-005, 102699001-004, 102727001-005, 102737001

METHOD BLANK:

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Radium-226	pCi/l	<4.268E-01	1.0	
Radium-228	pCi/l	<5.555E-01	1.0	

Laboratory Control Sample:

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Radium-226	pCi/l	4.745	5.434	115	70-130	
Radium-228	pCi/l	4.868	5.238	108	70-130	

Laboratory Control Sample Duplicate:

Parameter	Units	RPD	Max RPD	Qualifiers
Radium-226	pCi/l	9.1	20	
Radium-228	pCi/l	15.4	20	

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

 Alabama Power



Sample Group : WMWGASAP_24

Project/Site : Gaston Ash Pond
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:

Supervision:



Anions

Gaston Ash Pond

WMWGASAP_24

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>Chloride Batch ID</u>	<u>Fluoride Batch ID</u>	<u>Sulfate Batch ID</u>	<u>Project ID</u>
AW12867	565912	565913	565914	WMWGASAP_24
AW12868	565912	565913	565914	WMWGASAP_24
AW12869	565912	565913	565914	WMWGASAP_24
AW12870	565912	565913	565914	WMWGASAP_24
AW12871	565912	565913	565914	WMWGASAP_24
AW12885	565912	565913	565914	WMWGASAP_24
AW12886	565912	565913	565914	WMWGASAP_24
AW12887	565912	565913	565914	WMWGASAP_24
AW12888	565912	565913	565914	WMWGASAP_24
AW12889	565912	565913	565914	WMWGASAP_24
AW12890	566624	566625	566626	WMWGASAP_24
AW12891	566624	566625	566626	WMWGASAP_24
AW12893	566624	566625	566626	WMWGASAP_24
AW12894	566624	566625	566626	WMWGASAP_24
AW12895	566624	566625	566626	WMWGASAP_24
AW12896	566624	566625	566626	WMWGASAP_24
AW12897	566624	566625	566626	WMWGASAP_24
AW13172	566624	566625	566626	WMWGASAP_24
AW13173	566624	566625	566626	WMWGASAP_24
AW13175	566624	566625	566626	WMWGASAP_24
AW13176	567045	567048	567051	WMWGASAP_24
AW13177	567045	567048	567051	WMWGASAP_24
AW13313	567045	567048	567051	WMWGASAP_24
AW13314	567045	567048	567051	WMWGASAP_24
AW13315	567045	567048	567051	WMWGASAP_24
AW12892	566647	566648	566649	WMWGASAP_24
AW13174	566647	566648	566649	WMWGASAP_24

4. All of the above samples were analyzed and prepared by EPA 300.0.
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 instrument performance check (IPC) was analyzed and all criteria were met.
- All laboratory reagent blanks were less than the method detection limits for the requested anions, with the following exceptions:
 1. The closing blank for sulfate in batch 565914 exceeded the MDL of 0.30 mg/L, at 0.748 mg/L. The following batch samples presented positive sulfate results below 10x the blank value, and should be considered as quantitatively estimated with indication of potential high bias: AW12887, AW12888 and AW12889.
 2. The blank results for anion sulfate in batch 566626 exceeded the MDL value of 0.3, at 0.723 and 0.457 mg/L. Reported results for sulfate in samples AW12893, AW12896 and AW12897 were below 10x the associated blank values, and should be considered as quantitatively estimated results with indication of potential high bias.
 3. The blank results for anion sulfate in batch 566649 exceeded the MDL value of 0.3, at 0.454 mg/L. Since all of the associated batch sample results for sulfate were greater than 10x the blank value, no qualifications were necessary.
- All laboratory fortified blanks (LFB) were within acceptance criteria for the anions requested, with the following exceptions:
 1. No closing LFB was listed or run for the dilution re-analyses for sulfate in batch 565914. Due to absence of a closing LFB, the reported results for the following sample dilutions for sulfate are qualified as quantitatively estimated with indeterminate bias direction and magnitude: AW12867, AW12868, AW12869, AW12870 and AW12871.
 2. No closing LFB was listed or run for the dilution re-analyses for chloride and sulfate in batches 566624 and 566626, respectively. Due to absence of a closing LFB, the reported results for the following sample dilutions are qualified as quantitatively estimated with indeterminate bias direction and magnitude: for chloride, AW13173; for sulfate, AW13172, AW13173 and AW13175.
- 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 laboratory fortified matrix (LFM) sample was analyzed with each batch. All acceptance criteria for accuracy were met. It is noted that the LFM sample for sulfate in batch 566649 was diluted at 10x, and the LFM sample spiked at 10x normal concentration for sulfate, with acceptable recovery.



- A sample duplicate and/or laboratory fortified matrix duplicate were analyzed with each batch. All acceptance criteria for precision were met. It is noted that separate and distinct criteria for duplicate precision calculations, based on sample and duplicate anion concentrations, are used to assess precision compliance. These are as follow: if the sample and duplicate are both greater than 5x anion Reporting Limit (RL) concentration, the precision is calculated and reported as relative percent difference (RPD), with an acceptance range of 0 - 20%; if either the sample or duplicate are less than 5x anion RL, the precision is calculated and reported as the absolute value of the difference between the two concentrations, with an acceptance range of less than or equal to the anion RL value.
7. Samples AW13173, AW13174 and AW13314 were re-analyzed for chloride at a 10x dilution, samples AW12867, AW12868, AW12869 and AW12870 were re-analyzed for sulfate at a 5x dilution, and samples AW12871, AW13172, AW13173, AW13174, AW13175 and AW13314 were re-analyzed for sulfate at a 10x dilution, due to undiluted results exceeding the calibrated range of the detector. The dilution results for sulfate for these samples should be used; reporting limit (RL) values are adjusted upward to reflect the dilution factor applied.

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AW12867	Sulfate	5X
AW12868	Sulfate	5X
AW12869	Sulfate	5X
AW12870	Sulfate	5X
AW12871	Sulfate	10X
AW13172	Sulfate	10X
AW13173	Chloride, Sulfate	10X
AW13175	Sulfate	10X
AW13174	Chloride, Sulfate	10X
AW13314	Chloride, Sulfate	10X

8. The raw data results are shown with dilution factors included, when dilutions are manually performed by the analyst.
 The raw data results are shown without dilution factor corrections, when dilutions are run automatically by the instrument.



Metals ICP

Gaston Ash Pond

WMWGASAP_24

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>
AW12867	20160525_20160525A_20160525B	WMWGASAP_24
AW12868	20160525_20160525A_20160525B	WMWGASAP_24
AW12869	20160525_20160525A_20160525B	WMWGASAP_24
AW12870	20160525_20160525A_20160525B	WMWGASAP_24
AW12871	20160525_20160525A_20160525B	WMWGASAP_24
AW12885	20160525_20160525A_20160525B	WMWGASAP_24
AW12886	20160525_20160525A_20160525B	WMWGASAP_24
AW12887	20160525_20160525A_20160525B	WMWGASAP_24
AW12888	20160525_20160525A_20160525B	WMWGASAP_24
AW12889	20160525_20160525A_20160525B	WMWGASAP_24
AW12890	20160525_20160525A_20160525B	WMWGASAP_24
AW12891	20160525_20160525A_20160525B	WMWGASAP_24
AW12893	20160525_20160525A_20160525B	WMWGASAP_24
AW12894	20160525_20160525A_20160525B	WMWGASAP_24
AW12895	20160525_20160525A_20160525B	WMWGASAP_24
AW12896	20160525_20160525A_20160525B	WMWGASAP_24
AW12897	20160525_20160525A_20160525B	WMWGASAP_24
AW13172	20160525_20160525A_20160525B	WMWGASAP_24
AW13173	20160525_20160525A_20160525B	WMWGASAP_24
AW13175	20160525_20160525A_20160525B	WMWGASAP_24
AW13176	20160525_20160525A_20160525B	WMWGASAP_24
AW13177	20160525_20160525A_20160525B	WMWGASAP_24
AW13313	20160525_20160525A_20160525B	WMWGASAP_24
AW13314	20160525_20160525A_20160525B	WMWGASAP_24
AW13315	20160525_20160525A_20160525B	WMWGASAP_24
AW12892	201605224B	WMWGASAP_24
AW13174	201605224B	WMWGASAP_24

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



General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below half 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 half 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, with the exception of batch 201605224B, which is a dissolved set and does not get digested.
- 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 with the following exceptions:

<u>Analyte</u>	<u>Sample ID</u>
Calcium	AW13174

The concentration of this analyte in the matrix spike was less than 30 percent of the concentration of the sample causing inaccurate spike recovery information. The laboratory control sample indicates that the digestion and analysis were in control.

- 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 without a dilution with the following exceptions: The following samples were diluted due to sample concentrations from the undiluted analysis were over the high standard of the calibration curve.



<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AW12867	Calcium	10.15X
AW12868	Calcium	10.15X
AW12869	Calcium	10.15X
AW12870	Calcium	10.15X
AW12871	Calcium	10.15X
AW12886	Calcium	10.15X
AW12890	Calcium	10.15X
AW12891	Calcium	10.15X
AW12895	Calcium	10.15X
AW12896	Calcium	10.15X
AW13172	Calcium	10.15X
AW13173	Calcium	10.15X
AW13175	Calcium	10.15X
AW13175MS	Calcium	10.15X
AW13175MSD	Calcium	10.15X
AW13177	Calcium	10.15X
AW13314	Calcium	10.15X
AW13315	Calcium	10.15X
AW13315MS	Calcium	10.15X
AW13315MSD	Calcium	10.15X
AW12892	Calcium	10.15X
AW13174	Calcium	10.15X
AW13174MS	Calcium	10.15X
AW13174MSD	Calcium	10.15X

8. The raw data results include both results corrected for dilution and results not corrected for dilution.



Metals ICPMS

Gaston Ash Pond

WMWGASAP_24

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>
AW12867	565773	WMWGASAP_24
AW12868	565773	WMWGASAP_24
AW12869	565773	WMWGASAP_24
AW12870	565773	WMWGASAP_24
AW12871	565773	WMWGASAP_24
AW12885	565773	WMWGASAP_24
AW12886	565773	WMWGASAP_24
AW12887	565773	WMWGASAP_24
AW12888	565773	WMWGASAP_24
AW12889	565773	WMWGASAP_24
AW12890	565774	WMWGASAP_24
AW12891	565774	WMWGASAP_24
AW12893	565774	WMWGASAP_24
AW12894	565774	WMWGASAP_24
AW12895	565774	WMWGASAP_24
AW12896	565774	WMWGASAP_24
AW12897	565774	WMWGASAP_24
AW13172	566229	WMWGASAP_24
AW13173	566229	WMWGASAP_24
AW13175	566229	WMWGASAP_24
AW13176	566229	WMWGASAP_24
AW13177	566229	WMWGASAP_24
AW13313	566564	WMWGASAP_24
AW13314	566564	WMWGASAP_24
AW13315	566564	WMWGASAP_24
AW12892	566207	WMWGASAP_24
AW13174	566207	WMWGASAP_24



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.
7. The Cadmium MDL increased from 0.0001mg/L to 0.0002mg/L.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes. The highest point of the calibration curve for batches 565773, 565774 and 566229 (1.25ppm) was removed for Sb and Ba to improve linearity.
- 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 with the exception of Sb in batch 566564, all batch samples were re-analyzed for Sb with passing criteria.
- 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, with the exception of batch 566207, which is dissolved and does not get digested.
- 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.
- Original dilution solution for Sb in batch 566207 was higher than the RL. Sb was re-analyzed for this batch with passing dilution solutions.

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.
8. All samples were analyzed at a dilution of 1 to 5 to compensate for any matrix effects.
 9. The raw data results are shown with dilution factors included.



Mercury

Gaston Ash Pond

WMWGASAP_24

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

Sample ID	Batch ID	Project ID
AW12867	566031	WMWGASAP_24
AW12868	566031	WMWGASAP_24
AW12869	566032	WMWGASAP_24
AW12870	566032	WMWGASAP_24
AW12871	566032	WMWGASAP_24
AW12885	566032	WMWGASAP_24
AW12886	566032	WMWGASAP_24
AW12887	566032	WMWGASAP_24
AW12888	566032	WMWGASAP_24
AW12889	566032	WMWGASAP_24
AW12890	566032	WMWGASAP_24
AW12891	566032	WMWGASAP_24
AW12893	566033	WMWGASAP_24
AW12894	566033	WMWGASAP_24
AW12895	566033	WMWGASAP_24
AW12896	566033	WMWGASAP_24
AW12897	566033	WMWGASAP_24
AW13172	566033	WMWGASAP_24
AW13173	566033	WMWGASAP_24
AW13175	566033	WMWGASAP_24
AW13176	566033	WMWGASAP_24
AW13177	566033	WMWGASAP_24
AW13313	566599	WMWGASAP_24
AW13314	566599	WMWGASAP_24
AW13315	566599	WMWGASAP_24
AW12982	566597	WMWGASAP_24
AW13174	566597	WMWGASAP_24

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 Ash Pond

WMWGASAP_24

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>
AW12867	565852	WMWGASAP_24
AW12868	565852	WMWGASAP_24
AW12869	565852	WMWGASAP_24
AW12870	565852	WMWGASAP_24
AW12871	565852	WMWGASAP_24
AW12885	565852	WMWGASAP_24
AW12886	565852	WMWGASAP_24
AW12887	565852	WMWGASAP_24
AW12888	565852	WMWGASAP_24
AW12889	565852	WMWGASAP_24
AW12890	566242	WMWGASAP_24
AW12891	566242	WMWGASAP_24
AW12893	566242	WMWGASAP_24
AW12894	566242	WMWGASAP_24
AW12895	566242	WMWGASAP_24
AW12896	566242	WMWGASAP_24
AW12897	566242	WMWGASAP_24
AW13172	566257	WMWGASAP_24
AW13173	566257	WMWGASAP_24
AW13175	566257	WMWGASAP_24
AW13176	566257	WMWGASAP_24
AW13177	566257	WMWGASAP_24
AW13313	566257	WMWGASAP_24
AW13314	566257	WMWGASAP_24
AW13315	566257	WMWGASAP_24

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.
7. The TDS reporting limit was incorrectly listed as 2.5 mg/L. This has been corrected based on filter volume and project limits. Sample AW13176 is now Not Detected.



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 0.5 mg 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 2.5 mg and 200 mg residue with the exception of AW12893, AW12897 and AW13176 which were <2.5mg.

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 18-May-16

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AW12867

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	J 0.00237	mg/L
* Barium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	0.0451	mg/L
* Beryllium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	1.37	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		10.15	1.0	5.0	110	mg/L
* Cadmium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	J 0.0400	mg/L
* Molybdenum, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	0.0167	mg/L
* Lead, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	J 0.000343	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/20/2016	SM 2540C		1		50	540	mg/L
* Chloride, Total	SES	5/20/2016	EPA 300.0		1	0.04	0.25	10.3	mg/L
* Fluoride, Total	SES	5/20/2016	EPA 300.0		1	0.01	0.3	J 0.079	mg/L
* Sulfate, Total	SES	5/20/2016	EPA 300.0		5	1.5	5	159	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 18-May-16

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AW12867

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW12889 Boron, Total	mg/L	0.00250	0.044	1.00	0.981	0.973	0.994	0.85 to 1.15	98.1	70 to 130	0.819	20	
AW12889 Antimony, Total	mg/L	0.0000962	0.00132	0.10	0.0870	0.0890	0.0897	0.085 to 0.115	87.0	70 to 130	2.36	20	
AW12889 Beryllium, Total	mg/L	0.00000931	0.00132	0.10	0.0947	0.0955	0.102	0.085 to 0.115	94.7	70 to 130	0.834	20	
AW12889 Selenium, Total	mg/L	0.0000306	0.0044	0.10	0.0941	0.0944	0.100	0.085 to 0.115	94.1	70 to 130	0.380	20	
AW12889 Thallium, Total	mg/L	0.00000175	0.00044	0.10	0.101	0.101	0.0973	0.085 to 0.115	101	70 to 130	0.0950	20	
AW12868 Mercury, Total by CVAA	mg/L	0.0000743	0.0005	0.004	0.00364	0.00366	0.00395	0.0034 to 0.0046	91.0	70 to 130	0.606	20	
AW12889 Cadmium, Total	mg/L	0.000000753	0.00044	0.10	0.0932	0.0961	0.0957	0.085 to 0.115	93.2	70 to 130	3.08	20	
AW12889 Calcium, Total	mg/L	-0.0264	0.22	5.00	37.0	36.6	4.96	4.25 to 5.75	92.0	70 to 130	1.09	20	
AW12889 Cobalt, Total	mg/L	-0.000000224	0.0044	0.10	0.0841	0.0850	0.0863	0.085 to 0.115	84.1	70 to 130	1.04	20	
AW12889 Chromium, Total	mg/L	-0.000000096	0.0044	0.10	0.0881	0.0895	0.0895	0.085 to 0.115	88.1	70 to 130	1.62	20	
AW12889 Molybdenum, Total	mg/L	0.00000480	0.0044	0.10	0.0989	0.0999	0.0982	0.085 to 0.115	98.9	70 to 130	1.02	20	
AW12889 Arsenic, Total	mg/L	0.00000541	0.0022	0.10	0.0930	0.0939	0.1000	0.085 to 0.115	93.0	70 to 130	0.931	20	
AW12889 Barium, Total	mg/L	0.00000240	0.0044	0.10	0.110	0.110	0.101	0.085 to 0.115	102	70 to 130	0.470	20	
AW12889 Lead, Total	mg/L	0.00000398	0.0022	0.10	0.0952	0.0961	0.0994	0.085 to 0.115	95.2	70 to 130	0.922	20	
AW12889 Lithium, Total	mg/L	0.000277	0.022	0.20	0.205	0.197	0.206	0.17 to 0.23	102	70 to 130	3.98	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 18-May-16

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AW12867

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW12889	Fluoride, Total	mg/L	0.000	0.3	2.00	2.11	0.064	2.01	1.8 to 2.2	102	80 to 120	1.55	20
AW12889	Chloride, Total	mg/L	0.000	0.25	10.00	11.9	1.40	10.1	9 to 11	105	80 to 120	0.712	20
AW12889	Solids, Dissolved	mg/L	3.0	25			150	52	40 to 60			1.96	5
AW12889	Sulfate, Total	mg/L	0.000	1.0	20.00	21.1	1.92	19.6	18 to 22	95.8	80 to 120	0.519	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/10/2017
 Version: 2.0

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 18-May-16

Description: Gaston Ash Pond - MW-18 DUP

Laboratory ID Number: AW12868

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	J 0.00228	mg/L
* Barium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	0.0455	mg/L
* Beryllium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	1.36	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		10.15	1.0	5.0	106	mg/L
* Cadmium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	J 0.0398	mg/L
* Molybdenum, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	0.0165	mg/L
* Lead, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	J 0.000336	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/20/2016	SM 2540C		1		50	534	mg/L
* Chloride, Total	SES	5/20/2016	EPA 300.0		1	0.04	0.25	10.3	mg/L
* Fluoride, Total	SES	5/20/2016	EPA 300.0		1	0.01	0.3	J 0.078	mg/L
* Sulfate, Total	SES	5/20/2016	EPA 300.0		5	1.5	5	158	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 18-May-16

Description: Gaston Ash Pond - MW-18 DUP

Laboratory ID Number: AW12868

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW12889 Boron, Total	mg/L	0.00250	0.044	1.00	0.981	0.973	0.994	0.85 to 1.15	98.1	70 to 130	0.819	20	
AW12889 Antimony, Total	mg/L	0.0000962	0.00132	0.10	0.0870	0.0890	0.0897	0.085 to 0.115	87.0	70 to 130	2.36	20	
AW12889 Chromium, Total	mg/L	-0.00000096	0.0044	0.10	0.0881	0.0895	0.0895	0.085 to 0.115	88.1	70 to 130	1.62	20	
AW12889 Molybdenum, Total	mg/L	0.00000480	0.0044	0.10	0.0989	0.0999	0.0982	0.085 to 0.115	98.9	70 to 130	1.02	20	
AW12889 Beryllium, Total	mg/L	0.00000931	0.00132	0.10	0.0947	0.0955	0.102	0.085 to 0.115	94.7	70 to 130	0.834	20	
AW12889 Selenium, Total	mg/L	0.0000306	0.0044	0.10	0.0941	0.0944	0.100	0.085 to 0.115	94.1	70 to 130	0.380	20	
AW12889 Thallium, Total	mg/L	0.00000175	0.00044	0.10	0.101	0.101	0.0973	0.085 to 0.115	101	70 to 130	0.0950	20	
AW12889 Arsenic, Total	mg/L	0.00000541	0.0022	0.10	0.0930	0.0939	0.1000	0.085 to 0.115	93.0	70 to 130	0.931	20	
AW12889 Barium, Total	mg/L	0.00000240	0.0044	0.10	0.110	0.110	0.101	0.085 to 0.115	102	70 to 130	0.470	20	
AW12889 Lead, Total	mg/L	0.00000398	0.0022	0.10	0.0952	0.0961	0.0994	0.085 to 0.115	95.2	70 to 130	0.922	20	
AW12889 Lithium, Total	mg/L	0.000277	0.022	0.20	0.205	0.197	0.206	0.17 to 0.23	102	70 to 130	3.98	20	
AW12868 Mercury, Total by CVAA	mg/L	0.0000743	0.0005	0.004	0.00364	0.00366	0.00395	0.0034 to 0.0046	91.0	70 to 130	0.606	20	
AW12889 Cadmium, Total	mg/L	0.000000753	0.00044	0.10	0.0932	0.0961	0.0957	0.085 to 0.115	93.2	70 to 130	3.08	20	
AW12889 Calcium, Total	mg/L	-0.0264	0.22	5.00	37.0	36.6	4.96	4.25 to 5.75	92.0	70 to 130	1.09	20	
AW12889 Cobalt, Total	mg/L	-0.000000224	0.0044	0.10	0.0841	0.0850	0.0863	0.085 to 0.115	84.1	70 to 130	1.04	20	

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 18-May-16

Description: Gaston Ash Pond - MW-18 DUP

Laboratory ID Number: AW12868

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW12889	Fluoride, Total	mg/L	0.000	0.3	2.00	2.11	0.064	2.01	1.8 to 2.2	102	80 to 120	1.55	20
AW12889	Chloride, Total	mg/L	0.000	0.25	10.00	11.9	1.40	10.1	9 to 11	105	80 to 120	0.712	20
AW12889	Solids, Dissolved	mg/L	3.0	25			150	52	40 to 60			1.96	5
AW12889	Sulfate, Total	mg/L	0.000	1.0	20.00	21.1	1.92	19.6	18 to 22	95.8	80 to 120	0.519	20

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CC:

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

Certificate Of Analysis  **Alabama Power**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 18-May-16

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AW12869

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	J 0.000869	mg/L
* Arsenic, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	0.0112	mg/L
* Barium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	0.0891	mg/L
* Beryllium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	3.10	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		10.15	1.0	5.0	70.3	mg/L
* Cadmium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	J 0.000216	mg/L
* Cobalt, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	0.613	mg/L
* Molybdenum, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	2.24	mg/L
* Lead, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/20/2016	SM 2540C		1		25	432	mg/L
* Chloride, Total	SES	5/20/2016	EPA 300.0		1	0.04	0.25	13.8	mg/L
* Fluoride, Total	SES	5/20/2016	EPA 300.0		1	0.01	0.3	J 0.241	mg/L
* Sulfate, Total	SES	5/20/2016	EPA 300.0		5	1.5	5	251	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 18-May-16

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AW12869

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW12889 Boron, Total	mg/L	0.00250	0.044	1.00	0.981	0.973	0.994	0.85 to 1.15	98.1	70 to 130	0.819	20	
AW12889 Antimony, Total	mg/L	0.0000962	0.00132	0.10	0.0870	0.0890	0.0897	0.085 to 0.115	87.0	70 to 130	2.36	20	
AW12889 Beryllium, Total	mg/L	0.00000931	0.00132	0.10	0.0947	0.0955	0.102	0.085 to 0.115	94.7	70 to 130	0.834	20	
AW12889 Selenium, Total	mg/L	0.0000306	0.0044	0.10	0.0941	0.0944	0.100	0.085 to 0.115	94.1	70 to 130	0.380	20	
AW12889 Thallium, Total	mg/L	0.00000175	0.00044	0.10	0.101	0.101	0.0973	0.085 to 0.115	101	70 to 130	0.0950	20	
AW12889 Chromium, Total	mg/L	-0.000000096	0.0044	0.10	0.0881	0.0895	0.0895	0.085 to 0.115	88.1	70 to 130	1.62	20	
AW12889 Molybdenum, Total	mg/L	0.00000480	0.0044	0.10	0.0989	0.0999	0.0982	0.085 to 0.115	98.9	70 to 130	1.02	20	
AW12891 Mercury, Total by CVAA	mg/L	0.0000646	0.0005	0.004	0.00391	0.00391	0.00392	0.0034 to 0.0046	97.8	70 to 130	0.143	20	
AW12889 Cadmium, Total	mg/L	0.000000753	0.00044	0.10	0.0932	0.0961	0.0957	0.085 to 0.115	93.2	70 to 130	3.08	20	
AW12889 Calcium, Total	mg/L	-0.0264	0.22	5.00	37.0	36.6	4.96	4.25 to 5.75	92.0	70 to 130	1.09	20	
AW12889 Cobalt, Total	mg/L	-0.000000224	0.0044	0.10	0.0841	0.0850	0.0863	0.085 to 0.115	84.1	70 to 130	1.04	20	
AW12889 Arsenic, Total	mg/L	0.00000541	0.0022	0.10	0.0930	0.0939	0.1000	0.085 to 0.115	93.0	70 to 130	0.931	20	
AW12889 Barium, Total	mg/L	0.00000240	0.0044	0.10	0.110	0.110	0.101	0.085 to 0.115	102	70 to 130	0.470	20	
AW12889 Lead, Total	mg/L	0.00000398	0.0022	0.10	0.0952	0.0961	0.0994	0.085 to 0.115	95.2	70 to 130	0.922	20	
AW12889 Lithium, Total	mg/L	0.000277	0.022	0.20	0.205	0.197	0.206	0.17 to 0.23	102	70 to 130	3.98	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 18-May-16

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AW12869

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW12889	Fluoride, Total	mg/L	0.000	0.3	2.00	2.11	0.064	2.01	1.8 to 2.2	102	80 to 120	1.55	20
AW12889	Chloride, Total	mg/L	0.000	0.25	10.00	11.9	1.40	10.1	9 to 11	105	80 to 120	0.712	20
AW12889	Solids, Dissolved	mg/L	3.0	25			150	52	40 to 60			1.96	5
AW12889	Sulfate, Total	mg/L	0.000	1.0	20.00	21.1	1.92	19.6	18 to 22	95.8	80 to 120	0.519	20

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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CC:

Reported: 7/10/2017
 Version: 2.0

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 18-May-16

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AW12870

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	J 0.00337	mg/L
* Barium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	0.0313	mg/L
* Beryllium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	1.35	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		10.15	1.0	5.0	41.4	mg/L
* Cadmium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	0.0738	mg/L
* Molybdenum, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	0.269	mg/L
* Lead, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/20/2016	SM 2540C		1		25	261	mg/L
* Chloride, Total	SES	5/20/2016	EPA 300.0		1	0.04	0.25	10.0	mg/L
* Fluoride, Total	SES	5/20/2016	EPA 300.0		1	0.01	0.3	J 0.151	mg/L
* Sulfate, Total	SES	5/20/2016	EPA 300.0		5	1.5	5	140	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 18-May-16

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AW12870

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW12889 Boron, Total	mg/L	0.00250	0.044	1.00	0.981	0.973	0.994	0.85 to 1.15	98.1	70 to 130	0.819	20	
AW12889 Antimony, Total	mg/L	0.0000962	0.00132	0.10	0.0870	0.0890	0.0897	0.085 to 0.115	87.0	70 to 130	2.36	20	
AW12889 Cadmium, Total	mg/L	0.000000753	0.00044	0.10	0.0932	0.0961	0.0957	0.085 to 0.115	93.2	70 to 130	3.08	20	
AW12889 Calcium, Total	mg/L	-0.0264	0.22	5.00	37.0	36.6	4.96	4.25 to 5.75	92.0	70 to 130	1.09	20	
AW12889 Cobalt, Total	mg/L	-0.000000224	0.0044	0.10	0.0841	0.0850	0.0863	0.085 to 0.115	84.1	70 to 130	1.04	20	
AW12889 Arsenic, Total	mg/L	0.00000541	0.0022	0.10	0.0930	0.0939	0.1000	0.085 to 0.115	93.0	70 to 130	0.931	20	
AW12889 Barium, Total	mg/L	0.00000240	0.0044	0.10	0.110	0.110	0.101	0.085 to 0.115	102	70 to 130	0.470	20	
AW12889 Lead, Total	mg/L	0.00000398	0.0022	0.10	0.0952	0.0961	0.0994	0.085 to 0.115	95.2	70 to 130	0.922	20	
AW12889 Lithium, Total	mg/L	0.000277	0.022	0.20	0.205	0.197	0.206	0.17 to 0.23	102	70 to 130	3.98	20	
AW12889 Chromium, Total	mg/L	-0.000000096	0.0044	0.10	0.0881	0.0895	0.0895	0.085 to 0.115	88.1	70 to 130	1.62	20	
AW12889 Molybdenum, Total	mg/L	0.00000480	0.0044	0.10	0.0989	0.0999	0.0982	0.085 to 0.115	98.9	70 to 130	1.02	20	
AW12891 Mercury, Total by CVAA	mg/L	0.0000646	0.0005	0.004	0.00391	0.00391	0.00392	0.0034 to 0.0046	97.8	70 to 130	0.143	20	
AW12889 Beryllium, Total	mg/L	0.00000931	0.00132	0.10	0.0947	0.0955	0.102	0.085 to 0.115	94.7	70 to 130	0.834	20	
AW12889 Selenium, Total	mg/L	0.0000306	0.0044	0.10	0.0941	0.0944	0.100	0.085 to 0.115	94.1	70 to 130	0.380	20	
AW12889 Thallium, Total	mg/L	0.00000175	0.00044	0.10	0.101	0.101	0.0973	0.085 to 0.115	101	70 to 130	0.0950	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 18-May-16

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AW12870

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW12889	Fluoride, Total	mg/L	0.000	0.3	2.00	2.11	0.064	2.01	1.8 to 2.2	102	80 to 120	1.55	20
AW12889	Chloride, Total	mg/L	0.000	0.25	10.00	11.9	1.40	10.1	9 to 11	105	80 to 120	0.712	20
AW12889	Solids, Dissolved	mg/L	3.0	25			150	52	40 to 60			1.96	5
AW12889	Sulfate, Total	mg/L	0.000	1.0	20.00	21.1	1.92	19.6	18 to 22	95.8	80 to 120	0.519	20

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Expiration: June 30, 2018

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CC:

Reported: 7/10/2017
 Version: 2.0

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 18-May-16

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AW12871

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	J 0.00409	mg/L
* Barium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	0.0740	mg/L
* Beryllium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	3.61	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		10.15	1.0	5.0	160	mg/L
* Cadmium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	0.120	mg/L
* Molybdenum, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	0.657	mg/L
* Lead, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/20/2016	SM 2540C		1		50	882	mg/L
* Chloride, Total	SES	5/20/2016	EPA 300.0		1	0.04	0.25	16.2	mg/L
* Fluoride, Total	SES	5/20/2016	EPA 300.0		1	0.01	0.3	J 0.076	mg/L
* Sulfate, Total	SES	5/20/2016	EPA 300.0		10	3.0	10	559	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 18-May-16

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AW12871

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW12889 Boron, Total	mg/L	0.00250	0.044	1.00	0.981	0.973	0.994	0.85 to 1.15	98.1	70 to 130	0.819	20	
AW12889 Antimony, Total	mg/L	0.0000962	0.00132	0.10	0.0870	0.0890	0.0897	0.085 to 0.115	87.0	70 to 130	2.36	20	
AW12889 Chromium, Total	mg/L	-0.00000096	0.0044	0.10	0.0881	0.0895	0.0895	0.085 to 0.115	88.1	70 to 130	1.62	20	
AW12889 Molybdenum, Total	mg/L	0.00000480	0.0044	0.10	0.0989	0.0999	0.0982	0.085 to 0.115	98.9	70 to 130	1.02	20	
AW12891 Mercury, Total by CVAA	mg/L	0.0000646	0.0005	0.004	0.00391	0.00391	0.00392	0.0034 to 0.0046	97.8	70 to 130	0.143	20	
AW12889 Beryllium, Total	mg/L	0.0000931	0.00132	0.10	0.0947	0.0955	0.102	0.085 to 0.115	94.7	70 to 130	0.834	20	
AW12889 Selenium, Total	mg/L	0.0000306	0.0044	0.10	0.0941	0.0944	0.100	0.085 to 0.115	94.1	70 to 130	0.380	20	
AW12889 Thallium, Total	mg/L	0.00000175	0.00044	0.10	0.101	0.101	0.0973	0.085 to 0.115	101	70 to 130	0.0950	20	
AW12889 Arsenic, Total	mg/L	0.00000541	0.0022	0.10	0.0930	0.0939	0.1000	0.085 to 0.115	93.0	70 to 130	0.931	20	
AW12889 Barium, Total	mg/L	0.00000240	0.0044	0.10	0.110	0.110	0.101	0.085 to 0.115	102	70 to 130	0.470	20	
AW12889 Lead, Total	mg/L	0.00000398	0.0022	0.10	0.0952	0.0961	0.0994	0.085 to 0.115	95.2	70 to 130	0.922	20	
AW12889 Lithium, Total	mg/L	0.000277	0.022	0.20	0.205	0.197	0.206	0.17 to 0.23	102	70 to 130	3.98	20	
AW12889 Cadmium, Total	mg/L	0.000000753	0.00044	0.10	0.0932	0.0961	0.0957	0.085 to 0.115	93.2	70 to 130	3.08	20	
AW12889 Calcium, Total	mg/L	-0.0264	0.22	5.00	37.0	36.6	4.96	4.25 to 5.75	92.0	70 to 130	1.09	20	
AW12889 Cobalt, Total	mg/L	-0.000000224	0.0044	0.10	0.0841	0.0850	0.0863	0.085 to 0.115	84.1	70 to 130	1.04	20	

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 18-May-16

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AW12871

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW12889	Fluoride, Total	mg/L	0.000	0.3	2.00	2.11	0.064	2.01	1.8 to 2.2	102	80 to 120	1.55	20
AW12889	Chloride, Total	mg/L	0.000	0.25	10.00	11.9	1.40	10.1	9 to 11	105	80 to 120	0.712	20
AW12889	Solids, Dissolved	mg/L	3.0	25			150	52	40 to 60			1.96	5
AW12889	Sulfate, Total	mg/L	0.000	1.0	20.00	21.1	1.92	19.6	18 to 22	95.8	80 to 120	0.519	20

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AW12885

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	J 0.00866	mg/L
* Beryllium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.1	0.5	29.6	mg/L
* Cadmium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	J 0.00651	mg/L
* Lead, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/20/2016	SM 2540C		1		25	140	mg/L
* Chloride, Total	SES	5/20/2016	EPA 300.0		1	0.04	0.25	1.90	mg/L
* Fluoride, Total	SES	5/20/2016	EPA 300.0		1	0.01	0.3	J 0.068	mg/L
* Sulfate, Total	SES	5/20/2016	EPA 300.0		1	0.3	1	5.12	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AW12885

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW12889 Boron, Total	mg/L	0.00250	0.044	1.00	0.981	0.973	0.994	0.85 to 1.15	98.1	70 to 130	0.819	20	
AW12889 Antimony, Total	mg/L	0.0000962	0.00132	0.10	0.0870	0.0890	0.0897	0.085 to 0.115	87.0	70 to 130	2.36	20	
AW12889 Cadmium, Total	mg/L	0.000000753	0.00044	0.10	0.0932	0.0961	0.0957	0.085 to 0.115	93.2	70 to 130	3.08	20	
AW12889 Calcium, Total	mg/L	-0.0264	0.22	5.00	37.0	36.6	4.96	4.25 to 5.75	92.0	70 to 130	1.09	20	
AW12889 Cobalt, Total	mg/L	-0.000000224	0.0044	0.10	0.0841	0.0850	0.0863	0.085 to 0.115	84.1	70 to 130	1.04	20	
AW12889 Beryllium, Total	mg/L	0.00000931	0.00132	0.10	0.0947	0.0955	0.102	0.085 to 0.115	94.7	70 to 130	0.834	20	
AW12889 Selenium, Total	mg/L	0.0000306	0.0044	0.10	0.0941	0.0944	0.100	0.085 to 0.115	94.1	70 to 130	0.380	20	
AW12889 Thallium, Total	mg/L	0.00000175	0.00044	0.10	0.101	0.101	0.0973	0.085 to 0.115	101	70 to 130	0.0950	20	
AW12889 Chromium, Total	mg/L	-0.000000096	0.0044	0.10	0.0881	0.0895	0.0895	0.085 to 0.115	88.1	70 to 130	1.62	20	
AW12889 Molybdenum, Total	mg/L	0.00000480	0.0044	0.10	0.0989	0.0999	0.0982	0.085 to 0.115	98.9	70 to 130	1.02	20	
AW12891 Mercury, Total by CVAA	mg/L	0.0000646	0.0005	0.004	0.00391	0.00391	0.00392	0.0034 to 0.0046	97.8	70 to 130	0.143	20	
AW12889 Arsenic, Total	mg/L	0.00000541	0.0022	0.10	0.0930	0.0939	0.1000	0.085 to 0.115	93.0	70 to 130	0.931	20	
AW12889 Barium, Total	mg/L	0.00000240	0.0044	0.10	0.110	0.110	0.101	0.085 to 0.115	102	70 to 130	0.470	20	
AW12889 Lead, Total	mg/L	0.00000398	0.0022	0.10	0.0952	0.0961	0.0994	0.085 to 0.115	95.2	70 to 130	0.922	20	
AW12889 Lithium, Total	mg/L	0.000277	0.022	0.20	0.205	0.197	0.206	0.17 to 0.23	102	70 to 130	3.98	20	

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AW12885

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW12889	Fluoride, Total	mg/L	0.000	0.3	2.00	2.11	0.064	2.01	1.8 to 2.2	102	80 to 120	1.55	20
AW12889	Chloride, Total	mg/L	0.000	0.25	10.00	11.9	1.40	10.1	9 to 11	105	80 to 120	0.712	20
AW12889	Solids, Dissolved	mg/L	3.0	25			150	52	40 to 60			1.96	5
AW12889	Sulfate, Total	mg/L	0.000	1.0	20.00	21.1	1.92	19.6	18 to 22	95.8	80 to 120	0.519	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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CC:

Reported: 7/10/2017
 Version: 2.0

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AW12886

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	0.0196	mg/L
* Beryllium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	0.201	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		10.15	1.0	5.0	50.5	mg/L
* Cadmium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/20/2016	SM 2540C		1		25	269	mg/L
* Chloride, Total	SES	5/20/2016	EPA 300.0		1	0.04	0.25	12.0	mg/L
* Fluoride, Total	SES	5/20/2016	EPA 300.0		1	0.01	0.3	J 0.065	mg/L
* Sulfate, Total	SES	5/20/2016	EPA 300.0		1	0.3	1	25.1	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AW12886

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec Limit
			Limit	Spike				Limit	Rec	Limit	Prec	
AW12889 Boron, Total	mg/L	0.00250	0.044	1.00	0.981	0.973	0.994	0.85 to 1.15	98.1	70 to 130	0.819	20
AW12889 Antimony, Total	mg/L	0.0000962	0.00132	0.10	0.0870	0.0890	0.0897	0.085 to 0.115	87.0	70 to 130	2.36	20
AW12889 Beryllium, Total	mg/L	0.00000931	0.00132	0.10	0.0947	0.0955	0.102	0.085 to 0.115	94.7	70 to 130	0.834	20
AW12889 Selenium, Total	mg/L	0.0000306	0.0044	0.10	0.0941	0.0944	0.100	0.085 to 0.115	94.1	70 to 130	0.380	20
AW12889 Thallium, Total	mg/L	0.00000175	0.00044	0.10	0.101	0.101	0.0973	0.085 to 0.115	101	70 to 130	0.0950	20
AW12889 Arsenic, Total	mg/L	0.00000541	0.0022	0.10	0.0930	0.0939	0.1000	0.085 to 0.115	93.0	70 to 130	0.931	20
AW12889 Barium, Total	mg/L	0.00000240	0.0044	0.10	0.110	0.110	0.101	0.085 to 0.115	102	70 to 130	0.470	20
AW12889 Lead, Total	mg/L	0.00000398	0.0022	0.10	0.0952	0.0961	0.0994	0.085 to 0.115	95.2	70 to 130	0.922	20
AW12889 Lithium, Total	mg/L	0.000277	0.022	0.20	0.205	0.197	0.206	0.17 to 0.23	102	70 to 130	3.98	20
AW12889 Cadmium, Total	mg/L	0.000000753	0.00044	0.10	0.0932	0.0961	0.0957	0.085 to 0.115	93.2	70 to 130	3.08	20
AW12889 Calcium, Total	mg/L	-0.0264	0.22	5.00	37.0	36.6	4.96	4.25 to 5.75	92.0	70 to 130	1.09	20
AW12889 Cobalt, Total	mg/L	-0.000000224	0.0044	0.10	0.0841	0.0850	0.0863	0.085 to 0.115	84.1	70 to 130	1.04	20
AW12889 Chromium, Total	mg/L	-0.000000096	0.0044	0.10	0.0881	0.0895	0.0895	0.085 to 0.115	88.1	70 to 130	1.62	20
AW12889 Molybdenum, Total	mg/L	0.00000480	0.0044	0.10	0.0989	0.0999	0.0982	0.085 to 0.115	98.9	70 to 130	1.02	20
AW12891 Mercury, Total by CVAA	mg/L	0.0000646	0.0005	0.004	0.00391	0.00391	0.00392	0.0034 to 0.0046	97.8	70 to 130	0.143	20

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AW12886

Sample	Analysis	Units	MB	Sample			LFB		Rec		Prec		
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW12889	Fluoride, Total	mg/L	0.000	0.3	2.00	2.11	0.064	2.01	1.8 to 2.2	102	80 to 120	1.55	20
AW12889	Chloride, Total	mg/L	0.000	0.25	10.00	11.9	1.40	10.1	9 to 11	105	80 to 120	0.712	20
AW12889	Solids, Dissolved	mg/L	3.0	25			150	52	40 to 60			1.96	5
AW12889	Sulfate, Total	mg/L	0.000	1.0	20.00	21.1	1.92	19.6	18 to 22	95.8	80 to 120	0.519	20

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 Calera, AL 35040
 (205) 664-6032 or 6171
 FAX (205) 257-1654

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AW12887

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	0.0188	mg/L
* Beryllium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	J 0.0466	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.1	0.5	33.9	mg/L
* Cadmium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/20/2016	SM 2540C		1		25	189	mg/L
* Chloride, Total	SES	5/20/2016	EPA 300.0		1	0.04	0.25	3.94	mg/L
* Fluoride, Total	SES	5/20/2016	EPA 300.0		1	0.01	0.3	J 0.088	mg/L
* Sulfate, Total	SES	5/20/2016	EPA 300.0		1	0.3	1	7.27	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AW12887

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW12889 Boron, Total	mg/L	0.00250	0.044	1.00	0.981	0.973	0.994	0.85 to 1.15	98.1	70 to 130	0.819	20	
AW12889 Antimony, Total	mg/L	0.0000962	0.00132	0.10	0.0870	0.0890	0.0897	0.085 to 0.115	87.0	70 to 130	2.36	20	
AW12889 Beryllium, Total	mg/L	0.00000931	0.00132	0.10	0.0947	0.0955	0.102	0.085 to 0.115	94.7	70 to 130	0.834	20	
AW12889 Selenium, Total	mg/L	0.0000306	0.0044	0.10	0.0941	0.0944	0.100	0.085 to 0.115	94.1	70 to 130	0.380	20	
AW12889 Thallium, Total	mg/L	0.00000175	0.00044	0.10	0.101	0.101	0.0973	0.085 to 0.115	101	70 to 130	0.0950	20	
AW12889 Cadmium, Total	mg/L	0.000000753	0.00044	0.10	0.0932	0.0961	0.0957	0.085 to 0.115	93.2	70 to 130	3.08	20	
AW12889 Calcium, Total	mg/L	-0.0264	0.22	5.00	37.0	36.6	4.96	4.25 to 5.75	92.0	70 to 130	1.09	20	
AW12889 Cobalt, Total	mg/L	-0.000000224	0.0044	0.10	0.0841	0.0850	0.0863	0.085 to 0.115	84.1	70 to 130	1.04	20	
AW12889 Chromium, Total	mg/L	-0.000000096	0.0044	0.10	0.0881	0.0895	0.0895	0.085 to 0.115	88.1	70 to 130	1.62	20	
AW12889 Molybdenum, Total	mg/L	0.00000480	0.0044	0.10	0.0989	0.0999	0.0982	0.085 to 0.115	98.9	70 to 130	1.02	20	
AW12891 Mercury, Total by CVAA	mg/L	0.0000646	0.0005	0.004	0.00391	0.00391	0.00392	0.0034 to 0.0046	97.8	70 to 130	0.143	20	
AW12889 Arsenic, Total	mg/L	0.00000541	0.0022	0.10	0.0930	0.0939	0.1000	0.085 to 0.115	93.0	70 to 130	0.931	20	
AW12889 Barium, Total	mg/L	0.00000240	0.0044	0.10	0.110	0.110	0.101	0.085 to 0.115	102	70 to 130	0.470	20	
AW12889 Lead, Total	mg/L	0.00000398	0.0022	0.10	0.0952	0.0961	0.0994	0.085 to 0.115	95.2	70 to 130	0.922	20	
AW12889 Lithium, Total	mg/L	0.000277	0.022	0.20	0.205	0.197	0.206	0.17 to 0.23	102	70 to 130	3.98	20	

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AW12887

Sample	Analysis	Units	MB	Sample			LFB		Rec		Prec		
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW12889	Fluoride, Total	mg/L	0.000	0.3	2.00	2.11	0.064	2.01	1.8 to 2.2	102	80 to 120	1.55	20
AW12889	Chloride, Total	mg/L	0.000	0.25	10.00	11.9	1.40	10.1	9 to 11	105	80 to 120	0.712	20
AW12889	Solids, Dissolved	mg/L	3.0	25			150	52	40 to 60			1.96	5
AW12889	Sulfate, Total	mg/L	0.000	1.0	20.00	21.1	1.92	19.6	18 to 22	95.8	80 to 120	0.519	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/10/2017
 Version: 2.0

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AW12888

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	J 0.00816	mg/L
* Beryllium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.1	0.5	32.6	mg/L
* Cadmium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/20/2016	SM 2540C		1		25	156	mg/L
* Chloride, Total	SES	5/20/2016	EPA 300.0		1	0.04	0.25	1.40	mg/L
* Fluoride, Total	SES	5/20/2016	EPA 300.0		1	0.01	0.3	J 0.064	mg/L
* Sulfate, Total	SES	5/20/2016	EPA 300.0		1	0.3	1	1.92	mg/L

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 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AW12888

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW12889 Boron, Total	mg/L	0.00250	0.044	1.00	0.981	0.973	0.994	0.85 to 1.15	98.1	70 to 130	0.819	20	
AW12889 Antimony, Total	mg/L	0.0000962	0.00132	0.10	0.0870	0.0890	0.0897	0.085 to 0.115	87.0	70 to 130	2.36	20	
AW12889 Beryllium, Total	mg/L	0.00000931	0.00132	0.10	0.0947	0.0955	0.102	0.085 to 0.115	94.7	70 to 130	0.834	20	
AW12889 Selenium, Total	mg/L	0.0000306	0.0044	0.10	0.0941	0.0944	0.100	0.085 to 0.115	94.1	70 to 130	0.380	20	
AW12889 Thallium, Total	mg/L	0.00000175	0.00044	0.10	0.101	0.101	0.0973	0.085 to 0.115	101	70 to 130	0.0950	20	
AW12889 Cadmium, Total	mg/L	0.000000753	0.00044	0.10	0.0932	0.0961	0.0957	0.085 to 0.115	93.2	70 to 130	3.08	20	
AW12889 Calcium, Total	mg/L	-0.0264	0.22	5.00	37.0	36.6	4.96	4.25 to 5.75	92.0	70 to 130	1.09	20	
AW12889 Cobalt, Total	mg/L	-0.000000224	0.0044	0.10	0.0841	0.0850	0.0863	0.085 to 0.115	84.1	70 to 130	1.04	20	
AW12889 Chromium, Total	mg/L	-0.000000096	0.0044	0.10	0.0881	0.0895	0.0895	0.085 to 0.115	88.1	70 to 130	1.62	20	
AW12889 Molybdenum, Total	mg/L	0.00000480	0.0044	0.10	0.0989	0.0999	0.0982	0.085 to 0.115	98.9	70 to 130	1.02	20	
AW12891 Mercury, Total by CVAA	mg/L	0.0000646	0.0005	0.004	0.00391	0.00391	0.00392	0.0034 to 0.0046	97.8	70 to 130	0.143	20	
AW12889 Arsenic, Total	mg/L	0.00000541	0.0022	0.10	0.0930	0.0939	0.1000	0.085 to 0.115	93.0	70 to 130	0.931	20	
AW12889 Barium, Total	mg/L	0.00000240	0.0044	0.10	0.110	0.110	0.101	0.085 to 0.115	102	70 to 130	0.470	20	
AW12889 Lead, Total	mg/L	0.00000398	0.0022	0.10	0.0952	0.0961	0.0994	0.085 to 0.115	95.2	70 to 130	0.922	20	
AW12889 Lithium, Total	mg/L	0.000277	0.022	0.20	0.205	0.197	0.206	0.17 to 0.23	102	70 to 130	3.98	20	

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AW12888

Sample	Analysis	Units	MB	Sample			LFB		Rec		Prec		
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW12889	Fluoride, Total	mg/L	0.000	0.3	2.00	2.11	0.064	2.01	1.8 to 2.2	102	80 to 120	1.55	20
AW12889	Chloride, Total	mg/L	0.000	0.25	10.00	11.9	1.40	10.1	9 to 11	105	80 to 120	0.712	20
AW12889	Solids, Dissolved	mg/L	3.0	25			150	52	40 to 60			1.96	5
AW12889	Sulfate, Total	mg/L	0.000	1.0	20.00	21.1	1.92	19.6	18 to 22	95.8	80 to 120	0.519	20

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Certificate Of Analysis  **Alabama Power**

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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-2 DUP

Laboratory ID Number: AW12889

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	J 0.00777	mg/L
* Beryllium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.1	0.5	32.4	mg/L
* Cadmium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/20/2016	SM 2540C		1		25	156	mg/L
* Chloride, Total	SES	5/20/2016	EPA 300.0		1	0.04	0.25	1.41	mg/L
* Fluoride, Total	SES	5/20/2016	EPA 300.0		1	0.01	0.3	J 0.065	mg/L
* Sulfate, Total	SES	5/20/2016	EPA 300.0		1	0.3	1	1.93	mg/L

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Customer Account: WMWGASAP
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-2 DUP

Laboratory ID Number: AW12889

Sample Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
		MB	Limit					Limit	Rec	Limit	Prec		
AW12889 Boron, Total	mg/L	0.00250	0.044	1.00	0.981	0.973	0.994	0.85 to 1.15	98.1	70 to 130	0.819	20	
AW12889 Antimony, Total	mg/L	0.0000962	0.00132	0.10	0.0870	0.0890	0.0897	0.085 to 0.115	87.0	70 to 130	2.36	20	
AW12889 Chromium, Total	mg/L	-0.00000096	0.0044	0.10	0.0881	0.0895	0.0895	0.085 to 0.115	88.1	70 to 130	1.62	20	
AW12889 Molybdenum, Total	mg/L	0.00000480	0.0044	0.10	0.0989	0.0999	0.0982	0.085 to 0.115	98.9	70 to 130	1.02	20	
AW12891 Mercury, Total by CVAA	mg/L	0.0000646	0.0005	0.004	0.00391	0.00391	0.00392	0.0034 to 0.0046	97.8	70 to 130	0.143	20	
AW12889 Cadmium, Total	mg/L	0.00000753	0.00044	0.10	0.0932	0.0961	0.0957	0.085 to 0.115	93.2	70 to 130	3.08	20	
AW12889 Calcium, Total	mg/L	-0.0264	0.22	5.00	37.0	36.6	4.96	4.25 to 5.75	92.0	70 to 130	1.09	20	
AW12889 Cobalt, Total	mg/L	-0.00000224	0.0044	0.10	0.0841	0.0850	0.0863	0.085 to 0.115	84.1	70 to 130	1.04	20	
AW12889 Beryllium, Total	mg/L	0.00000931	0.00132	0.10	0.0947	0.0955	0.102	0.085 to 0.115	94.7	70 to 130	0.834	20	
AW12889 Selenium, Total	mg/L	0.0000306	0.0044	0.10	0.0941	0.0944	0.100	0.085 to 0.115	94.1	70 to 130	0.380	20	
AW12889 Thallium, Total	mg/L	0.00000175	0.00044	0.10	0.101	0.101	0.0973	0.085 to 0.115	101	70 to 130	0.0950	20	
AW12889 Arsenic, Total	mg/L	0.00000541	0.0022	0.10	0.0930	0.0939	0.1000	0.085 to 0.115	93.0	70 to 130	0.931	20	
AW12889 Barium, Total	mg/L	0.00000240	0.0044	0.10	0.110	0.110	0.101	0.085 to 0.115	102	70 to 130	0.470	20	
AW12889 Lead, Total	mg/L	0.00000398	0.0022	0.10	0.0952	0.0961	0.0994	0.085 to 0.115	95.2	70 to 130	0.922	20	
AW12889 Lithium, Total	mg/L	0.000277	0.022	0.20	0.205	0.197	0.206	0.17 to 0.23	102	70 to 130	3.98	20	

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Batch QC Summary



Corrected Copy



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 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-2 DUP

Laboratory ID Number: AW12889

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW12889	Fluoride, Total	mg/L	0.000	0.3	2.00	2.11	0.064	2.01	1.8 to 2.2	102	80 to 120	1.55	20
AW12889	Chloride, Total	mg/L	0.000	0.25	10.00	11.9	1.40	10.1	9 to 11	105	80 to 120	0.712	20
AW12889	Solids, Dissolved	mg/L	3.0	25			150	52	40 to 60			1.96	5
AW12889	Sulfate, Total	mg/L	0.000	1.0	20.00	21.1	1.92	19.6	18 to 22	95.8	80 to 120	0.519	20

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Reported: 7/10/2017
 Version: 2.0

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AW12890

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	0.00511	mg/L
* Barium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	0.0492	mg/L
* Beryllium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	J 0.0252	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		10.15	1.0	5.0	42.9	mg/L
* Cadmium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	0.0125	mg/L
* Lead, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/24/2016	SM 2540C		1		25	206	mg/L
* Chloride, Total	SES	5/25/2016	EPA 300.0		1	0.04	0.25	9.40	mg/L
* Fluoride, Total	SES	5/25/2016	EPA 300.0		1	0.01	0.3	J 0.092	mg/L
* Sulfate, Total	SES	5/25/2016	EPA 300.0		1	0.3	1	14.9	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AW12890

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW12897 Lead, Total	mg/L	0.00000398	0.0022	0.10	0.0981	0.0997	0.0994	0.085 to 0.115	98.1	70 to 130	1.63	20	
AW12897 Beryllium, Total	mg/L	0.00000931	0.00132	0.10	0.0981	0.0993	0.102	0.085 to 0.115	98.1	70 to 130	1.28	20	
AW12897 Cadmium, Total	mg/L	0.000000753	0.00044	0.10	0.0965	0.0984	0.0957	0.085 to 0.115	96.5	70 to 130	1.95	20	
AW13175 Calcium, Total	mg/L	-0.0276	0.22	5.00	95.4	97.5	4.78	4.25 to 5.75	78.0	70 to 130	2.18	20	
AW12897 Selenium, Total	mg/L	0.0000306	0.0044	0.10	0.0961	0.0964	0.100	0.085 to 0.115	96.1	70 to 130	0.367	20	
AW12897 Thallium, Total	mg/L	0.00000175	0.00044	0.10	0.103	0.105	0.0973	0.085 to 0.115	103	70 to 130	2.27	20	
AW12891 Mercury, Total by CVAA	mg/L	0.0000646	0.0005	0.004	0.00391	0.00391	0.00392	0.0034 to 0.0046	97.8	70 to 130	0.143	20	
AW12897 Arsenic, Total	mg/L	0.00000541	0.0022	0.10	0.0942	0.0949	0.1000	0.085 to 0.115	94.2	70 to 130	0.738	20	
AW12897 Barium, Total	mg/L	0.00000240	0.0044	0.10	0.105	0.107	0.101	0.085 to 0.115	105	70 to 130	1.98	20	
AW12897 Chromium, Total	mg/L	-0.000000096	0.0044	0.10	0.0908	0.0921	0.0895	0.085 to 0.115	90.8	70 to 130	1.48	20	
AW12897 Cobalt, Total	mg/L	-0.000000224	0.0044	0.10	0.0875	0.0886	0.0863	0.085 to 0.115	87.5	70 to 130	1.20	20	
AW13175 Boron, Total	mg/L	0.00355	0.044	1.00	1.16	1.18	0.973	0.85 to 1.15	99.1	70 to 130	1.71	20	
AW13175 Lithium, Total	mg/L	0.000357	0.022	0.20	0.220	0.219	0.195	0.17 to 0.23	110	70 to 130	0.456	20	
AW12897 Antimony, Total	mg/L	0.0000962	0.00132	0.10	0.0904	0.0912	0.0897	0.085 to 0.115	90.4	70 to 130	0.879	20	
AW12897 Molybdenum, Total	mg/L	0.00000480	0.0044	0.10	0.1000	0.101	0.0982	0.085 to 0.115	100	70 to 130	1.15	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AW12890

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample		LFB Limit	Rec		Prec Limit	
							Duplicate	LFB		Rec	Limit		Prec
AW12897	Fluoride, Total	mg/L	0.000	0.3	2.00	2.08	0.000	2.01	1.8 to 2.2	104	80 to 120	0	20
AW12896	Solids, Dissolved	mg/L	-5.0	25			206	49	40 to 60			0.242	5
AW12897	Chloride, Total	mg/L	0.000	0.25	10.00	11.0	0.000	10.1	9 to 11	110	80 to 120	0	20
AW12897	Sulfate, Total	mg/L	0.457	1.0	20.00	20.5	0.464	19.9	18 to 22	100	80 to 120	2.97	20

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AW12891

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	J 0.00160	mg/L
* Barium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	0.0437	mg/L
* Beryllium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		10.15	1.0	5.0	74.6	mg/L
* Cadmium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	J 0.00114	mg/L
* Selenium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/24/2016	SM 2540C		1		25	314	mg/L
* Chloride, Total	SES	5/25/2016	EPA 300.0		1	0.04	0.25	2.38	mg/L
* Fluoride, Total	SES	5/25/2016	EPA 300.0		1	0.01	0.3	J 0.098	mg/L
* Sulfate, Total	SES	6/1/2016	EPA 300.0		5	1.5	5	63.9	mg/L

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AW12891

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW12897 Lead, Total	mg/L	0.00000398	0.0022	0.10	0.0981	0.0997	0.0994	0.085 to 0.115	98.1	70 to 130	1.63	20	
AW12897 Beryllium, Total	mg/L	0.00000931	0.00132	0.10	0.0981	0.0993	0.102	0.085 to 0.115	98.1	70 to 130	1.28	20	
AW12897 Cadmium, Total	mg/L	0.000000753	0.00044	0.10	0.0965	0.0984	0.0957	0.085 to 0.115	96.5	70 to 130	1.95	20	
AW13175 Calcium, Total	mg/L	-0.0276	0.22	5.00	95.4	97.5	4.78	4.25 to 5.75	78.0	70 to 130	2.18	20	
AW12897 Antimony, Total	mg/L	0.0000962	0.00132	0.10	0.0904	0.0912	0.0897	0.085 to 0.115	90.4	70 to 130	0.879	20	
AW12897 Molybdenum, Total	mg/L	0.00000480	0.0044	0.10	0.1000	0.101	0.0982	0.085 to 0.115	100	70 to 130	1.15	20	
AW12891 Mercury, Total by CVAA	mg/L	0.0000646	0.0005	0.004	0.00391	0.00391	0.00392	0.0034 to 0.0046	97.8	70 to 130	0.143	20	
AW12897 Arsenic, Total	mg/L	0.00000541	0.0022	0.10	0.0942	0.0949	0.1000	0.085 to 0.115	94.2	70 to 130	0.738	20	
AW12897 Selenium, Total	mg/L	0.0000306	0.0044	0.10	0.0961	0.0964	0.100	0.085 to 0.115	96.1	70 to 130	0.367	20	
AW12897 Thallium, Total	mg/L	0.00000175	0.00044	0.10	0.103	0.105	0.0973	0.085 to 0.115	103	70 to 130	2.27	20	
AW12897 Barium, Total	mg/L	0.00000240	0.0044	0.10	0.105	0.107	0.101	0.085 to 0.115	105	70 to 130	1.98	20	
AW12897 Chromium, Total	mg/L	-0.000000096	0.0044	0.10	0.0908	0.0921	0.0895	0.085 to 0.115	90.8	70 to 130	1.48	20	
AW12897 Cobalt, Total	mg/L	-0.000000224	0.0044	0.10	0.0875	0.0886	0.0863	0.085 to 0.115	87.5	70 to 130	1.20	20	
AW13175 Boron, Total	mg/L	0.00355	0.044	1.00	1.16	1.18	0.973	0.85 to 1.15	99.1	70 to 130	1.71	20	
AW13175 Lithium, Total	mg/L	0.000357	0.022	0.20	0.220	0.219	0.195	0.17 to 0.23	110	70 to 130	0.456	20	

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AW12891

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW12896	Solids, Dissolved	mg/L	-5.0	25				206	49	40 to 60			0.242	5
AW12897	Fluoride, Total	mg/L	0.000	0.3	2.00	2.08		0.000	2.01	1.8 to 2.2	104	80 to 120	0	20
AW12897	Chloride, Total	mg/L	0.000	0.25	10.00	11.0		0.000	10.1	9 to 11	110	80 to 120	0	20
AW12897	Sulfate, Total	mg/L	0.457	1.0	20.00	20.5		0.464	19.9	18 to 22	100	80 to 120	2.97	20

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

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

Revised Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-14 DISS

Laboratory ID Number: AW12892

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Dissolved	ABB	6/1/2016	EPA 200.8		5.025	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Dissolved	ABB	5/26/2016	EPA 200.8		5.025	0.001	0.005	J 0.00106	mg/L
* Barium, Dissolved	ABB	5/26/2016	EPA 200.8		5.025	0.002	0.01	0.0356	mg/L
* Beryllium, Dissolved	ABB	5/26/2016	EPA 200.8		5.025	0.0006	0.003	U Not Detected	mg/L
* Boron, Dissolved	HRG	5/24/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Dissolved	HRG	5/24/2016	EPA 200.7		10.15	1.0	5.0	71.4	mg/L
* Cadmium, Dissolved	ABB	5/26/2016	EPA 200.8		5.025	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Dissolved	ABB	5/26/2016	EPA 200.8		5.025	0.002	0.01	U Not Detected	mg/L
* Chromium, Dissolved	ABB	5/26/2016	EPA 200.8		5.025	0.002	0.01	U Not Detected	mg/L
* Mercury, Dissolved by CVAA	MCW	6/1/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Dissolved	HRG	5/24/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Dissolved	ABB	5/26/2016	EPA 200.8		5.025	0.002	0.01	U Not Detected	mg/L
* Lead, Dissolved	ABB	5/26/2016	EPA 200.8		5.025	0.001	0.005	U Not Detected	mg/L
* Selenium, Dissolved	ABB	5/26/2016	EPA 200.8		5.025	0.002	0.01	U Not Detected	mg/L
* Thallium, Dissolved	ABB	5/26/2016	EPA 200.8		5.025	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Chloride, Dissolved	SES	5/25/2016	EPA 300.0		1	0.04	0.25	2.33	mg/L
Fluoride, Dissolved	SES	5/25/2016	EPA 300.0		1	0.01	0.3	J 0.099	mg/L
Sulfate, Dissolved	SES	6/1/2016	EPA 300.0		5	1.5	5	66.0	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: REVISED COPY: Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Revised Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-14 DISS

Laboratory ID Number: AW12892

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW13174 Barium, Dissolved	mg/L	-0.00000466	0.0044	0.10	0.110	0.113				86.3	70 to 130	3.17	20
AW13174 Cobalt, Dissolved	mg/L	-0.0000109	0.0044	0.10	0.0920	0.0913				92.0	70 to 130	0.763	20
AW13174 Chromium, Dissolved	mg/L	-0.0000263	0.0044	0.10	0.0922	0.0929				92.2	70 to 130	0.801	20
AW13174 Mercury, Dissolved by CVAA	mg/L	0.00006	0.0005	0.00400	0.00395	0.00398	0.00398	0.0034 to 0.0046		98.8	70 to 130	0.757	20
AW13174 Beryllium, Dissolved	mg/L	0.00000298	0.00132	0.10	0.0919	0.0913				91.9	70 to 130	0.670	20
AW13174 Molybdenum, Dissolved	mg/L	0.0000133	0.0044	0.10	0.111	0.111				93.1	70 to 130	0.234	20
AW13174 Antimony, Dissolved	mg/L	0.0000301	0.00132	0.10	0.0885	0.0925				88.5	70 to 130	4.42	20
AW13174 Arsenic, Dissolved	mg/L	0.00000755	0.0022	0.10	0.0950	0.0946				95.0	70 to 130	0.467	20
AW13174 Calcium, Dissolved	mg/L	-0.0220	0.22	5.00	70.3	70.9	4.95	4.25 to 5.75		64.0	70 to 130	0.850	20
AW13174 Thallium, Dissolved	mg/L	-0.0000322	0.00044	0.10	0.0999	0.0981				99.9	70 to 130	1.83	20
AW13174 Boron, Dissolved	mg/L	-0.00180	0.044	1.00	3.78	3.79	0.967	0.85 to 1.15		95.0	70 to 130	0.264	20
AW13174 Lead, Dissolved	mg/L	0.0000107	0.0022	0.10	0.0830	0.0820				83.0	70 to 130	1.13	20
AW13174 Selenium, Dissolved	mg/L	0.0000252	0.0044	0.10	0.0950	0.0925				95.0	70 to 130	2.73	20
AW13174 Cadmium, Dissolved	mg/L	0.000000785	0.00044	0.10	0.0895	0.0905				89.5	70 to 130	1.16	20
AW13174 Lithium, Dissolved	mg/L	0.000251	0.022	0.20	0.217	0.220	0.201	0.17 to 0.23		108	70 to 130	1.37	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: REVISED COPY: Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Revised Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-14 DISS

Laboratory ID Number: AW12892

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW13174	Chloride, Dissolved	mg/L	0.000	0.25	100	148		28.6	10.2	9 to 11	120	80 to 120	0.0666	20
AW13174	Sulfate, Dissolved	mg/L	0.454	1.0	200	412		207	20.2	18 to 22	103	80 to 120	0.484	20
AW13174	Fluoride, Dissolved	mg/L	0.000	0.3	2.00	2.11		0.087	2.02	1.8 to 2.2	101	80 to 120	1.14	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: REVISED COPY: Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/10/2017
 Version: 2.0

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW12893

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/24/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	5/25/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	5/25/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	5/25/2016	EPA 300.0		1	0.3	1	J 0.456	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW12893

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW12897 Arsenic, Total	mg/L	0.00000541	0.0022	0.10	0.0942	0.0949	0.1000	0.085 to 0.115	94.2	70 to 130	0.738	20	
AW12897 Lead, Total	mg/L	0.00000398	0.0022	0.10	0.0981	0.0997	0.0994	0.085 to 0.115	98.1	70 to 130	1.63	20	
AW12897 Selenium, Total	mg/L	0.0000306	0.0044	0.10	0.0961	0.0964	0.100	0.085 to 0.115	96.1	70 to 130	0.367	20	
AW12897 Thallium, Total	mg/L	0.00000175	0.00044	0.10	0.103	0.105	0.0973	0.085 to 0.115	103	70 to 130	2.27	20	
AW12897 Beryllium, Total	mg/L	0.00000931	0.00132	0.10	0.0981	0.0993	0.102	0.085 to 0.115	98.1	70 to 130	1.28	20	
AW12897 Cadmium, Total	mg/L	0.000000753	0.00044	0.10	0.0965	0.0984	0.0957	0.085 to 0.115	96.5	70 to 130	1.95	20	
AW13175 Calcium, Total	mg/L	-0.0276	0.22	5.00	95.4	97.5	4.78	4.25 to 5.75	78.0	70 to 130	2.18	20	
AW13177 Mercury, Total by CVAA	mg/L	0.000069	0.0005	0.004	0.00393	0.00390	0.00384	0.0034 to 0.0046	98.2	70 to 130	0.792	20	
AW12897 Antimony, Total	mg/L	0.0000962	0.00132	0.10	0.0904	0.0912	0.0897	0.085 to 0.115	90.4	70 to 130	0.879	20	
AW12897 Molybdenum, Total	mg/L	0.00000480	0.0044	0.10	0.1000	0.101	0.0982	0.085 to 0.115	100	70 to 130	1.15	20	
AW12897 Barium, Total	mg/L	0.00000240	0.0044	0.10	0.105	0.107	0.101	0.085 to 0.115	105	70 to 130	1.98	20	
AW12897 Chromium, Total	mg/L	-0.000000096	0.0044	0.10	0.0908	0.0921	0.0895	0.085 to 0.115	90.8	70 to 130	1.48	20	
AW12897 Cobalt, Total	mg/L	-0.000000224	0.0044	0.10	0.0875	0.0886	0.0863	0.085 to 0.115	87.5	70 to 130	1.20	20	
AW13175 Boron, Total	mg/L	0.00355	0.044	1.00	1.16	1.18	0.973	0.85 to 1.15	99.1	70 to 130	1.71	20	
AW13175 Lithium, Total	mg/L	0.000357	0.022	0.20	0.220	0.219	0.195	0.17 to 0.23	110	70 to 130	0.456	20	

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 17-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW12893

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW12896	Solids, Dissolved	mg/L	-5.0	25			206	49	40 to 60			0.242	5
AW12897	Fluoride, Total	mg/L	0.000	0.3	2.00	2.08	0.000	2.01	1.8 to 2.2	104	80 to 120	0	20
AW12897	Chloride, Total	mg/L	0.000	0.25	10.00	11.0	0.000	10.1	9 to 11	110	80 to 120	0	20
AW12897	Sulfate, Total	mg/L	0.457	1.0	20.00	20.5	0.464	19.9	18 to 22	100	80 to 120	2.97	20

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AW12894

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	0.0110	mg/L
* Beryllium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	0.118	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.1	0.5	34.7	mg/L
* Cadmium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/24/2016	SM 2540C		1		25	186	mg/L
* Chloride, Total	SES	5/25/2016	EPA 300.0		1	0.04	0.25	5.93	mg/L
* Fluoride, Total	SES	5/25/2016	EPA 300.0		1	0.01	0.3	J 0.068	mg/L
* Sulfate, Total	SES	5/25/2016	EPA 300.0		1	0.3	1	30.8	mg/L

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AW12894

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW12897 Lead, Total	mg/L	0.00000398	0.0022	0.10	0.0981	0.0997	0.0994	0.085 to 0.115	98.1	70 to 130	1.63	20	
AW12897 Arsenic, Total	mg/L	0.00000541	0.0022	0.10	0.0942	0.0949	0.1000	0.085 to 0.115	94.2	70 to 130	0.738	20	
AW12897 Selenium, Total	mg/L	0.0000306	0.0044	0.10	0.0961	0.0964	0.100	0.085 to 0.115	96.1	70 to 130	0.367	20	
AW12897 Thallium, Total	mg/L	0.00000175	0.00044	0.10	0.103	0.105	0.0973	0.085 to 0.115	103	70 to 130	2.27	20	
AW12897 Beryllium, Total	mg/L	0.00000931	0.00132	0.10	0.0981	0.0993	0.102	0.085 to 0.115	98.1	70 to 130	1.28	20	
AW12897 Cadmium, Total	mg/L	0.000000753	0.00044	0.10	0.0965	0.0984	0.0957	0.085 to 0.115	96.5	70 to 130	1.95	20	
AW13175 Calcium, Total	mg/L	-0.0276	0.22	5.00	95.4	97.5	4.78	4.25 to 5.75	78.0	70 to 130	2.18	20	
AW13177 Mercury, Total by CVAA	mg/L	0.000069	0.0005	0.004	0.00393	0.00390	0.00384	0.0034 to 0.0046	98.2	70 to 130	0.792	20	
AW12897 Antimony, Total	mg/L	0.0000962	0.00132	0.10	0.0904	0.0912	0.0897	0.085 to 0.115	90.4	70 to 130	0.879	20	
AW12897 Molybdenum, Total	mg/L	0.00000480	0.0044	0.10	0.1000	0.101	0.0982	0.085 to 0.115	100	70 to 130	1.15	20	
AW12897 Barium, Total	mg/L	0.00000240	0.0044	0.10	0.105	0.107	0.101	0.085 to 0.115	105	70 to 130	1.98	20	
AW12897 Chromium, Total	mg/L	-0.000000096	0.0044	0.10	0.0908	0.0921	0.0895	0.085 to 0.115	90.8	70 to 130	1.48	20	
AW12897 Cobalt, Total	mg/L	-0.000000224	0.0044	0.10	0.0875	0.0886	0.0863	0.085 to 0.115	87.5	70 to 130	1.20	20	
AW13175 Boron, Total	mg/L	0.00355	0.044	1.00	1.16	1.18	0.973	0.85 to 1.15	99.1	70 to 130	1.71	20	
AW13175 Lithium, Total	mg/L	0.000357	0.022	0.20	0.220	0.219	0.195	0.17 to 0.23	110	70 to 130	0.456	20	

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Expiration: June 30, 2018

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AW12894

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW12896	Solids, Dissolved	mg/L	-5.0	25				206	49	40 to 60			0.242	5
AW12897	Fluoride, Total	mg/L	0.000	0.3	2.00	2.08		0.000	2.01	1.8 to 2.2	104	80 to 120	0	20
AW12897	Chloride, Total	mg/L	0.000	0.25	10.00	11.0		0.000	10.1	9 to 11	110	80 to 120	0	20
AW12897	Sulfate, Total	mg/L	0.457	1.0	20.00	20.5		0.464	19.9	18 to 22	100	80 to 120	2.97	20

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/10/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AW12895

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	J 0.00194	mg/L
* Barium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	0.0794	mg/L
* Beryllium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	0.286	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		10.15	1.0	5.0	57.5	mg/L
* Cadmium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/24/2016	SM 2540C		1		25	343	mg/L
* Chloride, Total	SES	5/25/2016	EPA 300.0		1	0.04	0.25	19.6	mg/L
* Fluoride, Total	SES	5/25/2016	EPA 300.0		1	0.01	0.3	J 0.078	mg/L
* Sulfate, Total	SES	6/1/2016	EPA 300.0		10	3.0	10	83.8	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AW12895

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	Spike				Limit	Rec	Limit	Prec			
AW12897 Arsenic, Total	mg/L	0.00000541	0.0022	0.10	0.0942	0.0949	0.1000	0.085 to 0.115		94.2	70 to 130		0.738	20
AW12897 Lead, Total	mg/L	0.00000398	0.0022	0.10	0.0981	0.0997	0.0994	0.085 to 0.115		98.1	70 to 130		1.63	20
AW12897 Beryllium, Total	mg/L	0.00000931	0.00132	0.10	0.0981	0.0993	0.102	0.085 to 0.115		98.1	70 to 130		1.28	20
AW12897 Cadmium, Total	mg/L	0.000000753	0.00044	0.10	0.0965	0.0984	0.0957	0.085 to 0.115		96.5	70 to 130		1.95	20
AW13175 Calcium, Total	mg/L	-0.0276	0.22	5.00	95.4	97.5	4.78	4.25 to 5.75		78.0	70 to 130		2.18	20
AW13177 Mercury, Total by CVAA	mg/L	0.000069	0.0005	0.004	0.00393	0.00390	0.00384	0.0034 to 0.0046		98.2	70 to 130		0.792	20
AW12897 Antimony, Total	mg/L	0.0000962	0.00132	0.10	0.0904	0.0912	0.0897	0.085 to 0.115		90.4	70 to 130		0.879	20
AW12897 Molybdenum, Total	mg/L	0.00000480	0.0044	0.10	0.1000	0.101	0.0982	0.085 to 0.115		100	70 to 130		1.15	20
AW12897 Barium, Total	mg/L	0.00000240	0.0044	0.10	0.105	0.107	0.101	0.085 to 0.115		105	70 to 130		1.98	20
AW12897 Chromium, Total	mg/L	-0.000000096	0.0044	0.10	0.0908	0.0921	0.0895	0.085 to 0.115		90.8	70 to 130		1.48	20
AW12897 Cobalt, Total	mg/L	-0.000000224	0.0044	0.10	0.0875	0.0886	0.0863	0.085 to 0.115		87.5	70 to 130		1.20	20
AW13175 Boron, Total	mg/L	0.00355	0.044	1.00	1.16	1.18	0.973	0.85 to 1.15		99.1	70 to 130		1.71	20
AW13175 Lithium, Total	mg/L	0.000357	0.022	0.20	0.220	0.219	0.195	0.17 to 0.23		110	70 to 130		0.456	20
AW12897 Selenium, Total	mg/L	0.0000306	0.0044	0.10	0.0961	0.0964	0.100	0.085 to 0.115		96.1	70 to 130		0.367	20
AW12897 Thallium, Total	mg/L	0.00000175	0.00044	0.10	0.103	0.105	0.0973	0.085 to 0.115		103	70 to 130		2.27	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AW12895

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW12896	Solids, Dissolved	mg/L	-5.0	25				206	49	40 to 60			0.242	5
AW12897	Fluoride, Total	mg/L	0.000	0.3	2.00	2.08		0.000	2.01	1.8 to 2.2	104	80 to 120	0	20
AW12897	Chloride, Total	mg/L	0.000	0.25	10.00	11.0		0.000	10.1	9 to 11	110	80 to 120	0	20
AW12897	Sulfate, Total	mg/L	0.457	1.0	20.00	20.5		0.464	19.9	18 to 22	100	80 to 120	2.97	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AW12896

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	0.0380	mg/L
* Beryllium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		10.15	1.0	5.0	46.1	mg/L
* Cadmium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/24/2016	SM 2540C		1		25	207	mg/L
* Chloride, Total	SES	5/25/2016	EPA 300.0		1	0.04	0.25	4.35	mg/L
* Fluoride, Total	SES	5/25/2016	EPA 300.0		1	0.01	0.3	J 0.080	mg/L
* Sulfate, Total	SES	5/25/2016	EPA 300.0		1	0.3	1	J 0.492	mg/L

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Alabama Power General Test Laboratory
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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AW12896

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW12897 Arsenic, Total	mg/L	0.00000541	0.0022	0.10	0.0942	0.0949	0.1000	0.085 to 0.115	94.2	70 to 130	0.738	20	
AW12897 Lead, Total	mg/L	0.00000398	0.0022	0.10	0.0981	0.0997	0.0994	0.085 to 0.115	98.1	70 to 130	1.63	20	
AW12897 Antimony, Total	mg/L	0.0000962	0.00132	0.10	0.0904	0.0912	0.0897	0.085 to 0.115	90.4	70 to 130	0.879	20	
AW12897 Molybdenum, Total	mg/L	0.00000480	0.0044	0.10	0.1000	0.101	0.0982	0.085 to 0.115	100	70 to 130	1.15	20	
AW12897 Beryllium, Total	mg/L	0.00000931	0.00132	0.10	0.0981	0.0993	0.102	0.085 to 0.115	98.1	70 to 130	1.28	20	
AW12897 Cadmium, Total	mg/L	0.000000753	0.00044	0.10	0.0965	0.0984	0.0957	0.085 to 0.115	96.5	70 to 130	1.95	20	
AW13175 Calcium, Total	mg/L	-0.0276	0.22	5.00	95.4	97.5	4.78	4.25 to 5.75	78.0	70 to 130	2.18	20	
AW13177 Mercury, Total by CVAA	mg/L	0.000069	0.0005	0.004	0.00393	0.00390	0.00384	0.0034 to 0.0046	98.2	70 to 130	0.792	20	
AW12897 Selenium, Total	mg/L	0.0000306	0.0044	0.10	0.0961	0.0964	0.100	0.085 to 0.115	96.1	70 to 130	0.367	20	
AW12897 Thallium, Total	mg/L	0.00000175	0.00044	0.10	0.103	0.105	0.0973	0.085 to 0.115	103	70 to 130	2.27	20	
AW12897 Barium, Total	mg/L	0.00000240	0.0044	0.10	0.105	0.107	0.101	0.085 to 0.115	105	70 to 130	1.98	20	
AW12897 Chromium, Total	mg/L	-0.000000096	0.0044	0.10	0.0908	0.0921	0.0895	0.085 to 0.115	90.8	70 to 130	1.48	20	
AW12897 Cobalt, Total	mg/L	-0.000000224	0.0044	0.10	0.0875	0.0886	0.0863	0.085 to 0.115	87.5	70 to 130	1.20	20	
AW13175 Boron, Total	mg/L	0.00355	0.044	1.00	1.16	1.18	0.973	0.85 to 1.15	99.1	70 to 130	1.71	20	
AW13175 Lithium, Total	mg/L	0.000357	0.022	0.20	0.220	0.219	0.195	0.17 to 0.23	110	70 to 130	0.456	20	

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AW12896

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW12897	Fluoride, Total	mg/L	0.000	0.3	2.00	2.08	0.000	2.01	1.8 to 2.2	104	80 to 120	0	20
AW12896	Solids, Dissolved	mg/L	-5.0	25			206	49	40 to 60			0.242	5
AW12897	Chloride, Total	mg/L	0.000	0.25	10.00	11.0	0.000	10.1	9 to 11	110	80 to 120	0	20
AW12897	Sulfate, Total	mg/L	0.457	1.0	20.00	20.5	0.464	19.9	18 to 22	100	80 to 120	2.97	20

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CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPEB
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AW12897

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/20/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/20/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/24/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	5/25/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	5/25/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	5/25/2016	EPA 300.0		1	0.3	1	J 0.478	mg/L

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 Greg Dyer
 John Pugh

Customer Account: WMWGASAPEB
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AW12897

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW12897 Arsenic, Total	mg/L	0.00000541	0.0022	0.10	0.0942	0.0949	0.1000	0.085 to 0.115	94.2	70 to 130	0.738	20	
AW12897 Lead, Total	mg/L	0.00000398	0.0022	0.10	0.0981	0.0997	0.0994	0.085 to 0.115	98.1	70 to 130	1.63	20	
AW12897 Selenium, Total	mg/L	0.0000306	0.0044	0.10	0.0961	0.0964	0.100	0.085 to 0.115	96.1	70 to 130	0.367	20	
AW12897 Thallium, Total	mg/L	0.00000175	0.00044	0.10	0.103	0.105	0.0973	0.085 to 0.115	103	70 to 130	2.27	20	
AW12897 Antimony, Total	mg/L	0.0000962	0.00132	0.10	0.0904	0.0912	0.0897	0.085 to 0.115	90.4	70 to 130	0.879	20	
AW12897 Molybdenum, Total	mg/L	0.00000480	0.0044	0.10	0.1000	0.101	0.0982	0.085 to 0.115	100	70 to 130	1.15	20	
AW12897 Beryllium, Total	mg/L	0.00000931	0.00132	0.10	0.0981	0.0993	0.102	0.085 to 0.115	98.1	70 to 130	1.28	20	
AW12897 Cadmium, Total	mg/L	0.000000753	0.00044	0.10	0.0965	0.0984	0.0957	0.085 to 0.115	96.5	70 to 130	1.95	20	
AW13175 Calcium, Total	mg/L	-0.0276	0.22	5.00	95.4	97.5	4.78	4.25 to 5.75	78.0	70 to 130	2.18	20	
AW13177 Mercury, Total by CVAA	mg/L	0.000069	0.0005	0.004	0.00393	0.00390	0.00384	0.0034 to 0.0046	98.2	70 to 130	0.792	20	
AW12897 Barium, Total	mg/L	0.00000240	0.0044	0.10	0.105	0.107	0.101	0.085 to 0.115	105	70 to 130	1.98	20	
AW12897 Chromium, Total	mg/L	-0.000000096	0.0044	0.10	0.0908	0.0921	0.0895	0.085 to 0.115	90.8	70 to 130	1.48	20	
AW12897 Cobalt, Total	mg/L	-0.000000224	0.0044	0.10	0.0875	0.0886	0.0863	0.085 to 0.115	87.5	70 to 130	1.20	20	
AW13175 Boron, Total	mg/L	0.00355	0.044	1.00	1.16	1.18	0.973	0.85 to 1.15	99.1	70 to 130	1.71	20	
AW13175 Lithium, Total	mg/L	0.000357	0.022	0.20	0.220	0.219	0.195	0.17 to 0.23	110	70 to 130	0.456	20	

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Alabama Power General Test Laboratory
 744 County Road 87, GSC#8
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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPEB
 Sample Date: 18-May-16
 Customer ID:
 Delivery Date: 19-May-16

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AW12897

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample		LFB Limit	Rec		Prec Limit
							Duplicate	LFB		Rec	Limit	
AW12896	Solids, Dissolved	mg/L	-5.0	25			206	49	40 to 60			0.242 5
AW12897	Fluoride, Total	mg/L	0.000	0.3	2.00	2.08	0.000	2.01	1.8 to 2.2	104	80 to 120	0 20
AW12897	Chloride, Total	mg/L	0.000	0.25	10.00	11.0	0.000	10.1	9 to 11	110	80 to 120	0 20
AW12897	Sulfate, Total	mg/L	0.457	1.0	20.00	20.5	0.464	19.9	18 to 22	100	80 to 120	2.97 20

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CC:

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Certificate Of Analysis  **Alabama Power**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 19-May-16
 Customer ID:
 Delivery Date: 23-May-16

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AW13172

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	5/26/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	5/26/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	0.0249	mg/L
* Beryllium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	1.66	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		10.15	1.0	5.0	84.5	mg/L
* Cadmium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/26/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/25/2016	SM 2540C		1		50	458	mg/L
* Chloride, Total	SES	5/25/2016	EPA 300.0		1	0.04	0.25	14.9	mg/L
* Fluoride, Total	SES	5/25/2016	EPA 300.0		1	0.01	0.3	J 0.072	mg/L
* Sulfate, Total	SES	5/27/2016	EPA 300.0		10	3.0	10	204	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 19-May-16
 Customer ID:
 Delivery Date: 23-May-16

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AW13172

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW13177 Molybdenum, Total	mg/L	0.0000169	0.0044	0.10	0.131	0.122	0.0890	0.085 to 0.115	98.4	70 to 130	7.08	20	
AW13177 Chromium, Total	mg/L	0.00000329	0.0044	0.10	0.0843	0.0838	0.0944	0.085 to 0.115	84.3	70 to 130	0.549	20	
AW13177 Antimony, Total	mg/L	0.0000925	0.00132	0.10	0.100	0.0932	0.0930	0.085 to 0.115	99.2	70 to 130	7.34	20	
AW13175 Calcium, Total	mg/L	-0.0276	0.22	5.00	95.4	97.5	4.78	4.25 to 5.75	78.0	70 to 130	2.18	20	
AW13177 Barium, Total	mg/L	-0.00000344	0.0044	0.10	0.116	0.109	0.0932	0.085 to 0.115	99.9	70 to 130	5.75	20	
AW13177 Mercury, Total by CVAA	mg/L	0.000069	0.0005	0.004	0.00393	0.00390	0.00384	0.0034 to 0.0046	98.2	70 to 130	0.792	20	
AW13177 Beryllium, Total	mg/L	0.00000187	0.00132	0.10	0.0996	0.0992	0.114	0.085 to 0.115	99.6	70 to 130	0.349	20	
AW13177 Selenium, Total	mg/L	0.0000287	0.0044	0.10	0.0950	0.0950	0.0987	0.085 to 0.115	95.0	70 to 130	0.0827	20	
AW13177 Arsenic, Total	mg/L	0.00000752	0.0022	0.10	0.0987	0.0988	0.0980	0.085 to 0.115	95.6	70 to 130	0.159	20	
AW13177 Cadmium, Total	mg/L	0.000000479	0.00044	0.10	0.103	0.0954	0.0990	0.085 to 0.115	103	70 to 130	8.05	20	
AW13177 Thallium, Total	mg/L	0.00000228	0.00044	0.10	0.0993	0.0978	0.0976	0.085 to 0.115	99.3	70 to 130	1.52	20	
AW13175 Boron, Total	mg/L	0.00355	0.044	1.00	1.16	1.18	0.973	0.85 to 1.15	99.1	70 to 130	1.71	20	
AW13175 Lithium, Total	mg/L	0.000357	0.022	0.20	0.220	0.219	0.195	0.17 to 0.23	110	70 to 130	0.456	20	
AW13177 Cobalt, Total	mg/L	0.000000276	0.0044	0.10	0.0907	0.0850	0.0972	0.085 to 0.115	90.7	70 to 130	6.41	20	
AW13177 Lead, Total	mg/L	0.00000333	0.0022	0.10	0.0927	0.0915	0.0988	0.085 to 0.115	92.7	70 to 130	1.21	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 19-May-16
 Customer ID:
 Delivery Date: 23-May-16

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AW13172

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW12897	Fluoride, Total	mg/L	0.000	0.3	2.00	2.08	0.000	2.01	1.8 to 2.2	104	80 to 120	0	20
AW13315	Solids, Dissolved	mg/L	3.0	25			305	58	40 to 60			1.13	5
AW12897	Chloride, Total	mg/L	0.000	0.25	10.00	11.0	0.000	10.1	9 to 11	110	80 to 120	0	20
AW12897	Sulfate, Total	mg/L	0.457	1.0	20.00	20.5	0.464	19.9	18 to 22	100	80 to 120	2.97	20

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CC:

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 Calera, AL 35040
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 FAX (205) 257-1654

Certificate Of Analysis  **Alabama Power**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 19-May-16
 Customer ID:
 Delivery Date: 23-May-16

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AW13173

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	5/26/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	5/26/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	0.0282	mg/L
* Beryllium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	2.84	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		10.15	1.0	5.0	69.7	mg/L
* Cadmium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	0.0188	mg/L
* Lead, Total	ABB	5/26/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/25/2016	SM 2540C		1		25	422	mg/L
* Chloride, Total	SES	5/27/2016	EPA 300.0		10	0.40	2.50	28.7	mg/L
* Fluoride, Total	SES	5/25/2016	EPA 300.0		1	0.01	0.3	J 0.090	mg/L
* Sulfate, Total	SES	5/27/2016	EPA 300.0		10	3.0	10	206	mg/L

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 19-May-16
 Customer ID:
 Delivery Date: 23-May-16

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AW13173

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW13177 Antimony, Total	mg/L	0.0000925	0.00132	0.10	0.100	0.0932	0.0930	0.085 to 0.115	99.2	70 to 130	7.34	20	
AW13177 Molybdenum, Total	mg/L	0.0000169	0.0044	0.10	0.131	0.122	0.0890	0.085 to 0.115	98.4	70 to 130	7.08	20	
AW13177 Chromium, Total	mg/L	0.00000329	0.0044	0.10	0.0843	0.0838	0.0944	0.085 to 0.115	84.3	70 to 130	0.549	20	
AW13175 Calcium, Total	mg/L	-0.0276	0.22	5.00	95.4	97.5	4.78	4.25 to 5.75	78.0	70 to 130	2.18	20	
AW13177 Barium, Total	mg/L	-0.00000344	0.0044	0.10	0.116	0.109	0.0932	0.085 to 0.115	99.9	70 to 130	5.75	20	
AW13177 Mercury, Total by CVAA	mg/L	0.000069	0.0005	0.004	0.00393	0.00390	0.00384	0.0034 to 0.0046	98.2	70 to 130	0.792	20	
AW13177 Cobalt, Total	mg/L	0.000000276	0.0044	0.10	0.0907	0.0850	0.0972	0.085 to 0.115	90.7	70 to 130	6.41	20	
AW13177 Lead, Total	mg/L	0.00000333	0.0022	0.10	0.0927	0.0915	0.0988	0.085 to 0.115	92.7	70 to 130	1.21	20	
AW13177 Arsenic, Total	mg/L	0.00000752	0.0022	0.10	0.0987	0.0988	0.0980	0.085 to 0.115	95.6	70 to 130	0.159	20	
AW13177 Cadmium, Total	mg/L	0.000000479	0.00044	0.10	0.103	0.0954	0.0990	0.085 to 0.115	103	70 to 130	8.05	20	
AW13177 Thallium, Total	mg/L	0.00000228	0.00044	0.10	0.0993	0.0978	0.0976	0.085 to 0.115	99.3	70 to 130	1.52	20	
AW13175 Boron, Total	mg/L	0.00355	0.044	1.00	1.16	1.18	0.973	0.85 to 1.15	99.1	70 to 130	1.71	20	
AW13175 Lithium, Total	mg/L	0.000357	0.022	0.20	0.220	0.219	0.195	0.17 to 0.23	110	70 to 130	0.456	20	
AW13177 Beryllium, Total	mg/L	0.00000187	0.00132	0.10	0.0996	0.0992	0.114	0.085 to 0.115	99.6	70 to 130	0.349	20	
AW13177 Selenium, Total	mg/L	0.0000287	0.0044	0.10	0.0950	0.0950	0.0987	0.085 to 0.115	95.0	70 to 130	0.0827	20	

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 19-May-16
 Customer ID:
 Delivery Date: 23-May-16

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AW13173

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
			Limit	Limit			Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW12897	Fluoride, Total	mg/L	0.000	0.3	2.00	2.08	0.000	2.01	1.8 to 2.2	104	80 to 120	0	20
AW13315	Solids, Dissolved	mg/L	3.0	25			305	58	40 to 60			1.13	5
AW12897	Chloride, Total	mg/L	0.000	0.25	10.00	11.0	0.000	10.1	9 to 11	110	80 to 120	0	20
AW12897	Sulfate, Total	mg/L	0.457	1.0	20.00	20.5	0.464	19.9	18 to 22	100	80 to 120	2.97	20

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CC:

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



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 19-May-16
 Customer ID:
 Delivery Date: 23-May-16

Description: Gaston Ash Pond - MW-6 DISS

Laboratory ID Number: AW13174

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Dissolved	ABB	6/1/2016	EPA 200.8		5.025	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Dissolved	ABB	5/26/2016	EPA 200.8		5.025	0.001	0.005	U Not Detected	mg/L
* Barium, Dissolved	ABB	5/26/2016	EPA 200.8		5.025	0.002	0.01	0.0237	mg/L
* Beryllium, Dissolved	ABB	5/26/2016	EPA 200.8		5.025	0.0006	0.003	U Not Detected	mg/L
* Boron, Dissolved	HRG	5/24/2016	EPA 200.7		1.015	0.02	0.1	2.83	mg/L
* Calcium, Dissolved	HRG	5/24/2016	EPA 200.7		10.15	1.0	5.0	67.1	mg/L
* Cadmium, Dissolved	ABB	5/26/2016	EPA 200.8		5.025	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Dissolved	ABB	5/26/2016	EPA 200.8		5.025	0.002	0.01	U Not Detected	mg/L
* Chromium, Dissolved	ABB	5/26/2016	EPA 200.8		5.025	0.002	0.01	U Not Detected	mg/L
* Mercury, Dissolved by CVAA	MCW	6/1/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Dissolved	HRG	5/24/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Dissolved	ABB	5/26/2016	EPA 200.8		5.025	0.002	0.01	0.0179	mg/L
* Lead, Dissolved	ABB	5/26/2016	EPA 200.8		5.025	0.001	0.005	U Not Detected	mg/L
* Selenium, Dissolved	ABB	5/26/2016	EPA 200.8		5.025	0.002	0.01	U Not Detected	mg/L
* Thallium, Dissolved	ABB	5/26/2016	EPA 200.8		5.025	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Chloride, Dissolved	SES	6/1/2016	EPA 300.0		10	0.40	2.5	28.5	mg/L
Fluoride, Dissolved	SES	5/25/2016	EPA 300.0		1	0.01	0.3	J 0.088	mg/L
Sulfate, Dissolved	SES	6/1/2016	EPA 300.0		10	3.0	10	206	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: REVISED COPY: Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17
 Recovery for Calcium is out of range.
 The spike amount is less than 30% the sample amount,
 therefore will not be qualified. SGC 10/31/16

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Batch QC Summary



Revised Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 19-May-16
 Customer ID:
 Delivery Date: 23-May-16

Description: Gaston Ash Pond - MW-6 DISS

Laboratory ID Number: AW13174

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW13174 Chromium, Dissolved	mg/L	-0.0000263	0.0044	0.10	0.0922	0.0929			92.2	70 to 130	0.801	20	
AW13174 Cobalt, Dissolved	mg/L	-0.0000109	0.0044	0.10	0.0920	0.0913			92.0	70 to 130	0.763	20	
AW13174 Mercury, Dissolved by CVAA	mg/L	0.00006	0.0005	0.00400	0.00395	0.00398	0.00398	0.0034 to 0.0046	98.8	70 to 130	0.757	20	
AW13174 Barium, Dissolved	mg/L	-0.00000466	0.0044	0.10	0.110	0.113			86.3	70 to 130	3.17	20	
AW13174 Beryllium, Dissolved	mg/L	0.00000298	0.00132	0.10	0.0919	0.0913			91.9	70 to 130	0.670	20	
AW13174 Molybdenum, Dissolved	mg/L	0.0000133	0.0044	0.10	0.111	0.111			93.1	70 to 130	0.234	20	
AW13174 Cadmium, Dissolved	mg/L	0.000000785	0.00044	0.10	0.0895	0.0905			89.5	70 to 130	1.16	20	
AW13174 Lithium, Dissolved	mg/L	0.000251	0.022	0.20	0.217	0.220	0.201	0.17 to 0.23	108	70 to 130	1.37	20	
AW13174 Antimony, Dissolved	mg/L	0.0000301	0.00132	0.10	0.0885	0.0925			88.5	70 to 130	4.42	20	
AW13174 Arsenic, Dissolved	mg/L	0.00000755	0.0022	0.10	0.0950	0.0946			95.0	70 to 130	0.467	20	
AW13174 Calcium, Dissolved	mg/L	-0.0220	0.22	5.00	70.3	70.9	4.95	4.25 to 5.75	64.0	70 to 130	0.850	20	
AW13174 Thallium, Dissolved	mg/L	-0.0000322	0.00044	0.10	0.0999	0.0981			99.9	70 to 130	1.83	20	
AW13174 Boron, Dissolved	mg/L	-0.00180	0.044	1.00	3.78	3.79	0.967	0.85 to 1.15	95.0	70 to 130	0.264	20	
AW13174 Lead, Dissolved	mg/L	0.0000107	0.0022	0.10	0.0830	0.0820			83.0	70 to 130	1.13	20	
AW13174 Selenium, Dissolved	mg/L	0.0000252	0.0044	0.10	0.0950	0.0925			95.0	70 to 130	2.73	20	

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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 Recovery for Calcium is out of range.
 The spike amount is less than 30% the sample amount,
 therefore will not be qualified. SGC 10/31/16

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Batch QC Summary



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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 19-May-16
 Customer ID:
 Delivery Date: 23-May-16

Description: Gaston Ash Pond - MW-6 DISS

Laboratory ID Number: AW13174

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW13174	Chloride, Dissolved	mg/L	0.000	0.25	100	148	28.6	10.2	9 to 11	120	80 to 120	0.0666	20
AW13174	Sulfate, Dissolved	mg/L	0.454	1.0	200	412	207	20.2	18 to 22	103	80 to 120	0.484	20
AW13174	Fluoride, Dissolved	mg/L	0.000	0.3	2.00	2.11	0.087	2.02	1.8 to 2.2	101	80 to 120	1.14	20

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Expiration: June 30, 2018

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 The spike amount is less than 30% the sample amount,
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CC:

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 744 County Road 87, GSC#8
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Certificate Of Analysis  **Alabama Power**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 19-May-16
 Customer ID:
 Delivery Date: 23-May-16

Description: Gaston Ash Pond - MW-15

Laboratory ID Number: AW13175

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	5/26/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	5/26/2016	EPA 200.8		5.075	0.001	0.005	J 0.00150	mg/L
* Barium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	0.132	mg/L
* Beryllium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	0.169	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		10.15	1.0	5.0	91.5	mg/L
* Cadmium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	J 0.00207	mg/L
* Chromium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	0.0142	mg/L
* Lead, Total	ABB	5/26/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/25/2016	SM 2540C		1		50	496	mg/L
* Chloride, Total	SES	5/25/2016	EPA 300.0		1	0.04	0.25	20.9	mg/L
* Fluoride, Total	SES	5/25/2016	EPA 300.0		1	0.01	0.3	0.313	mg/L
* Sulfate, Total	SES	5/27/2016	EPA 300.0		10	3.0	10	224	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 19-May-16
 Customer ID:
 Delivery Date: 23-May-16

Description: Gaston Ash Pond - MW-15

Laboratory ID Number: AW13175

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW13177 Antimony, Total	mg/L	0.0000925	0.00132	0.10	0.100	0.0932	0.0930	0.085 to 0.115	99.2	70 to 130	7.34	20	
AW13177 Chromium, Total	mg/L	0.00000329	0.0044	0.10	0.0843	0.0838	0.0944	0.085 to 0.115	84.3	70 to 130	0.549	20	
AW13175 Calcium, Total	mg/L	-0.0276	0.22	5.00	95.4	97.5	4.78	4.25 to 5.75	78.0	70 to 130	2.18	20	
AW13177 Barium, Total	mg/L	-0.00000344	0.0044	0.10	0.116	0.109	0.0932	0.085 to 0.115	99.9	70 to 130	5.75	20	
AW13177 Mercury, Total by CVAA	mg/L	0.000069	0.0005	0.004	0.00393	0.00390	0.00384	0.0034 to 0.0046	98.2	70 to 130	0.792	20	
AW13177 Molybdenum, Total	mg/L	0.0000169	0.0044	0.10	0.131	0.122	0.0890	0.085 to 0.115	98.4	70 to 130	7.08	20	
AW13177 Arsenic, Total	mg/L	0.00000752	0.0022	0.10	0.0987	0.0988	0.0980	0.085 to 0.115	95.6	70 to 130	0.159	20	
AW13177 Cadmium, Total	mg/L	0.000000479	0.00044	0.10	0.103	0.0954	0.0990	0.085 to 0.115	103	70 to 130	8.05	20	
AW13177 Thallium, Total	mg/L	0.00000228	0.00044	0.10	0.0993	0.0978	0.0976	0.085 to 0.115	99.3	70 to 130	1.52	20	
AW13177 Beryllium, Total	mg/L	0.00000187	0.00132	0.10	0.0996	0.0992	0.114	0.085 to 0.115	99.6	70 to 130	0.349	20	
AW13177 Selenium, Total	mg/L	0.0000287	0.0044	0.10	0.0950	0.0950	0.0987	0.085 to 0.115	95.0	70 to 130	0.0827	20	
AW13175 Boron, Total	mg/L	0.00355	0.044	1.00	1.16	1.18	0.973	0.85 to 1.15	99.1	70 to 130	1.71	20	
AW13175 Lithium, Total	mg/L	0.000357	0.022	0.20	0.220	0.219	0.195	0.17 to 0.23	110	70 to 130	0.456	20	
AW13177 Cobalt, Total	mg/L	0.000000276	0.0044	0.10	0.0907	0.0850	0.0972	0.085 to 0.115	90.7	70 to 130	6.41	20	
AW13177 Lead, Total	mg/L	0.00000333	0.0022	0.10	0.0927	0.0915	0.0988	0.085 to 0.115	92.7	70 to 130	1.21	20	

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 19-May-16
 Customer ID:
 Delivery Date: 23-May-16

Description: Gaston Ash Pond - MW-15

Laboratory ID Number: AW13175

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit	
AW12897	Fluoride, Total	mg/L	0.000	0.3	2.00	2.08	0.000	2.01	1.8 to 2.2	104	80 to 120	0	20	
AW13315	Solids, Dissolved	mg/L	3.0	25			305	58	40 to 60				1.13	5
AW12897	Chloride, Total	mg/L	0.000	0.25	10.00	11.0	0.000	10.1	9 to 11	110	80 to 120	0	20	
AW12897	Sulfate, Total	mg/L	0.457	1.0	20.00	20.5	0.464	19.9	18 to 22	100	80 to 120	2.97	20	

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 19-May-16
 Customer ID:
 Delivery Date: 23-May-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW13176

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	5/26/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	5/26/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/26/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/25/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	6/8/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	6/8/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	6/8/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. The TDS result has been correctly changed to Not Detected. SGC 1/26/17 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 19-May-16
 Customer ID:
 Delivery Date: 23-May-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW13176

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW13177 Chromium, Total	mg/L	0.00000329	0.0044	0.10	0.0843	0.0838	0.0944	0.085 to 0.115	84.3	70 to 130	0.549	20	
AW13177 Barium, Total	mg/L	-0.00000344	0.0044	0.10	0.116	0.109	0.0932	0.085 to 0.115	99.9	70 to 130	5.75	20	
AW13177 Mercury, Total by CVAA	mg/L	0.000069	0.0005	0.004	0.00393	0.00390	0.00384	0.0034 to 0.0046	98.2	70 to 130	0.792	20	
AW13315 Boron, Total	mg/L	0.00329	0.044	1.00	1.17	1.21	0.992	0.85 to 1.15	97.3	70 to 130	3.36	20	
AW13177 Antimony, Total	mg/L	0.0000925	0.00132	0.10	0.100	0.0932	0.0930	0.085 to 0.115	99.2	70 to 130	7.34	20	
AW13177 Cobalt, Total	mg/L	0.00000276	0.0044	0.10	0.0907	0.0850	0.0972	0.085 to 0.115	90.7	70 to 130	6.41	20	
AW13177 Lead, Total	mg/L	0.00000333	0.0022	0.10	0.0927	0.0915	0.0988	0.085 to 0.115	92.7	70 to 130	1.21	20	
AW13177 Molybdenum, Total	mg/L	0.0000169	0.0044	0.10	0.131	0.122	0.0890	0.085 to 0.115	98.4	70 to 130	7.08	20	
AW13315 Lithium, Total	mg/L	0.000364	0.022	0.20	0.202	0.203	0.195	0.17 to 0.23	101	70 to 130	0.494	20	
AW13177 Arsenic, Total	mg/L	0.00000752	0.0022	0.10	0.0987	0.0988	0.0980	0.085 to 0.115	95.6	70 to 130	0.159	20	
AW13177 Cadmium, Total	mg/L	0.000000479	0.00044	0.10	0.103	0.0954	0.0990	0.085 to 0.115	103	70 to 130	8.05	20	
AW13177 Thallium, Total	mg/L	0.00000228	0.00044	0.10	0.0993	0.0978	0.0976	0.085 to 0.115	99.3	70 to 130	1.52	20	
AW13177 Beryllium, Total	mg/L	0.00000187	0.00132	0.10	0.0996	0.0992	0.114	0.085 to 0.115	99.6	70 to 130	0.349	20	
AW13177 Selenium, Total	mg/L	0.0000287	0.0044	0.10	0.0950	0.0950	0.0987	0.085 to 0.115	95.0	70 to 130	0.0827	20	
AW13315 Calcium, Total	mg/L	-0.0277	0.22	5.00	57.6	56.0	4.79	4.25 to 5.75	110	70 to 130	2.82	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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 The TDS result has been correctly changed to Not Detected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 19-May-16
 Customer ID:
 Delivery Date: 23-May-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW13176

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec Rec	Rec Limit	Prec	Prec Limit
AW13315	Solids, Dissolved	mg/L	3.0	25			305	58	40 to 60			1.13	5
AW13176	Sulfate, Total	mg/L	0.000	1.0	20.00	20.5	0.482	19.6	18 to 22	102	80 to 120	0	20
AW13176	Fluoride, Total	mg/L	0.00	0.3	2.00	2.08	0.00	1.99	1.8 to 2.2	104	80 to 120	0	20
AW13176	Chloride, Total	mg/L	0.00	0.25	10.00	10.2	0.00	10.1	9 to 11	102	80 to 120	0	20

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/10/2017
 Version: 2.0

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 19-May-16
 Customer ID:
 Delivery Date: 23-May-16

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AW13177

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	5/26/2016	EPA 200.8		5.075	0.0006	0.003	J 0.000818	mg/L
* Arsenic, Total	ABB	5/26/2016	EPA 200.8		5.075	0.001	0.005	J 0.00313	mg/L
* Barium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	0.0161	mg/L
* Beryllium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		10.15	1.0	5.0	49.7	mg/L
* Cadmium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	0.0326	mg/L
* Lead, Total	ABB	5/26/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/26/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/25/2016	SM 2540C		1		25	270	mg/L
* Chloride, Total	SES	6/8/2016	EPA 300.0		1	0.04	0.25	2.11	mg/L
* Fluoride, Total	SES	6/8/2016	EPA 300.0		1	0.01	0.3	J 0.093	mg/L
* Sulfate, Total	SES	6/8/2016	EPA 300.0		1	0.3	1	18.0	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 19-May-16
 Customer ID:
 Delivery Date: 23-May-16

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AW13177

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW13177 Chromium, Total	mg/L	0.00000329	0.0044	0.10	0.0843	0.0838	0.0944	0.085 to 0.115	84.3	70 to 130	0.549	20	
AW13177 Antimony, Total	mg/L	0.0000925	0.00132	0.10	0.100	0.0932	0.0930	0.085 to 0.115	99.2	70 to 130	7.34	20	
AW13177 Beryllium, Total	mg/L	0.00000187	0.00132	0.10	0.0996	0.0992	0.114	0.085 to 0.115	99.6	70 to 130	0.349	20	
AW13177 Selenium, Total	mg/L	0.0000287	0.0044	0.10	0.0950	0.0950	0.0987	0.085 to 0.115	95.0	70 to 130	0.0827	20	
AW13315 Calcium, Total	mg/L	-0.0277	0.22	5.00	57.6	56.0	4.79	4.25 to 5.75	110	70 to 130	2.82	20	
AW13177 Barium, Total	mg/L	-0.00000344	0.0044	0.10	0.116	0.109	0.0932	0.085 to 0.115	99.9	70 to 130	5.75	20	
AW13177 Mercury, Total by CVAA	mg/L	0.000069	0.0005	0.004	0.00393	0.00390	0.00384	0.0034 to 0.0046	98.2	70 to 130	0.792	20	
AW13315 Boron, Total	mg/L	0.00329	0.044	1.00	1.17	1.21	0.992	0.85 to 1.15	97.3	70 to 130	3.36	20	
AW13177 Molybdenum, Total	mg/L	0.0000169	0.0044	0.10	0.131	0.122	0.0890	0.085 to 0.115	98.4	70 to 130	7.08	20	
AW13315 Lithium, Total	mg/L	0.000364	0.022	0.20	0.202	0.203	0.195	0.17 to 0.23	101	70 to 130	0.494	20	
AW13177 Cobalt, Total	mg/L	0.000000276	0.0044	0.10	0.0907	0.0850	0.0972	0.085 to 0.115	90.7	70 to 130	6.41	20	
AW13177 Lead, Total	mg/L	0.00000333	0.0022	0.10	0.0927	0.0915	0.0988	0.085 to 0.115	92.7	70 to 130	1.21	20	
AW13177 Arsenic, Total	mg/L	0.00000752	0.0022	0.10	0.0987	0.0988	0.0980	0.085 to 0.115	95.6	70 to 130	0.159	20	
AW13177 Cadmium, Total	mg/L	0.000000479	0.00044	0.10	0.103	0.0954	0.0990	0.085 to 0.115	103	70 to 130	8.05	20	
AW13177 Thallium, Total	mg/L	0.00000228	0.00044	0.10	0.0993	0.0978	0.0976	0.085 to 0.115	99.3	70 to 130	1.52	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 19-May-16
 Customer ID:
 Delivery Date: 23-May-16

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AW13177

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW13176	Sulfate, Total	mg/L	0.000	1.0	20.00	20.5	0.482	19.6	18 to 22	102	80 to 120	0	20
AW13315	Solids, Dissolved	mg/L	3.0	25			305	58	40 to 60			1.13	5
AW13176	Fluoride, Total	mg/L	0.00	0.3	2.00	2.08	0.00	1.99	1.8 to 2.2	104	80 to 120	0	20
AW13176	Chloride, Total	mg/L	0.00	0.25	10.00	10.2	0.00	10.1	9 to 11	102	80 to 120	0	20

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Expiration: June 30, 2018

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CC:

Reported: 7/10/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 23-May-16
 Customer ID:
 Delivery Date: 24-May-16

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AW13313

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	6/1/2016	EPA 200.8		5.075	0.001	0.005	J 0.00213	mg/L
* Barium, Total	ABB	6/1/2016	EPA 200.8		5.075	0.002	0.01	0.0733	mg/L
* Beryllium, Total	ABB	6/1/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.1	0.5	31.3	mg/L
* Cadmium, Total	ABB	6/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	6/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	6/1/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	6/1/2016	EPA 200.8		5.075	0.002	0.01	J 0.00306	mg/L
* Lead, Total	ABB	6/1/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/25/2016	SM 2540C		1		25	184	mg/L
* Chloride, Total	SES	6/8/2016	EPA 300.0		1	0.04	0.25	5.20	mg/L
* Fluoride, Total	SES	6/8/2016	EPA 300.0		1	0.01	0.3	J 0.10	mg/L
* Sulfate, Total	SES	6/8/2016	EPA 300.0		1	0.3	1	1.78	mg/L

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 23-May-16
 Customer ID:
 Delivery Date: 24-May-16

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AW13313

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW13315 Boron, Total	mg/L	0.00329	0.044	1.00	1.17	1.21	0.992	0.85 to 1.15	97.3	70 to 130	3.36	20	
AW13315 Lithium, Total	mg/L	0.000364	0.022	0.20	0.202	0.203	0.195	0.17 to 0.23	101	70 to 130	0.494	20	
AW13315 Cadmium, Total	mg/L	0.00000515	0.00044	0.10	0.0969	0.0948	0.0955	0.085 to 0.115	96.9	70 to 130	2.19	20	
AW13315 Barium, Total	mg/L	-0.00000204	0.0044	0.10	0.115	0.113	0.0884	0.085 to 0.115	88.9	70 to 130	1.79	20	
AW13315 Mercury, Total by CVAA	mg/L	0.00005	0.0005	0.00400	0.00396	0.00403	0.00391	0.0034 to 0.0046	99.0	70 to 130	1.75	20	
AW13315 Arsenic, Total	mg/L	0.0000106	0.0022	0.10	0.0972	0.0987	0.0941	0.085 to 0.115	94.9	70 to 130	1.46	20	
AW13315 Chromium, Total	mg/L	0.0000325	0.0044	0.10	0.0939	0.0959	0.0932	0.085 to 0.115	93.9	70 to 130	2.09	20	
AW13315 Cobalt, Total	mg/L	-0.0000385	0.0044	0.10	0.0902	0.0881	0.0880	0.085 to 0.115	90.2	70 to 130	2.35	20	
AW13315 Molybdenum, Total	mg/L	0.000100	0.0044	0.10	0.0921	0.0918	0.0881	0.085 to 0.115	89.3	70 to 130	0.319	20	
AW13315 Antimony, Total	mg/L	0.000107	0.00132	0.10	0.0889	0.0884	0.0866	0.085 to 0.115	88.9	70 to 130	0.572	20	
AW13315 Beryllium, Total	mg/L	0.00	0.00132	0.10	0.120	0.112	0.106	0.085 to 0.115	120	70 to 130	7.08	20	
AW13315 Thallium, Total	mg/L	-0.0000119	0.00044	0.10	0.0919	0.0914	0.0964	0.085 to 0.115	91.9	70 to 130	0.621	20	
AW13315 Calcium, Total	mg/L	-0.0277	0.22	5.00	57.6	56.0	4.79	4.25 to 5.75	110	70 to 130	2.82	20	
AW13315 Lead, Total	mg/L	0.0000155	0.0022	0.10	0.0909	0.0901	0.0925	0.085 to 0.115	90.9	70 to 130	0.882	20	
AW13315 Selenium, Total	mg/L	0.0000524	0.0044	0.10	0.105	0.106	0.102	0.085 to 0.115	105	70 to 130	1.30	20	

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 23-May-16
 Customer ID:
 Delivery Date: 24-May-16

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AW13313

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW13176	Chloride, Total	mg/L	0.00	0.25	10.00	10.2	0.00	10.1	9 to 11	102	80 to 120	0	20
AW13176	Sulfate, Total	mg/L	0.000	1.0	20.00	20.5	0.482	19.6	18 to 22	102	80 to 120	0	20
AW13176	Fluoride, Total	mg/L	0.00	0.3	2.00	2.08	0.00	1.99	1.8 to 2.2	104	80 to 120	0	20
AW13315	Solids, Dissolved	mg/L	3.0	25			305	58	40 to 60			1.13	5

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CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 23-May-16
 Customer ID:
 Delivery Date: 24-May-16

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AW13314

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	6/1/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	6/1/2016	EPA 200.8		5.075	0.002	0.01	0.0289	mg/L
* Beryllium, Total	ABB	6/1/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	2.11	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		10.15	1.0	5.0	63.1	mg/L
* Cadmium, Total	ABB	6/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	6/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	6/1/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	J 0.0374	mg/L
* Molybdenum, Total	ABB	6/1/2016	EPA 200.8		5.075	0.002	0.01	0.257	mg/L
* Lead, Total	ABB	6/1/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/25/2016	SM 2540C		1		25	411	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		10	0.40	2.50	29.4	mg/L
* Fluoride, Total	SES	6/8/2016	EPA 300.0		1	0.01	0.3	J 0.076	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		10	3.0	10	160	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 23-May-16
 Customer ID:
 Delivery Date: 24-May-16

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AW13314

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW13315 Boron, Total	mg/L	0.00329	0.044	1.00	1.17	1.21	0.992	0.85 to 1.15	97.3	70 to 130	3.36	20	
AW13315 Lithium, Total	mg/L	0.000364	0.022	0.20	0.202	0.203	0.195	0.17 to 0.23	101	70 to 130	0.494	20	
AW13315 Cadmium, Total	mg/L	0.00000515	0.00044	0.10	0.0969	0.0948	0.0955	0.085 to 0.115	96.9	70 to 130	2.19	20	
AW13315 Barium, Total	mg/L	-0.00000204	0.0044	0.10	0.115	0.113	0.0884	0.085 to 0.115	88.9	70 to 130	1.79	20	
AW13315 Mercury, Total by CVAA	mg/L	0.00005	0.0005	0.00400	0.00396	0.00403	0.00391	0.0034 to 0.0046	99.0	70 to 130	1.75	20	
AW13315 Antimony, Total	mg/L	0.000107	0.00132	0.10	0.0889	0.0884	0.0866	0.085 to 0.115	88.9	70 to 130	0.572	20	
AW13315 Beryllium, Total	mg/L	0.00	0.00132	0.10	0.120	0.112	0.106	0.085 to 0.115	120	70 to 130	7.08	20	
AW13315 Thallium, Total	mg/L	-0.0000119	0.00044	0.10	0.0919	0.0914	0.0964	0.085 to 0.115	91.9	70 to 130	0.621	20	
AW13315 Arsenic, Total	mg/L	0.0000106	0.0022	0.10	0.0972	0.0987	0.0941	0.085 to 0.115	94.9	70 to 130	1.46	20	
AW13315 Chromium, Total	mg/L	0.0000325	0.0044	0.10	0.0939	0.0959	0.0932	0.085 to 0.115	93.9	70 to 130	2.09	20	
AW13315 Cobalt, Total	mg/L	-0.0000385	0.0044	0.10	0.0902	0.0881	0.0880	0.085 to 0.115	90.2	70 to 130	2.35	20	
AW13315 Molybdenum, Total	mg/L	0.000100	0.0044	0.10	0.0921	0.0918	0.0881	0.085 to 0.115	89.3	70 to 130	0.319	20	
AW13315 Calcium, Total	mg/L	-0.0277	0.22	5.00	57.6	56.0	4.79	4.25 to 5.75	110	70 to 130	2.82	20	
AW13315 Lead, Total	mg/L	0.0000155	0.0022	0.10	0.0909	0.0901	0.0925	0.085 to 0.115	90.9	70 to 130	0.882	20	
AW13315 Selenium, Total	mg/L	0.0000524	0.0044	0.10	0.105	0.106	0.102	0.085 to 0.115	105	70 to 130	1.30	20	

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 23-May-16
 Customer ID:
 Delivery Date: 24-May-16

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AW13314

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW13176	Chloride, Total	mg/L	0.00	0.25	10.00	10.2	0.00	10.1	9 to 11	102	80 to 120	0	20
AW13176	Sulfate, Total	mg/L	0.000	1.0	20.00	20.5	0.482	19.6	18 to 22	102	80 to 120	0	20
AW13176	Fluoride, Total	mg/L	0.00	0.3	2.00	2.08	0.00	1.99	1.8 to 2.2	104	80 to 120	0	20
AW13315	Solids, Dissolved	mg/L	3.0	25			305	58	40 to 60			1.13	5

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/10/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 23-May-16
 Customer ID:
 Delivery Date: 24-May-16

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AW13315

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/28/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	6/1/2016	EPA 200.8		5.075	0.001	0.005	J 0.00227	mg/L
* Barium, Total	ABB	6/1/2016	EPA 200.8		5.075	0.002	0.01	0.0261	mg/L
* Beryllium, Total	ABB	6/1/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/25/2016	EPA 200.7		1.015	0.02	0.1	0.197	mg/L
* Calcium, Total	HRG	5/25/2016	EPA 200.7		10.15	1.0	5.0	52.1	mg/L
* Cadmium, Total	ABB	6/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	6/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	6/1/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/25/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	6/1/2016	EPA 200.8		5.075	0.002	0.01	J 0.00283	mg/L
* Lead, Total	ABB	6/1/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/1/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/1/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	5/25/2016	SM 2540C		1		25	312	mg/L
* Chloride, Total	SES	6/8/2016	EPA 300.0		1	0.04	0.25	5.03	mg/L
* Fluoride, Total	SES	6/8/2016	EPA 300.0		1	0.01	0.3	J 0.131	mg/L
* Sulfate, Total	SES	6/8/2016	EPA 300.0		1	0.3	1	26.5	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 23-May-16
 Customer ID:
 Delivery Date: 24-May-16

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AW13315

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW13315 Lithium, Total	mg/L	0.000364	0.022	0.20	0.202	0.203	0.195	0.17 to 0.23	101	70 to 130	0.494	20	
AW13315 Boron, Total	mg/L	0.00329	0.044	1.00	1.17	1.21	0.992	0.85 to 1.15	97.3	70 to 130	3.36	20	
AW13315 Cadmium, Total	mg/L	0.00000515	0.00044	0.10	0.0969	0.0948	0.0955	0.085 to 0.115	96.9	70 to 130	2.19	20	
AW13315 Antimony, Total	mg/L	0.000107	0.00132	0.10	0.0889	0.0884	0.0866	0.085 to 0.115	88.9	70 to 130	0.572	20	
AW13315 Beryllium, Total	mg/L	0.00	0.00132	0.10	0.120	0.112	0.106	0.085 to 0.115	120	70 to 130	7.08	20	
AW13315 Thallium, Total	mg/L	-0.0000119	0.00044	0.10	0.0919	0.0914	0.0964	0.085 to 0.115	91.9	70 to 130	0.621	20	
AW13315 Arsenic, Total	mg/L	0.0000106	0.0022	0.10	0.0972	0.0987	0.0941	0.085 to 0.115	94.9	70 to 130	1.46	20	
AW13315 Chromium, Total	mg/L	0.0000325	0.0044	0.10	0.0939	0.0959	0.0932	0.085 to 0.115	93.9	70 to 130	2.09	20	
AW13315 Cobalt, Total	mg/L	-0.0000385	0.0044	0.10	0.0902	0.0881	0.0880	0.085 to 0.115	90.2	70 to 130	2.35	20	
AW13315 Molybdenum, Total	mg/L	0.000100	0.0044	0.10	0.0921	0.0918	0.0881	0.085 to 0.115	89.3	70 to 130	0.319	20	
AW13315 Barium, Total	mg/L	-0.00000204	0.0044	0.10	0.115	0.113	0.0884	0.085 to 0.115	88.9	70 to 130	1.79	20	
AW13315 Mercury, Total by CVAA	mg/L	0.00005	0.0005	0.00400	0.00396	0.00403	0.00391	0.0034 to 0.0046	99.0	70 to 130	1.75	20	
AW13315 Calcium, Total	mg/L	-0.0277	0.22	5.00	57.6	56.0	4.79	4.25 to 5.75	110	70 to 130	2.82	20	
AW13315 Lead, Total	mg/L	0.0000155	0.0022	0.10	0.0909	0.0901	0.0925	0.085 to 0.115	90.9	70 to 130	0.882	20	
AW13315 Selenium, Total	mg/L	0.0000524	0.0044	0.10	0.105	0.106	0.102	0.085 to 0.115	105	70 to 130	1.30	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: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 23-May-16
 Customer ID:
 Delivery Date: 24-May-16

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AW13315

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW13176	Chloride, Total	mg/L	0.00	0.25	10.00	10.2	0.00	10.1	9 to 11	102	80 to 120	0	20
AW13176	Fluoride, Total	mg/L	0.00	0.3	2.00	2.08	0.00	1.99	1.8 to 2.2	104	80 to 120	0	20
AW13315	Solids, Dissolved	mg/L	3.0	25			305	58	40 to 60			1.13	5
AW13176	Sulfate, Total	mg/L	0.000	1.0	20.00	20.5	0.482	19.6	18 to 22	102	80 to 120	0	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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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/10/2017
 Version: 2.0

Definitions



Abbreviation	Description
DF	Dilution Factor
LFB	Lab Fortified Blank
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 05/19/2016 08:00

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Nick Pitts	Location	Gaston Ash Pond

Analysis Requested	Bottle 3: Metals and Hg (1) 500 mL bottle, Bottle 4: TDS and Anions (1) 500 mL bottle, Bottles 1&2: Radiological (2) 2 L bottles
Comments	Added 3.0mL HNO3 to Bottle 3 (AW12892) and 5.0mL HNO3 to Bottles 1&2 (AW12892) SGC 5/19/16

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-14	05/17/2016	15:15	4	Groundwater			1.0	AW12891
MW-14 Filte	05/17/2016	15:15	4	Groundwater	✓		1.0	AW12892
FB-2	05/17/2016	16:10	4	Field Blank			1.0	AW12893
MW-11	05/18/2016	10:30	4	Groundwater			1.0	AW12894
MW-12	05/18/2016	12:30	4	Groundwater			1.0	AW12895
MW-13	05/18/2016	14:30	4	Groundwater			1.0	AW12896
EB-1	05/18/2016	15:35	4	Equipment Blank			1.0	AW12897

Relinquished By	Received By	Date/Time
		05/19/2016 08:06

SmarTroll ID	4696-23443-3-2	All metals and radiological bottles have pH < 2	<input checked="" type="checkbox"/>
Turbidity ID	3901-20010-2-2	Thermometer ID	1506-3968-4-4
		pH Strip ID	4831-24374-20-1



Chain of Custody

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Field Complete
 Lab Complete

Lab ETA 05/18/2016 14:30

Requested Complete Date	Routine
Site Representative	Byron Corina
Collector	Clarence Specht

Results To	Dustin Brooks
Requested By	Greg Dyer
Location	Gaston Ash Pond

Analysis Requested	Bottle 3: Metals and Hg (1) 500 mL bottle, Bottle 4: TDS and Anions (1) 500 mL bottle, Bottles 1&2: Radiological (2) 2 L bottles
Comments	RD-1 associated with MW-17 RD-2 associated with MW-16

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-18	05/17/2016	11:45	4	Groundwater			1.0	AW12867
MW-18-Dup	05/17/2016	11:45	4	Groundwater			1.0	AW12868
MW-17	05/17/2016	13:27	6	Groundwater			1.0	AW12869
MW-16	05/17/2016	15:38	6	Groundwater			1.0	AW12870
MW-20	05/18/2016	11:33	4	Groundwater			1.0	AW12871

Relinquished By	Received By	Date/Time
<i>C. Specht</i>	<i>Greg Dyer</i>	05/18/2016 14:47

SmarTroll ID	5141-26150-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	3901-20009-2-1	
Thermometer ID	1506-3968-4-4	
pH Strip ID	4831-24374-20-1	



Chain of Custody
Groundwater
 APC General Testing Laboratory
 General Service Complex Building 8

Field Complete
 Lab Complete

Lab ETA 05/19/2016 08:00

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Jason Rouss	Location	Gaston Ash Pond

Analysis Requested	Bottle 3: Metals and Hg (1) 500 mL bottle, Bottle 4: TDS and Anions (1) 500 mL bottle, Bottles 1&2: Radiological (2) 2 L bottles
Comments	

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-3	05/17/2016	11:55	4	Groundwater			1.0	AW12885
MW-4	05/17/2016	13:40	6	Groundwater			1.0	AW12886
MW-10	05/17/2016	15:30	4	Groundwater			1.0	AW12887
MW-2	05/18/2016	10:25	4	Groundwater			1.0	AW12888
MW-2 Dup	05/18/2016	10:25	4	Groundwater			1.0	AW12889
MW-19	05/18/2016	13:38	4	Groundwater			1.0	AW12890

Relinquished By	Received By	Date/Time
		05/19/2016 07:51
		05/19/2016 08:04

SmarTroll ID	4696-23444-3-3	All metals and radiological bottles have pH < 2	<input checked="" type="checkbox"/>
Turbidity ID	LaMotte 112-3410	Thermometer ID	1506-3968-4-4
		pH Strip ID	4831-24374-20-1



Chain of Custody

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Field Complete

Lab Complete

Lab ETA

Requested Complete Date	<input type="text" value="Routine"/>	Results To	<input type="text" value="Dustin Brooks"/>
Site Representative	<input type="text" value="Byron Corina"/>	Requested By	<input type="text" value="Greg Dyer"/>
Collector	<input type="text" value="Jason Rouss"/>	Location	<input type="text" value="Gaston Ash Pond"/>

Analysis Requested	<input type="text" value="Bottle 3: Metals and Hg (1) 500 mL bottle, Bottle 4: TDS and Anions (1) 500 mL bottle, Bottles 1&2: Radiological (2) 2 L bottles"/>
Comments	<input type="text" value="Relinquished to locked prep lab 223, Building 8 at 1950 5/19/2016"/> <input type="text" value="Received from locked prep lab 223, Building 8 at 0953 5/23/2016"/>

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-15	05/19/2016	09:50	6	Groundwater			2.0	AW13175
FB-1	05/19/2016	10:30	4	Groundwater			2.0	AW13176
MW-1	05/19/2016	16:55	4	Groundwater			2.0	AW13177

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: 2016.05.23 09:53:13 -0500'</small>	05/23/2016 09:53

SmarTroll ID	<input type="text" value="4696-23444-3-3"/>	All metals and radiological bottles have pH < 2	<input checked="" type="checkbox"/>
Turbidity ID	<input type="text" value="LaMotte 112-3410"/>	Thermometer ID	<input type="text" value="1506-3968-4-4"/>
		pH Strip ID	<input type="text" value="4831-24375-20-2"/>



Chain of Custody
Groundwater
 APC General Testing Laboratory
 General Service Complex Building 8

Field Complete
 Lab Complete

Lab ETA 05/19/2016 18:49

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Clarence Specht	Location	Gaston Ash Pond

Analysis Requested	Bottle 3: Metals and Hg (1) 500 mL bottle, Bottle 4: TDS and Anions (1) 500 mL bottle, Bottles 1&2: Radiological (2) 2 L bottles
Comments	Relinquished to locked storage sample prep lab room building 8 5/19/2016 1900 Received from locked prep lab room 223, building 8 5/23/16 0955 Added 5.0mL HNO3 to bottles 1&2 5/24/16; added 3.0mL HNO3 to bottle 3 5/24/16 SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-7	05/19/2016	11:37	4	Groundwater			0.5	AW13172
MW-6	05/19/2016	16:35	4	Groundwater			0.5	AW13173
MW-6 dis	05/19/2016	16:35	4	Groundwater	✓		0.5	AW13174

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: 2016.05.23 09:55:49 -05'00'</small>	05/23/2016 09:55

SmarTroll ID 5141-26150-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID 3901-20009-2-1	Thermometer ID 1506-3968-4-4
	pH Strip ID 4831-24375-20-2



Chain of Custody
Groundwater
 APC General Testing Laboratory
 General Service Complex Building 8

Field Complete
 Lab Complete

Lab ETA 05/23/2016 16:45

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Jason Rouss	Location	Gaston Ash Pond
Analysis Requested	Bottle 3: Metals and Hg (1) 500 mL bottle, Bottle 4: TDS and Anions (1) 500 mL bottle, Bottles 1&2: Radiological (2) 2 L bottles		
Comments	Relinquished to locked prep lab 223, Building 8 at 1642 5/23/2016 Received from locked prep lab room 223, Building 8 0835 5/24/2016		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-9	05/23/2016	12:55	4	Groundwater			0.3	AW13313

Relinquished By 	Received By Sarah Copeland <small>Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southemco.com, c=US Date: 2016.05.24 10:34:49 -05'00'</small>	Date/Time 05/24/2016 08:35

SmarTroll ID	4694-23444-3-3	All metals and radiological bottles have pH < 2	<input checked="" type="checkbox"/>
Turbidity ID	LaMotte 112-3410	Thermometer ID	1506-3968-4-4
		pH Strip ID	4831-24375-20-2



Chain of Custody
Groundwater
 APC General Testing Laboratory
 General Service Complex Building 8

Field Complete

Lab Complete

Lab ETA 05/23/2016 16:30

Requested Complete Date	Routine
Site Representative	Byron Corina
Collector	Clarence Specht

Results To	Dustin Brooks
Requested By	Greg Dyer
Location	Gaston Ash Pond

Analysis Requested	Bottle 3: Metals and Hg (1) 500 mL bottle, Bottle 4: TDS and Anions (1) 500 mL bottle, Bottles 1&2: Radiological (2) 2 L bottles
Comments	Relinquished to secured prep lab 223 5/23/16 1642 Received from locked prep lab Room 223, Building 8 0835 5/24/2016 Added 3.0mL HNO ₃ to AW13315 Bottle 2 0900 5/24/2016 SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-5	05/23/2016	10:40	4	Groundwater			0.3	AW13314
MW-8	05/23/2016	13:45	4	Groundwater			0.3	AW13315

Relinquished By	Received By	Date/Time
	<p style="font-size: 1.2em; margin: 0;">Sarah Copeland</p> <small>Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southemco.com, c=US Date: 2016.05.24 10:37:17 -0500</small>	<p style="margin: 0;">05/24/2016 08:35</p>

SmarTroll ID	5141-26150-1-1	All metals and radiological bottles have pH < 2 <input type="checkbox"/> Thermometer ID	1506-3968-4-4
Turbidity ID	3901-20009-2-1		4831-24375-20-2
			pH Strip ID

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: 400-123617-1

TestAmerica Sample Delivery Group: Gaston Ash Pond (2)

Client Project/Site: CCR Plant Gaston

Revision: 1

For:

Alabama Power General Test Laboratory

744 County Rd 87

GSC #8

Calera, Alabama 35040

Attn: Sarah Copeland



Authorized for release by:

11/7/2016 8:43:16 AM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

LINKS

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results through

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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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Method Summary

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

TestAmerica Job ID: 400-123617-1
SDG: Gaston Ash Pond (2)

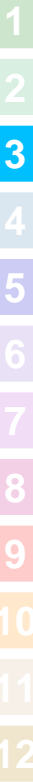
Method	Method Description	Protocol	Laboratory
9315	Radium-226 (GFPC)	SW846	TAL SL
9320	Radium-228 (GFPC)	SW846	TAL SL
Ra226_Ra228	Combined Radium-226 and Radium-228	TAL-STL	TAL SL

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: 400-123617-1
SDG: Gaston Ash Pond (2)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-123617-1	AW12867 MW-18	Water	05/17/16 11:45	06/28/16 15:42
400-123617-2	AW12868 MW-18 DUP	Water	05/17/16 11:45	06/28/16 15:42
400-123617-3	AW12869 MW-17	Water	05/17/16 13:27	06/28/16 15:42
400-123617-4	AW12870 MW-16	Water	05/17/16 15:38	06/28/16 15:42
400-123617-5	AW12871 MW-20	Water	05/18/16 11:33	06/28/16 15:42
400-123617-6	AW12885 MW-3	Water	05/17/16 11:55	06/28/16 15:42
400-123617-7	AW12886 MW-4	Water	05/17/16 13:40	06/28/16 15:42
400-123617-8	AW12887 MW-10	Water	05/17/16 15:30	06/28/16 15:42
400-123617-9	AW12888 MW-2	Water	05/18/16 10:25	06/28/16 15:42
400-123617-10	AW12889 MW-2 DUP	Water	05/18/16 10:25	06/28/16 15:42
400-123617-11	AW12890 MW-19	Water	05/18/16 13:38	06/28/16 15:42
400-123617-12	AW12891 MW-14	Water	05/17/16 15:15	06/28/16 15:42
400-123617-13	AW12892 MW-14 DISSOLVED	Water	05/17/16 15:15	06/28/16 15:42
400-123617-14	AW12893 FB-2	Water	05/17/16 16:10	06/28/16 15:42
400-123617-15	AW12894 MW-11	Water	05/18/16 10:30	06/28/16 15:42
400-123617-16	AW12895 MW-12	Water	05/18/16 12:30	06/28/16 15:42
400-123617-17	AW12896 MW-13	Water	05/18/16 14:30	06/28/16 15:42
400-123617-18	AW12897 EB-1	Water	05/18/16 15:35	06/28/16 15:42
400-123617-19	AW13172 MW-7	Water	05/19/16 11:37	06/28/16 15:42
400-123617-20	AW13173 MW-6	Water	05/19/16 16:35	06/28/16 15:42
400-123617-21	AW13174 MW-6 DISSOLVED	Water	05/19/16 16:35	06/28/16 15:42
400-123617-22	AW13175 MW-15	Water	05/19/16 09:50	06/28/16 15:42
400-123617-23	AW13176 FB-1	Water	05/19/16 10:30	06/28/16 15:42
400-123617-24	AW13177 MW-1	Water	05/19/16 16:55	06/28/16 15:42
400-123617-25	AW13313 MW-9	Water	05/23/16 12:55	06/28/16 15:42
400-123617-26	AW13314 MW-5	Water	05/23/16 10:40	06/28/16 15:42
400-123617-27	AW13315 MW-8	Water	05/23/16 13:45	06/28/16 15:42

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW12867 MW-18

Lab Sample ID: 400-123617-1

Date Collected: 05/17/16 11:45

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.794		0.162	0.177	1.00	0.134	pCi/L	07/06/16 13:59	07/28/16 08:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.7		40 - 110					07/06/16 13:59	07/28/16 08:03	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.407	U	0.272	0.275	1.00	0.422	pCi/L	07/06/16 13:59	07/25/16 13:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.7		40 - 110					07/06/16 13:59	07/25/16 13:21	1
Y Carrier	84.9		40 - 110					07/06/16 13:59	07/25/16 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	1.20		0.317	0.327	5.00	0.422	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW12868 MW-18 DUP

Lab Sample ID: 400-123617-2

Date Collected: 05/17/16 11:45

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.548		0.137	0.146	1.00	0.111	pCi/L	07/06/16 13:59	07/28/16 08:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.2		40 - 110					07/06/16 13:59	07/28/16 08:03	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0900	U	0.277	0.277	1.00	0.481	pCi/L	07/06/16 13:59	07/25/16 13:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.2		40 - 110					07/06/16 13:59	07/25/16 13:21	1
Y Carrier	82.6		40 - 110					07/06/16 13:59	07/25/16 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	0.638		0.309	0.313	5.00	0.481	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW12869 MW-17

Lab Sample ID: 400-123617-3

Date Collected: 05/17/16 13:27

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.286		0.102	0.106	1.00	0.106	pCi/L	07/06/16 13:59	07/28/16 08:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.9		40 - 110					07/06/16 13:59	07/28/16 08:04	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.506	U	0.327	0.330	1.00	0.508	pCi/L	07/06/16 13:59	07/25/16 13:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.9		40 - 110					07/06/16 13:59	07/25/16 13:21	1
Y Carrier	84.1		40 - 110					07/06/16 13:59	07/25/16 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	0.792		0.342	0.347	5.00	0.508	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW12870 MW-16

Lab Sample ID: 400-123617-4

Date Collected: 05/17/16 15:38

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	2.26		0.263	0.333	1.00	0.151	pCi/L	07/06/16 13:59	07/28/16 08:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.3		40 - 110					07/06/16 13:59	07/28/16 08:04	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.825		0.299	0.308	1.00	0.404	pCi/L	07/06/16 13:59	07/25/16 13:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.3		40 - 110					07/06/16 13:59	07/25/16 13:21	1
Y Carrier	85.6		40 - 110					07/06/16 13:59	07/25/16 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	3.09		0.398	0.453	5.00	0.404	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW12871 MW-20

Lab Sample ID: 400-123617-5

Date Collected: 05/18/16 11:33

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	18.4		0.871	1.87	1.00	0.234	pCi/L	07/06/16 13:59	07/28/16 08:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	54.4		40 - 110					07/06/16 13:59	07/28/16 08:04	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.44		0.549	0.565	1.00	0.778	pCi/L	07/06/16 13:59	07/25/16 13:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	54.4		40 - 110					07/06/16 13:59	07/25/16 13:21	1
Y Carrier	86.0		40 - 110					07/06/16 13:59	07/25/16 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	19.9		1.03	1.96	5.00	0.778	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW12885 MW-3

Lab Sample ID: 400-123617-6

Date Collected: 05/17/16 11:55

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0414	U	0.0665	0.0666	1.00	0.115	pCi/L	07/06/16 13:59	07/28/16 08:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.8		40 - 110					07/06/16 13:59	07/28/16 08:04	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.181	U	0.295	0.296	1.00	0.498	pCi/L	07/06/16 13:59	07/25/16 13:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.8		40 - 110					07/06/16 13:59	07/25/16 13:21	1
Y Carrier	83.7		40 - 110					07/06/16 13:59	07/25/16 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	0.222	U	0.303	0.303	5.00	0.498	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW12886 MW-4

Lab Sample ID: 400-123617-7

Date Collected: 05/17/16 13:40

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.153		0.103	0.104	1.00	0.153	pCi/L	07/06/16 13:59	07/28/16 08:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					07/06/16 13:59	07/28/16 08:04	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.141	U	0.240	0.240	1.00	0.406	pCi/L	07/06/16 13:59	07/25/16 13:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					07/06/16 13:59	07/25/16 13:21	1
Y Carrier	86.0		40 - 110					07/06/16 13:59	07/25/16 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	0.294	U	0.261	0.262	5.00	0.406	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW12887 MW-10

Lab Sample ID: 400-123617-8

Date Collected: 05/17/16 15:30

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0728	U	0.0966	0.0969	1.00	0.162	pCi/L	07/06/16 13:59	07/28/16 08:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		40 - 110					07/06/16 13:59	07/28/16 08:04	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.291	U	0.279	0.280	1.00	0.452	pCi/L	07/06/16 13:59	07/25/16 13:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		40 - 110					07/06/16 13:59	07/25/16 13:21	1
Y Carrier	85.2		40 - 110					07/06/16 13:59	07/25/16 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	0.364	U	0.295	0.297	5.00	0.452	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW12888 MW-2

Lab Sample ID: 400-123617-9

Date Collected: 05/18/16 10:25

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0520	U	0.0835	0.0836	1.00	0.143	pCi/L	07/06/16 13:59	07/28/16 08:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					07/06/16 13:59	07/28/16 08:04	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0903	U	0.230	0.230	1.00	0.397	pCi/L	07/06/16 13:59	07/25/16 13:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					07/06/16 13:59	07/25/16 13:21	1
Y Carrier	85.2		40 - 110					07/06/16 13:59	07/25/16 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	0.142	U	0.244	0.245	5.00	0.397	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW12889 MW-2 DUP

Lab Sample ID: 400-123617-10

Date Collected: 05/18/16 10:25

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.125		0.0823	0.0831	1.00	0.119	pCi/L	07/06/16 13:59	07/28/16 07:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.6		40 - 110					07/06/16 13:59	07/28/16 07:50	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.493		0.271	0.274	1.00	0.407	pCi/L	07/06/16 13:59	07/25/16 13:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.6		40 - 110					07/06/16 13:59	07/25/16 13:20	1
Y Carrier	86.7		40 - 110					07/06/16 13:59	07/25/16 13:20	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.618		0.283	0.287	5.00	0.407	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW12890 MW-19

Lab Sample ID: 400-123617-11

Date Collected: 05/18/16 13:38

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.306		0.112	0.116	1.00	0.135	pCi/L	07/06/16 13:59	07/28/16 07:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					07/06/16 13:59	07/28/16 07:50	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.119	U	0.236	0.236	1.00	0.403	pCi/L	07/06/16 13:59	07/25/16 13:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					07/06/16 13:59	07/25/16 13:35	1
Y Carrier	85.2		40 - 110					07/06/16 13:59	07/25/16 13:35	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.425		0.262	0.263	5.00	0.403	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW12891 MW-14

Lab Sample ID: 400-123617-12

Date Collected: 05/17/16 15:15

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.285		0.112	0.115	1.00	0.137	pCi/L	07/06/16 13:59	07/28/16 07:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					07/06/16 13:59	07/28/16 07:50	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.166	U	0.188	0.189	1.00	0.376	pCi/L	07/06/16 13:59	07/25/16 13:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					07/06/16 13:59	07/25/16 13:35	1
Y Carrier	86.4		40 - 110					07/06/16 13:59	07/25/16 13:35	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.119	U	0.219	0.221	5.00	0.376	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW12892 MW-14 DISSOLVED

Lab Sample ID: 400-123617-13

Date Collected: 05/17/16 15:15

Matrix: Water

Date Received: 06/28/16 15:42

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.276		0.103	0.106	1.00	0.115	pCi/L	07/06/16 13:59	07/28/16 07:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		40 - 110					07/06/16 13:59	07/28/16 07:51	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.254	U	0.236	0.237	1.00	0.380	pCi/L	07/06/16 13:59	07/25/16 13:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		40 - 110					07/06/16 13:59	07/25/16 13:35	1
Y Carrier	86.0		40 - 110					07/06/16 13:59	07/25/16 13:35	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.530		0.257	0.260	5.00	0.380	pCi/L		07/29/16 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW12893 FB-2

Lab Sample ID: 400-123617-14

Date Collected: 05/17/16 16:10

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0586	U	0.0705	0.0707	1.00	0.116	pCi/L	07/06/16 13:59	07/28/16 07:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					07/06/16 13:59	07/28/16 07:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0427	U	0.248	0.248	1.00	0.449	pCi/L	07/06/16 13:59	07/25/16 13:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					07/06/16 13:59	07/25/16 13:35	1
Y Carrier	85.6		40 - 110					07/06/16 13:59	07/25/16 13:35	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0159	U	0.258	0.258	5.00	0.449	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW12894 MW-11

Lab Sample ID: 400-123617-15

Date Collected: 05/18/16 10:30

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0782	U	0.0809	0.0812	1.00	0.130	pCi/L	07/06/16 13:59	07/28/16 07:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					07/06/16 13:59	07/28/16 07:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.146	U	0.218	0.219	1.00	0.368	pCi/L	07/06/16 13:59	07/25/16 13:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					07/06/16 13:59	07/25/16 13:35	1
Y Carrier	84.1		40 - 110					07/06/16 13:59	07/25/16 13:35	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.224	U	0.233	0.233	5.00	0.368	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW12895 MW-12

Lab Sample ID: 400-123617-16

Date Collected: 05/18/16 12:30

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.363		0.108	0.113	1.00	0.106	pCi/L	07/06/16 13:59	07/28/16 07:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					07/06/16 13:59	07/28/16 07:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.315	U	0.228	0.230	1.00	0.354	pCi/L	07/06/16 13:59	07/25/16 13:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					07/06/16 13:59	07/25/16 13:35	1
Y Carrier	86.7		40 - 110					07/06/16 13:59	07/25/16 13:35	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.678		0.252	0.256	5.00	0.354	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW12896 MW-13

Lab Sample ID: 400-123617-17

Date Collected: 05/18/16 14:30

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.409		0.110	0.116	1.00	0.0911	pCi/L	07/06/16 13:59	07/28/16 07:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					07/06/16 13:59	07/28/16 07:52	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.130	U	0.228	0.228	1.00	0.387	pCi/L	07/06/16 13:59	07/25/16 13:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					07/06/16 13:59	07/25/16 13:34	1
Y Carrier	84.5		40 - 110					07/06/16 13:59	07/25/16 13:34	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	0.539		0.253	0.256	5.00	0.387	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW12897 EB-1

Lab Sample ID: 400-123617-18

Date Collected: 05/18/16 15:35

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0250	U	0.0500	0.0501	1.00	0.0900	pCi/L	07/06/16 13:59	07/28/16 07:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					07/06/16 13:59	07/28/16 07:52	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.197	U	0.232	0.232	1.00	0.382	pCi/L	07/06/16 13:59	07/25/16 13:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					07/06/16 13:59	07/25/16 13:34	1
Y Carrier	84.5		40 - 110					07/06/16 13:59	07/25/16 13:34	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	0.222	U	0.237	0.238	5.00	0.382	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW13172 MW-7

Lab Sample ID: 400-123617-19

Date Collected: 05/19/16 11:37

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0979	U	0.0957	0.0961	1.00	0.153	pCi/L	07/06/16 13:59	07/28/16 07:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.6		40 - 110					07/06/16 13:59	07/28/16 07:53	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0176	U	0.208	0.208	1.00	0.372	pCi/L	07/06/16 13:59	07/25/16 13:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.6		40 - 110					07/06/16 13:59	07/25/16 13:34	1
Y Carrier	84.9		40 - 110					07/06/16 13:59	07/25/16 13:34	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	0.116	U	0.229	0.229	5.00	0.372	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW13173 MW-6

Lab Sample ID: 400-123617-20

Date Collected: 05/19/16 16:35

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.257		0.0995	0.102	1.00	0.116	pCi/L	07/06/16 13:59	07/28/16 07:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					07/06/16 13:59	07/28/16 07:53	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.288	U	0.239	0.241	1.00	0.379	pCi/L	07/06/16 13:59	07/25/16 13:34	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					07/06/16 13:59	07/25/16 13:34	1
Y Carrier	83.4		40 - 110					07/06/16 13:59	07/25/16 13:34	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	0.544		0.259	0.261	5.00	0.379	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW13174 MW-6 DISSOLVED

Lab Sample ID: 400-123617-21

Date Collected: 05/19/16 16:35

Matrix: Water

Date Received: 06/28/16 15:42

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.242		0.0782	0.0812	1.00	0.0726	pCi/L	07/05/16 20:25	07/27/16 07:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					07/05/16 20:25	07/27/16 07:56	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.290	U	0.240	0.241	1.00	0.381	pCi/L	07/05/16 20:47	07/22/16 14:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					07/05/16 20:47	07/22/16 14:08	1
Y Carrier	87.1		40 - 110					07/05/16 20:47	07/22/16 14:08	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.532		0.252	0.254	5.00	0.381	pCi/L		07/29/16 11:51	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW13175 MW-15

Lab Sample ID: 400-123617-22

Date Collected: 05/19/16 09:50

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.550		0.126	0.135	1.00	0.126	pCi/L	07/05/16 20:25	07/27/16 07:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					07/05/16 20:25	07/27/16 07:56	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.406	U	0.267	0.270	1.00	0.412	pCi/L	07/05/16 20:47	07/22/16 14:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					07/05/16 20:47	07/22/16 14:08	1
Y Carrier	85.6		40 - 110					07/05/16 20:47	07/22/16 14:08	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	0.956		0.295	0.302	5.00	0.412	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW13176 FB-1

Lab Sample ID: 400-123617-23

Date Collected: 05/19/16 10:30

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0383	U	0.0535	0.0536	1.00	0.0903	pCi/L	07/05/16 20:25	07/27/16 07:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.4		40 - 110					07/05/16 20:25	07/27/16 07:56	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0695	U	0.242	0.242	1.00	0.421	pCi/L	07/05/16 20:47	07/22/16 14:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.4		40 - 110					07/05/16 20:47	07/22/16 14:09	1
Y Carrier	83.7		40 - 110					07/05/16 20:47	07/22/16 14:09	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	0.108	U	0.248	0.248	5.00	0.421	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW13177 MW-1

Lab Sample ID: 400-123617-24

Date Collected: 05/19/16 16:55

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.625		0.120	0.133	1.00	0.0843	pCi/L	07/05/16 20:25	07/27/16 07:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					07/05/16 20:25	07/27/16 07:55	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.324	U	0.227	0.229	1.00	0.349	pCi/L	07/05/16 20:47	07/22/16 14:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					07/05/16 20:47	07/22/16 14:09	1
Y Carrier	83.4		40 - 110					07/05/16 20:47	07/22/16 14:09	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	0.949		0.257	0.264	5.00	0.349	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW13313 MW-9

Lab Sample ID: 400-123617-25

Date Collected: 05/23/16 12:55

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0793	U	0.0681	0.0684	1.00	0.106	pCi/L	07/05/16 20:25	07/27/16 07:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					07/05/16 20:25	07/27/16 07:55	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0375	U	0.202	0.202	1.00	0.372	pCi/L	07/05/16 20:47	07/22/16 14:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					07/05/16 20:47	07/22/16 14:09	1
Y Carrier	86.7		40 - 110					07/05/16 20:47	07/22/16 14:09	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	0.0417	U	0.213	0.213	5.00	0.372	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW13314 MW-5

Lab Sample ID: 400-123617-26

Date Collected: 05/23/16 10:40

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.219		0.0788	0.0812	1.00	0.0832	pCi/L	07/05/16 20:25	07/27/16 07:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.9		40 - 110					07/05/16 20:25	07/27/16 07:55	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.231	U	0.220	0.221	1.00	0.355	pCi/L	07/05/16 20:47	07/22/16 14:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.9		40 - 110					07/05/16 20:47	07/22/16 14:09	1
Y Carrier	86.0		40 - 110					07/05/16 20:47	07/22/16 14:09	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	0.450		0.234	0.236	5.00	0.355	pCi/L		07/28/16 20:03	1

Client Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW13315 MW-8

Lab Sample ID: 400-123617-27

Date Collected: 05/23/16 13:45

Matrix: Water

Date Received: 06/28/16 15:42

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0411	U	0.0521	0.0522	1.00	0.0865	pCi/L	07/05/16 20:25	07/27/16 07:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.0		40 - 110					07/05/16 20:25	07/27/16 07:55	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.358	U	0.295	0.297	1.00	0.586	pCi/L	07/05/16 20:47	07/22/16 16:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.0		40 - 110					07/05/16 20:47	07/22/16 16:40	1
Y Carrier	82.6		40 - 110					07/05/16 20:47	07/22/16 16:40	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	-0.317	U	0.300	0.302	5.00	0.586	pCi/L		07/28/16 20:03	1

Definitions/Glossary

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

TestAmerica Job ID: 400-123617-1
SDG: Gaston Ash Pond (2)

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW12867 MW-18

Lab Sample ID: 400-123617-1

Date Collected: 05/17/16 11:45

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259392	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9315		1	262456	07/28/16 08:03	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259395	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9320		1	261844	07/25/16 13:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Client Sample ID: AW12868 MW-18 DUP

Lab Sample ID: 400-123617-2

Date Collected: 05/17/16 11:45

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259392	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9315		1	262456	07/28/16 08:03	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259395	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9320		1	261844	07/25/16 13:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Client Sample ID: AW12869 MW-17

Lab Sample ID: 400-123617-3

Date Collected: 05/17/16 13:27

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259392	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9315		1	262456	07/28/16 08:04	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259395	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9320		1	261844	07/25/16 13:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Client Sample ID: AW12870 MW-16

Lab Sample ID: 400-123617-4

Date Collected: 05/17/16 15:38

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259392	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9315		1	262456	07/28/16 08:04	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259395	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9320		1	261844	07/25/16 13:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW12871 MW-20

Lab Sample ID: 400-123617-5

Date Collected: 05/18/16 11:33

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259392	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9315		1	262456	07/28/16 08:04	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259395	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9320		1	261844	07/25/16 13:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Client Sample ID: AW12885 MW-3

Lab Sample ID: 400-123617-6

Date Collected: 05/17/16 11:55

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259392	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9315		1	262456	07/28/16 08:04	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259395	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9320		1	261844	07/25/16 13:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Client Sample ID: AW12886 MW-4

Lab Sample ID: 400-123617-7

Date Collected: 05/17/16 13:40

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259392	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9315		1	262456	07/28/16 08:04	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259395	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9320		1	261844	07/25/16 13:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Client Sample ID: AW12887 MW-10

Lab Sample ID: 400-123617-8

Date Collected: 05/17/16 15:30

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259392	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9315		1	262456	07/28/16 08:04	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259395	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9320		1	261844	07/25/16 13:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW12888 MW-2

Lab Sample ID: 400-123617-9

Date Collected: 05/18/16 10:25

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259392	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9315		1	262456	07/28/16 08:04	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259395	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9320		1	261844	07/25/16 13:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Client Sample ID: AW12889 MW-2 DUP

Lab Sample ID: 400-123617-10

Date Collected: 05/18/16 10:25

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259392	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9315		1	262466	07/28/16 07:50	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259395	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9320		1	261844	07/25/16 13:20	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Client Sample ID: AW12890 MW-19

Lab Sample ID: 400-123617-11

Date Collected: 05/18/16 13:38

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259392	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9315		1	262466	07/28/16 07:50	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259395	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9320		1	261836	07/25/16 13:35	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Client Sample ID: AW12891 MW-14

Lab Sample ID: 400-123617-12

Date Collected: 05/17/16 15:15

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259392	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9315		1	262466	07/28/16 07:50	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259395	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9320		1	261836	07/25/16 13:35	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Client Sample ID: AW12892 MW-14 DISSOLVED

Lab Sample ID: 400-123617-13

Date Collected: 05/17/16 15:15

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	PrecSep-21			259392	07/06/16 13:59	SCB	TAL SL
Dissolved	Analysis	9315		1	262466	07/28/16 07:51	RTM	TAL SL
Dissolved	Prep	PrecSep_0			259395	07/06/16 13:59	SCB	TAL SL
Dissolved	Analysis	9320		1	261836	07/25/16 13:35	RTM	TAL SL
Dissolved	Analysis	Ra226_Ra228		1	262650	07/29/16 11:51	RTM	TAL SL

Client Sample ID: AW12893 FB-2

Lab Sample ID: 400-123617-14

Date Collected: 05/17/16 16:10

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259392	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9315		1	262466	07/28/16 07:51	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259395	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9320		1	261836	07/25/16 13:35	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Client Sample ID: AW12894 MW-11

Lab Sample ID: 400-123617-15

Date Collected: 05/18/16 10:30

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259392	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9315		1	262466	07/28/16 07:51	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259395	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9320		1	261836	07/25/16 13:35	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Client Sample ID: AW12895 MW-12

Lab Sample ID: 400-123617-16

Date Collected: 05/18/16 12:30

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259392	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9315		1	262466	07/28/16 07:51	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259395	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9320		1	261836	07/25/16 13:35	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-123617-1
SDG: Gaston Ash Pond (2)

Client Sample ID: AW12896 MW-13

Lab Sample ID: 400-123617-17

Date Collected: 05/18/16 14:30

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259392	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9315		1	262466	07/28/16 07:52	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259395	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9320		1	261836	07/25/16 13:34	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Client Sample ID: AW12897 EB-1

Lab Sample ID: 400-123617-18

Date Collected: 05/18/16 15:35

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259392	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9315		1	262466	07/28/16 07:52	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259395	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9320		1	261836	07/25/16 13:34	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Client Sample ID: AW13172 MW-7

Lab Sample ID: 400-123617-19

Date Collected: 05/19/16 11:37

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259392	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9315		1	262466	07/28/16 07:53	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259395	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9320		1	261836	07/25/16 13:34	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Client Sample ID: AW13173 MW-6

Lab Sample ID: 400-123617-20

Date Collected: 05/19/16 16:35

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259392	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9315		1	262466	07/28/16 07:53	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259395	07/06/16 13:59	SCB	TAL SL
Total/NA	Analysis	9320		1	261836	07/25/16 13:34	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-123617-1
SDG: Gaston Ash Pond (2)

Client Sample ID: AW13174 MW-6 DISSOLVED

Lab Sample ID: 400-123617-21

Date Collected: 05/19/16 16:35

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Dissolved	Prep	PrecSep-21			259247	07/05/16 20:25	MCJ	TAL SL
Dissolved	Analysis	9315		1	262336	07/27/16 07:56	RTM	TAL SL
Dissolved	Prep	PrecSep_0			259249	07/05/16 20:47	MCJ	TAL SL
Dissolved	Analysis	9320		1	261711	07/22/16 14:08	JLW	TAL SL
Dissolved	Analysis	Ra226_Ra228		1	262650	07/29/16 11:51	RTM	TAL SL

Client Sample ID: AW13175 MW-15

Lab Sample ID: 400-123617-22

Date Collected: 05/19/16 09:50

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259247	07/05/16 20:25	MCJ	TAL SL
Total/NA	Analysis	9315		1	262336	07/27/16 07:56	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259249	07/05/16 20:47	MCJ	TAL SL
Total/NA	Analysis	9320		1	261711	07/22/16 14:08	JLW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Client Sample ID: AW13176 FB-1

Lab Sample ID: 400-123617-23

Date Collected: 05/19/16 10:30

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259247	07/05/16 20:25	MCJ	TAL SL
Total/NA	Analysis	9315		1	262336	07/27/16 07:56	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259249	07/05/16 20:47	MCJ	TAL SL
Total/NA	Analysis	9320		1	261711	07/22/16 14:09	JLW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Client Sample ID: AW13177 MW-1

Lab Sample ID: 400-123617-24

Date Collected: 05/19/16 16:55

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259247	07/05/16 20:25	MCJ	TAL SL
Total/NA	Analysis	9315		1	262336	07/27/16 07:55	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259249	07/05/16 20:47	MCJ	TAL SL
Total/NA	Analysis	9320		1	261711	07/22/16 14:09	JLW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-123617-1
SDG: Gaston Ash Pond (2)

Client Sample ID: AW13313 MW-9

Lab Sample ID: 400-123617-25

Date Collected: 05/23/16 12:55

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259247	07/05/16 20:25	MCJ	TAL SL
Total/NA	Analysis	9315		1	262336	07/27/16 07:55	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259249	07/05/16 20:47	MCJ	TAL SL
Total/NA	Analysis	9320		1	261711	07/22/16 14:09	JLW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Client Sample ID: AW13314 MW-5

Lab Sample ID: 400-123617-26

Date Collected: 05/23/16 10:40

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259247	07/05/16 20:25	MCJ	TAL SL
Total/NA	Analysis	9315		1	262336	07/27/16 07:55	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259249	07/05/16 20:47	MCJ	TAL SL
Total/NA	Analysis	9320		1	261711	07/22/16 14:09	JLW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	RTM	TAL SL

Client Sample ID: AW13315 MW-8

Lab Sample ID: 400-123617-27

Date Collected: 05/23/16 13:45

Matrix: Water

Date Received: 06/28/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259247	07/05/16 20:25	MCJ	TAL SL
Total/NA	Analysis	9315		1	262336	07/27/16 07:55	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259249	07/05/16 20:47	MCJ	TAL SL
Total/NA	Analysis	9320		1	261710	07/22/16 16:40	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262592	07/28/16 20:03	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: 400-123617-1
 SDG: Gaston Ash Pond (2)

Rad

Prep Batch: 259247

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123617-21	AW13174 MW-6 DISSOLVED	Dissolved	Water	PrecSep-21	
400-123617-22	AW13175 MW-15	Total/NA	Water	PrecSep-21	
400-123617-23	AW13176 FB-1	Total/NA	Water	PrecSep-21	
400-123617-24	AW13177 MW-1	Total/NA	Water	PrecSep-21	
400-123617-25	AW13313 MW-9	Total/NA	Water	PrecSep-21	
400-123617-26	AW13314 MW-5	Total/NA	Water	PrecSep-21	
400-123617-27	AW13315 MW-8	Total/NA	Water	PrecSep-21	
MB 160-259247/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-259247/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-123616-A-2-A DU	Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 259249

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123617-21	AW13174 MW-6 DISSOLVED	Dissolved	Water	PrecSep_0	
400-123617-22	AW13175 MW-15	Total/NA	Water	PrecSep_0	
400-123617-23	AW13176 FB-1	Total/NA	Water	PrecSep_0	
400-123617-24	AW13177 MW-1	Total/NA	Water	PrecSep_0	
400-123617-25	AW13313 MW-9	Total/NA	Water	PrecSep_0	
400-123617-26	AW13314 MW-5	Total/NA	Water	PrecSep_0	
400-123617-27	AW13315 MW-8	Total/NA	Water	PrecSep_0	
MB 160-259249/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-259249/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-123616-A-2-B DU	Duplicate	Total/NA	Water	PrecSep_0	

Prep Batch: 259392

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123617-1	AW12867 MW-18	Total/NA	Water	PrecSep-21	
400-123617-2	AW12868 MW-18 DUP	Total/NA	Water	PrecSep-21	
400-123617-3	AW12869 MW-17	Total/NA	Water	PrecSep-21	
400-123617-4	AW12870 MW-16	Total/NA	Water	PrecSep-21	
400-123617-5	AW12871 MW-20	Total/NA	Water	PrecSep-21	
400-123617-6	AW12885 MW-3	Total/NA	Water	PrecSep-21	
400-123617-7	AW12886 MW-4	Total/NA	Water	PrecSep-21	
400-123617-8	AW12887 MW-10	Total/NA	Water	PrecSep-21	
400-123617-9	AW12888 MW-2	Total/NA	Water	PrecSep-21	
400-123617-10	AW12889 MW-2 DUP	Total/NA	Water	PrecSep-21	
400-123617-11	AW12890 MW-19	Total/NA	Water	PrecSep-21	
400-123617-12	AW12891 MW-14	Total/NA	Water	PrecSep-21	
400-123617-13	AW12892 MW-14 DISSOLVED	Dissolved	Water	PrecSep-21	
400-123617-14	AW12893 FB-2	Total/NA	Water	PrecSep-21	
400-123617-15	AW12894 MW-11	Total/NA	Water	PrecSep-21	
400-123617-16	AW12895 MW-12	Total/NA	Water	PrecSep-21	
400-123617-17	AW12896 MW-13	Total/NA	Water	PrecSep-21	
400-123617-18	AW12897 EB-1	Total/NA	Water	PrecSep-21	
400-123617-19	AW13172 MW-7	Total/NA	Water	PrecSep-21	
400-123617-20	AW13173 MW-6	Total/NA	Water	PrecSep-21	
MB 160-259392/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-259392/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-123617-3 DU	AW12869 MW-17	Total/NA	Water	PrecSep-21	

QC Association Summary

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Rad (Continued)

Prep Batch: 259395

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123617-1	AW12867 MW-18	Total/NA	Water	PrecSep_0	
400-123617-2	AW12868 MW-18 DUP	Total/NA	Water	PrecSep_0	
400-123617-3	AW12869 MW-17	Total/NA	Water	PrecSep_0	
400-123617-4	AW12870 MW-16	Total/NA	Water	PrecSep_0	
400-123617-5	AW12871 MW-20	Total/NA	Water	PrecSep_0	
400-123617-6	AW12885 MW-3	Total/NA	Water	PrecSep_0	
400-123617-7	AW12886 MW-4	Total/NA	Water	PrecSep_0	
400-123617-8	AW12887 MW-10	Total/NA	Water	PrecSep_0	
400-123617-9	AW12888 MW-2	Total/NA	Water	PrecSep_0	
400-123617-10	AW12889 MW-2 DUP	Total/NA	Water	PrecSep_0	
400-123617-11	AW12890 MW-19	Total/NA	Water	PrecSep_0	
400-123617-12	AW12891 MW-14	Total/NA	Water	PrecSep_0	
400-123617-13	AW12892 MW-14 DISSOLVED	Dissolved	Water	PrecSep_0	
400-123617-14	AW12893 FB-2	Total/NA	Water	PrecSep_0	
400-123617-15	AW12894 MW-11	Total/NA	Water	PrecSep_0	
400-123617-16	AW12895 MW-12	Total/NA	Water	PrecSep_0	
400-123617-17	AW12896 MW-13	Total/NA	Water	PrecSep_0	
400-123617-18	AW12897 EB-1	Total/NA	Water	PrecSep_0	
400-123617-19	AW13172 MW-7	Total/NA	Water	PrecSep_0	
400-123617-20	AW13173 MW-6	Total/NA	Water	PrecSep_0	
MB 160-259395/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-259395/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-123617-3 DU	AW12869 MW-17	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-259247/1-A
Matrix: Water
Analysis Batch: 262335

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 259247

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.01406	U	0.0628	0.0628	1.00	0.115	pCi/L	07/05/16 20:24	07/27/16 07:58	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		Prepared	Analyzed					
Ba Carrier	96.6		40 - 110			07/05/16 20:24	07/27/16 07:58	1		

Lab Sample ID: LCS 160-259247/2-A
Matrix: Water
Analysis Batch: 262335

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 259247

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.2	14.08		1.38	1.00	0.125	pCi/L	126	68 - 137
Carrier	LCS LCS		Limits			Prepared	Analyzed	Dil Fac	
Ba Carrier	%Yield	Qualifier		Prepared	Analyzed				
Ba Carrier	93.4		40 - 110			07/05/16 20:24	07/27/16 07:58	1	

Lab Sample ID: 400-123616-A-2-A DU
Matrix: Water
Analysis Batch: 262335

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 259247

Analyte	Sample Sample		DU	DU	Total	RL	MDC	Unit	RER	RER Limit
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					
Radium-226	0.236		0.1492		0.0842	1.00	0.118	pCi/L	0.50	1
Carrier	DU DU		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		Prepared	Analyzed					
Ba Carrier	95.4		40 - 110			07/05/16 20:24	07/27/16 07:58	1		

Lab Sample ID: MB 160-259392/1-A
Matrix: Water
Analysis Batch: 262456

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 259392

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.01297	U	0.0614	0.0614	1.00	0.116	pCi/L	07/06/16 13:59	07/28/16 08:02	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		Prepared	Analyzed					
Ba Carrier	89.7		40 - 110			07/06/16 13:59	07/28/16 08:02	1		

Lab Sample ID: LCS 160-259392/2-A
Matrix: Water
Analysis Batch: 262456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 259392

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.2	14.25		1.42	1.00	0.114	pCi/L	128	68 - 137

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

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

Lab Sample ID: LCS 160-259392/2-A
Matrix: Water
Analysis Batch: 262456

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 259392

	LCS	LCS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	92.3		40 - 110

Lab Sample ID: 400-123617-3 DU
Matrix: Water
Analysis Batch: 262456

Client Sample ID: AW12869 MW-17
Prep Type: Total/NA
Prep Batch: 259392

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.286		0.3840		0.118	1.00	0.101	pCi/L	0.44	1

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	89.2		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-259249/1-A
Matrix: Water
Analysis Batch: 261711

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 259249

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.02547	U	0.188	0.188	1.00	0.346	pCi/L	07/05/16 20:47	07/22/16 14:06	1

	MB	MB		Prepared	Analyzed	Dil Fac
Carrier	%Yield	Qualifier	Limits			
Ba Carrier	96.6		40 - 110	07/05/16 20:47	07/22/16 14:06	1
Y Carrier	87.9		40 - 110	07/05/16 20:47	07/22/16 14:06	1

Lab Sample ID: LCS 160-259249/2-A
Matrix: Water
Analysis Batch: 261711

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 259249

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	14.8	20.21		2.10	1.00	0.354	pCi/L	136	56 - 140

	LCS	LCS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	93.4		40 - 110
Y Carrier	86.4		40 - 110

Lab Sample ID: 400-123616-A-2-B DU
Matrix: Water
Analysis Batch: 261711

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 259249

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.191	U	0.09004	U	0.199	1.00	0.343	pCi/L	0.25	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

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

Lab Sample ID: 400-123616-A-2-B DU
Matrix: Water
Analysis Batch: 261711

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 259249

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	95.4		40 - 110
Y Carrier	89.0		40 - 110

Lab Sample ID: MB 160-259395/1-A
Matrix: Water
Analysis Batch: 261844

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 259395

Analyte	MB MB		Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	0.05890	U	0.270	0.270	1.00	0.470	pCi/L	07/06/16 13:59	07/25/16 13:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		40 - 110					07/06/16 13:59	07/25/16 13:22	1
Y Carrier	83.0		40 - 110					07/06/16 13:59	07/25/16 13:22	1

Lab Sample ID: LCS 160-259395/2-A
Matrix: Water
Analysis Batch: 261844

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 259395

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	
									%Rec	Limits
Radium-228	14.8	15.97		1.72	1.00	0.473	pCi/L	108	56 - 140	
Carrier	%Yield	Qualifier	Limits							
Ba Carrier	92.3		40 - 110							
Y Carrier	83.0		40 - 110							

Lab Sample ID: 400-123617-3 DU
Matrix: Water
Analysis Batch: 261844

Client Sample ID: AW12869 MW-17
Prep Type: Total/NA
Prep Batch: 259395

Analyte	Sample Sample		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
	Result	Qual								
Radium-228	0.506	U	0.7129		0.328	1.00	0.468	pCi/L	0.31	1
Carrier	%Yield	Qualifier	Limits							
Ba Carrier	89.2		40 - 110							
Y Carrier	83.7		40 - 110							

Chain of Custody Record

Client Information		Sampler: Clarence Specht / Jason Rouss		Lab PVI: Whitmire, Cheyenne R		COC No: 400-56525-24537.1	
Client Contact: Sarah Copeland		Phone: 205-664-6121		E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 1 of 3	
Company: Alabama Power General Test Laboratory		Address: 744 County Rd 87 GSC #8		City: Calera		Job #: 400-123617	
State, Zip: AL, 35040		PO #: 205-664-6121 (Tel)		WO #: sgcopela@southernco.com		Preservation Codes: A - HCL B - NaOH M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - DI Water Y - Ascorbic Acid Z - other (specify) Other:	
Project Name: CCR		Project #: 40007143		SSOW#: Gaston Ash Pond (2)		Special Instructions/Note:	
Sample Identification		Date Requested:		Analysis Requested		Total Number of Containers	
Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=soil/water, BT=Tea, A=Air)	
AW12867	5/17/16	1145	G	Water	X	MW-18	
AW12868	5/17/16	1145	G	Water	X	MW-18 Dup (Sample Duplicate)	
AW12869	5/17/16	1327	G	Water	Y	MW-17	
AW12870	5/17/16	1538	G	Water	Y	MW-16	
AW12871	5/18/16	1133	G	Water	X	MW-20	
AW12885	5/17/16	1155	G	Water	X	MW-3	
AW12886	5/17/16	1340	G	Water	Y	MW-4	
AW12887	5/17/16	1530	G	Water	X	MW-10	
AW12888	5/18/16	1025	G	Water	X	MW-20	
AW12889	5/18/16	1025	G	Water	X	MW-2 Dup (Sample Duplicate)	
Possible Hazard Identification		Date: 6/27/16 12:40		Time: 6/28/16 15:42		Company: APC	
<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: Sarah Copeland		Relinquished by: Sarah Copeland	
Relinquished by: <i>Sarah Copeland</i>		Date/Time: 6/28/16 15:42		Date/Time: 6/28/16 15:42		Company: APC	
Relinquished by: <i>Sarah Copeland</i>		Date/Time: 6/28/16 15:42		Date/Time: 6/28/16 15:42		Company: APC	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Special Instructions/QC Requirements:	



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, Zip: AL, 35040
 Phone: 205-664-6121 (Tel)
 Email: sgcopela@southernco.com
 Project #: 40007143
 CCR
 Site: Gaston Ash Pond (2)

Sampler: Nick Pitts / Jason Rouss
Lab PM: Whitmire, Cheyenne R.
Phone: 205-664-6121
E-Mail: cheyenne.whitmire@testamericainc.com

Carrier Tracking No(s):
COC No: 400-56525-24537.1
Page: Page 2 of 3
Job #:

Due Date Requested:
TAT Requested (days): Routine
PO #:
WO #:
Project #:
SSOW#:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Performs MS/SD (Yes or No)	9315, Ra226, 9320, Ra228, Ra228Ra228, GPC	Analysis Requested	Preservation Codes	Total Number of Containers	Special Instructions/Note:
AW12890	5/18/16	1338	G	Water			X		MW-19	2	
AW12891	5/17/16	1515	G	Water			X		MW-14	2	
AW12892	5/17/16	1515	G	Water	Y		X		MW-14 Dissolved	2	
AW12893	5/17/16	1610	G	Water			X		FB-2 (Field Blank)	2	
AW12894	5/18/16	1030	G	Water			X		MW-11	2	
AW12895	5/18/16	1230	G	Water			X		MW-12	2	
AW12896	5/18/16	1430	G	Water			X		MW-13	2	
AW12897	5/18/16	1535	G	Water			X		EB-1 (Equipment Blank)	2	

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
 L - EDTA
 Other:

Analysis Requested

Special Instructions/Note:

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

Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by: Sarah Copeland
Date: 6/27/16; 1240
Company: APC

Relinquished by: Sarah Copeland
Date/Time: 6/28/16 1542
Company: APC

Relinquished by: [Signature]
Date/Time: 6/28/16 1542
Company: APC

Custody Seal No.: Yes No

Cooler Temperature(s) °C and Other Remarks:



Chain of Custody Record

Client Information		Sampler: Clarence Specht / Jason Rouss Phone: 205-664-6121 Lab P.M.I.: Whitire, Cheyenne R E-Mail: cheyenne.whitire@testamericainc.com		Carrier Tracking No(s): COC No: 400-56525-24537.1 Page: Page 3 of 3 Job #:	
Company: Alabama Power General Test Laboratory Address: 744 County Rd 87 GSC #8 City: Calera State, Zip: AL, 35040 Phone: 205-664-6121(Tel) Email: sgcopela@southernco.com Project #: 40007143 CCR Site: Gaston Ash Pond (2)		Due Date Requested: TAT Requested (days): Routine PO #: WO #: Project #: 40007143 SOW#:		Analysis Requested Total Number of Containers:	
Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:		Matrix (W=water, S=solid, O=wastohi, BT=TISSUE, AC=AP) Sample Type (C=Comp, G=grab) Sample Time Sample Date Sample Date Requested:		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)	
Sample Identification AW13172 AW13173 AW13174 AW13175 AW13176 AW13177 AW13313 AW13314 AW13315		Matrix (W=water, S=solid, O=wastohi, BT=TISSUE, AC=AP) Sample Type (C=Comp, G=grab) Sample Time Sample Date Sample Date Requested:		Special Instructions/Note: MW-7 MW-6 MW-6 Dissolved MW-15 FB-1 (Field Blank) MW-1 MW-9 MW-5 MW-8	
Possible Hazard Identification <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		Special Instructions/Note: MW-7 MW-6 MW-6 Dissolved MW-15 FB-1 (Field Blank) MW-1 MW-9 MW-5 MW-8		Special Instructions/Note: MW-7 MW-6 MW-6 Dissolved MW-15 FB-1 (Field Blank) MW-1 MW-9 MW-5 MW-8	
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:		Date:		Method of Shipment:	
Relinquished by: Sarah Copeland		Date/Time: 6/27/16; 1240		Received by:	
Relinquished by: Chad S. S. S.		Date/Time: 6/28/16 1542		Received by: [Signature]	
Relinquished by:		Date/Time:		Received by:	
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: 400-123617-1
SDG Number: Gaston Ash Pond (2)

Login Number: 123617

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	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	N/A	
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	



Certification Summary

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

TestAmerica Job ID: 400-123617-1
 SDG: Gaston Ash Pond (2)

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16 *
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	MO00054	06-30-17
California	State Program	9	2886	03-31-18
Connecticut	State Program	1	PH-0241	03-31-17
Florida	NELAP	4	E87689	06-30-17
Illinois	NELAP	5	003757	11-30-16 *
Iowa	State Program	7	373	12-01-16 *
Kansas	NELAP	7	E-10236	10-31-17
Kentucky (DW)	State Program	4	90125	12-31-16
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-17
Louisiana (DW)	NELAP	6	LA160008	12-31-16 *
Maryland	State Program	3	310	09-30-17
Missouri	State Program	7	780	06-30-17
Nevada	State Program	9	MO000542016-1	07-31-17
New Jersey	NELAP	2	MO002	06-30-17
New York	NELAP	2	11616	03-31-17
North Dakota	State Program	8	R207	06-30-17
NRC	NRC		24-24817-01	12-31-22

* Certification renewal pending - certification considered valid.

Certification Summary

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

TestAmerica Job ID: 400-123617-1
SDG: Gaston Ash Pond (2)

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Oklahoma	State Program	6	9997	08-31-17
Pennsylvania	NELAP	3	68-00540	02-28-17 *
South Carolina	State Program	4	85002001	06-30-17
Texas	NELAP	6	T104704193-16-10	07-31-17
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		P330-14-0016	01-09-17
Utah	NELAP	8	MO000542016-8	07-31-17
Virginia	NELAP	3	460230	06-14-17
Washington	State Program	10	C592	08-30-17
West Virginia DEP	State Program	3	381	08-31-17

* Certification renewal pending - certification considered valid.

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

 Alabama Power



Sample Group : WMWGASAP_31

Project/Site : Gaston Ash Pond
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:

Supervision:



Anions

Gaston Ash Pond

WMWGASAP_31

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>Chloride Batch ID</u>	<u>Fluoride Batch ID</u>	<u>Sulfate Batch ID</u>	<u>Project ID</u>
AW17246	569485	569486	569487	WMWGASAP_31
AW17247	569485	569486	569487	WMWGASAP_31
AW17471	569485	569486	569487	WMWGASAP_31
AW17472	569485	569486	569487	WMWGASAP_31
AW17473	569485	569486	569487	WMWGASAP_31
AW17474	569485	569486	569487	WMWGASAP_31
AW17475	569485	569486	569487	WMWGASAP_31
AW17476	569485	569486	569487	WMWGASAP_31
AW17477	569485	569486	569487	WMWGASAP_31
AW17709	569764	569765	569766	WMWGASAP_31
AW17712	569764	569765	569766	WMWGASAP_31
AW17713	569764	569765	569766	WMWGASAP_31
AW17714	569764	569765	569766	WMWGASAP_31
AW17715	569764	569765	569766	WMWGASAP_31
AW17716	569764	569765	569766	WMWGASAP_31
AW17717	569764	569765	569766	WMWGASAP_31
AW17718	569764	569765	569766	WMWGASAP_31
AW17719	569767	569768	569769	WMWGASAP_31
AW17720	569767	569768	569769	WMWGASAP_31
AW17721	569767	569768	569769	WMWGASAP_31
AW17722	569767	569768	569769	WMWGASAP_31
AW17723	569767	569768	569769	WMWGASAP_31
AW17724	569767	569768	569769	WMWGASAP_31
AW17725	569767	569768	569769	WMWGASAP_31
AW17726	569767	569768	569769	WMWGASAP_31
AW17727	569767	569768	569769	WMWGASAP_31
AW17728	569767	569768	569769	WMWGASAP_31
AW17992	570417	570418	570419	WMWGASAP_31
AW17993	570417	570418	570419	WMWGASAP_31



4. All of the above samples were analyzed and prepared by EPA 300.0.
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 instrument performance check (IPC) was analyzed and all criteria were met.
- All laboratory reagent blanks were less than the method detection limits for the requested anions, with the following exception:
 1. The reagent blank in batch 569769 presented a positive sulfate concentration above the MDL of 0.3, at 0.334 mg/L. The reported result for sulfate in sample AW17724 was above the MDL but below 10x the blank concentration, and is considered as a quantitatively estimated result with indication of potential high bias.
- All laboratory fortified blanks (LFB) were within acceptance criteria for the anions requested, with the following exceptions:
 1. No opening or closing LFB were listed for the dilution re-analysis for sulfate in batch 569487. Due to absence of LFB data, the reported result for the following sample dilution for sulfate is qualified as quantitatively estimated with indeterminate bias direction and magnitude: AW17247.
 2. No closing LFB was listed for the dilution re-analyses for chloride or for sulfate in batches 569764 and 569766, respectively. Due to absence of LFB data, the reported results for the following sample dilutions are qualified as quantitatively estimated with indeterminate bias direction and magnitude: for chloride, AW17713 and AW17714; for sulfate, AW17709, AW17712, AW17713, AW17714, AW17716 and AW17717.
 3. No closing LFB was listed for the dilution re-analyses for chloride or for sulfate in batches 569767 and 569769, respectively. Due to absence of LFB data, the reported results for the following sample dilutions are qualified as quantitatively estimated with indeterminate bias direction and magnitude: for chloride, AW17726, AW17727 and AW17728; for sulfate, AW17726, AW17727 and AW17728.
 4. No closing LFB was listed for the dilution re-analyses for sulfate in batch 570419. Due to absence of LFB data, the reported results for the following sample dilutions for sulfate are qualified as quantitatively estimated with indeterminate bias direction and magnitude: AW17992 and AW17993.
- 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 laboratory fortified matrix (LFM) sample was analyzed with each batch. All acceptance criteria for accuracy were met. It is noted that both the parent sample and the LFM sample were re-analyzed at a 10x dilution, with acceptable recoveries in batches 569767 and 569769.
 - A sample duplicate and/or laboratory fortified matrix duplicate were analyzed with each batch. All acceptance criteria for precision were met. It is noted that separate and distinct criteria for duplicate precision calculations, based on sample and duplicate anion concentrations, are used to assess precision compliance. These are as follow: if the sample and duplicate are both greater than 5x anion Reporting Limit (RL) concentration, the precision is calculated and reported as relative percent difference (RPD), with an acceptance range of 0 - 20%; if either the sample or duplicate are less than 5x anion RL, the precision is calculated and reported as the absolute value of the difference between the two concentrations, with an acceptance range of less than or equal to the anion RL value.
7. Samples AW17713, AW17714, AW17726, AW17727 and AW17728 were re-analyzed at a 10x dilution for chloride, and samples AW17709, AW17712, AW17713, AW17714, AW17716, AW17717, AW17247, AW17726, AW17727, AW17728, AW17992 and AW17993 were re-analyzed at a 10x dilution for sulfate, due to the undiluted result exceeding the calibrated range of the detector. The dilution result for sulfate for this sample should be used; reporting limit (RL) values are adjusted upward to reflect the dilution factor applied.

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AW17247	Sulfate	10X
AW17709	Sulfate	10X
AW17712	Sulfate	10X
AW17713	Chloride, Sulfate	10X
AW17714	Chloride, Sulfate	10X
AW17715	Sulfate	10X
AW17716	Sulfate	10X
AW17717	Sulfate	10X
AW17726	Chloride, Sulfate	10X
AW17727	Chloride, Sulfate	10X
AW17728	Chloride, Sulfate	10X
AW17992	Sulfate	10X
AW17993	Sulfate	10X

8. The raw data results are shown with dilution factors included, when dilutions are manually performed by the analyst. The raw data results are shown without dilution factor corrections, when dilutions are run automatically by the instrument.



Metals ICP

Gaston Ash Pond

WMWGASAP_31

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>
AW17246	20160720E	WMWGASAP_31
AW17247	20160721C	WMWGASAP_31
AW17471	20160721C	WMWGASAP_31
AW17472	20160721C	WMWGASAP_31
AW17473	20160721C	WMWGASAP_31
AW17474	20160721C	WMWGASAP_31
AW17475	20160721C	WMWGASAP_31
AW17476	20160721C	WMWGASAP_31
AW17477	20160721C	WMWGASAP_31
AW17709	20160721C	WMWGASAP_31
AW17712	20160721C	WMWGASAP_31
AW17713	20160801	WMWGASAP_31
AW17714	20160801	WMWGASAP_31
AW17715	20160801	WMWGASAP_31
AW17716	20160801	WMWGASAP_31
AW17717	20160801	WMWGASAP_31
AW17718	20160801	WMWGASAP_31
AW17719	20160801	WMWGASAP_31
AW17720	20160801	WMWGASAP_31
AW17721	20160801	WMWGASAP_31
AW17722	20160801	WMWGASAP_31
AW17723	20160803	WMWGASAP_31
AW17724	20160803	WMWGASAP_31
AW17725	20160803	WMWGASAP_31
AW17726	20160803	WMWGASAP_31
AW17727	20160803	WMWGASAP_31
AW17728	20160803	WMWGASAP_31
AW17992	20160803	WMWGASAP_31
AW17993	20160803	WMWGASAP_31



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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

<u>Analyte</u>	<u>Sample ID</u>
Calcium	AW17246
Calcium	AW17712
Calcium	AW17793

The concentrations of these analytes in the matrix spike added before digestion were less than 30 percent of the concentration of the sample causing inaccurate spike recovery information. The laboratory control sample indicates that the digestion and analysis were in control.



- 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 without a dilution with the following exceptions: The following samples were diluted due to sample concentrations from the undiluted analysis were over the high standard of the calibration curve.

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AW17246	Calcium	10.15X
AW17246MS	Calcium	10.15X
AW17246MSD	Calcium	10.15X
AW17473	Calcium	10.15X
AW17475	Calcium	10.15X
AW17476	Calcium	10.15X
AW17709	Calcium	10.15X
AW17712	Calcium	10.15X
AW17712MS	Calcium	10.15X
AW17712MSD	Calcium	10.15X
AW17713	Calcium	10.15X
AW17714	Calcium	10.15X
AW17716	Calcium	10.15X
AW17717	Calcium	10.15X
AW17719	Calcium	10.15X
AW17723	Calcium	10.15X
AW17724	Calcium	10.15X
AW17726	Calcium	10.15X
AW17727	Calcium	10.15X
AW17728	Calcium	10.15X
AW17992	Calcium	10.15X
AW17993	Calcium	10.15X
AW17993MS	Calcium	10.15X
AW17993MSD	Calcium	10.15X

8. The raw data results include both results corrected for dilution and results not corrected for dilution.



Metals ICPMS

Gaston Ash Pond

WMWGASAP_31

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>
AW17246	570271	WMWGASAP_31
AW17247	570272	WMWGASAP_31
AW17471	570272	WMWGASAP_31
AW17472	570272	WMWGASAP_31
AW17473	570272	WMWGASAP_31
AW17474	570272	WMWGASAP_31
AW17475	570272	WMWGASAP_31
AW17476	570272	WMWGASAP_31
AW17477	570272	WMWGASAP_31
AW17709	570272	WMWGASAP_31
AW17712	570272	WMWGASAP_31
AW17713	570273	WMWGASAP_31
AW17714	570273	WMWGASAP_31
AW17715	570273	WMWGASAP_31
AW17716	570273	WMWGASAP_31
AW17717	570273	WMWGASAP_31
AW17718	570273	WMWGASAP_31
AW17719	570273	WMWGASAP_31
AW17720	570273	WMWGASAP_31
AW17721	570273	WMWGASAP_31
AW17722	570273	WMWGASAP_31
AW17723	570274	WMWGASAP_31
AW17724	570274	WMWGASAP_31
AW17725	570274	WMWGASAP_31
AW17726	570274	WMWGASAP_31
AW17727	570274	WMWGASAP_31
AW17728	570274	WMWGASAP_31
AW17992	570274	WMWGASAP_31
AW17993	570274	WMWGASAP_31



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.
7. Cadmium MDL increased from 0.0001mg/L to 0.0002mg/L.

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.
8. All samples were analyzed at a dilution of 1 to 5 to compensate for any matrix effects.
 9. The raw data results are shown with dilution factors included.



Mercury

Gaston Ash Pond

WMWGASAP_31

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>
AW17246	569822	WMWGASAP_31
AW17247	569822	WMWGASAP_31
AW17471	569822	WMWGASAP_31
AW17472	569822	WMWGASAP_31
AW17473	569822	WMWGASAP_31
AW17474	569822	WMWGASAP_31
AW17475	570395	WMWGASAP_31
AW17476	570395	WMWGASAP_31
AW17477	570395	WMWGASAP_31
AW17709	570395	WMWGASAP_31
AW17712	570395	WMWGASAP_31
AW17713	570395	WMWGASAP_31
AW17714	570395	WMWGASAP_31
AW17715	570395	WMWGASAP_31
AW17716	570884	WMWGASAP_31
AW17717	570884	WMWGASAP_31
AW17718	570884	WMWGASAP_31
AW17719	570884	WMWGASAP_31
AW17720	570884	WMWGASAP_31
AW17721	570884	WMWGASAP_31
AW17722	570884	WMWGASAP_31
AW17723	570884	WMWGASAP_31
AW17724	570884	WMWGASAP_31
AW17725	570884	WMWGASAP_31
AW17726	570885	WMWGASAP_31
AW17727	570885	WMWGASAP_31
AW17728	570885	WMWGASAP_31
AW17992	570885	WMWGASAP_31
AW17993	570885	WMWGASAP_31

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.
- AW17475-477, AW17709, AW17712-715, were run twice because the instrument reductant reagent was not flowing correctly sometime during that time. The issue was corrected, samples were run again, and the 2nd run results were reported in LabWorks.

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 Ash Pond

WMWGASAP_31

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>
AW17246	569491	WMWGASAP_31
AW17247	569491	WMWGASAP_31
AW17471	569491	WMWGASAP_31
AW17472	569491	WMWGASAP_31
AW17473	569491	WMWGASAP_31
AW17474	569491	WMWGASAP_31
AW17475	569491	WMWGASAP_31
AW17476	569491	WMWGASAP_31
AW17477	569491	WMWGASAP_31
AW17709	569774	WMWGASAP_31
AW17712	569774	WMWGASAP_31
AW17713	569774	WMWGASAP_31
AW17714	569774	WMWGASAP_31
AW17715	569782	WMWGASAP_31
AW17716	569782	WMWGASAP_31
AW17717	569782	WMWGASAP_31
AW17718	569782	WMWGASAP_31
AW17719	569782	WMWGASAP_31
AW17720	569782	WMWGASAP_31
AW17721	569782	WMWGASAP_31
AW17722	569782	WMWGASAP_31
AW17723	569782	WMWGASAP_31
AW17724	569782	WMWGASAP_31
AW17725	569783	WMWGASAP_31
AW17726	569783	WMWGASAP_31
AW17727	569783	WMWGASAP_31
AW17728	569783	WMWGASAP_31
AW17992	570399	WMWGASAP_31
AW17993	570399	WMWGASAP_31



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.
7. The reporting limit for TDS was incorrectly listed as 2.5mg/L. It is now corrected based on filter volume and project limits. Sample IDs AW17722 and AW17725 are now reported as Not Detected.

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 0.5 mg 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 2.5 mg and 200 mg residue with the exception of AW17715, AW17718, AW17722, and AW17725 which were <2.5mg.

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 11-Jul-16
 Customer ID:
 Delivery Date: 12-Jul-16

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AW17246

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	J 0.00112	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0496	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	7/20/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	7/20/2016	EPA 200.7		10.15	1.0	5.0	68.9	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/18/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	7/20/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	J 0.00361	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/14/2016	SM 2540C		1		25	319	mg/L
* Chloride, Total	SES	7/13/2016	EPA 300.0		1	0.04	0.25	2.42	mg/L
* Fluoride, Total	SES	7/13/2016	EPA 300.0		1	0.01	0.3	J 0.086	mg/L
* Sulfate, Total	SES	7/13/2016	EPA 300.0		1	0.3	1	57.6	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17
 Recovery for Calcium is out of range.
 The spike amount is less than 30% the sample amount, therefore will not be qualified. SGC 11/9/16

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 11-Jul-16
 Customer ID:
 Delivery Date: 12-Jul-16

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AW17246

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW17246 Lithium, Total	mg/L	0.000281	0.022	0.20	0.229	0.221	0.198	0.17 to 0.23	114	70 to 130	3.56	20	
AW17246 Calcium, Total	mg/L	-0.00848	0.22	5.00	75.6	71.2	4.92	4.25 to 5.75	134	70 to 130	5.99	20	
AW17246 Chromium, Total	mg/L	0.00000855	0.0044	0.10	0.102	0.102	0.100	0.085 to 0.115	102	70 to 130	0.0062620		
AW17246 Lead, Total	mg/L	0.0000160	0.0022	0.10	0.104	0.105	0.0986	0.085 to 0.115	104	70 to 130	0.499	20	
AW17246 Cadmium, Total	mg/L	0.00000416	0.00044	0.10	0.103	0.104	0.0948	0.085 to 0.115	103	70 to 130	0.0269	20	
AW17246 Molybdenum, Total	mg/L	0.0000126	0.0044	0.10	0.105	0.106	0.101	0.085 to 0.115	101	70 to 130	0.752	20	
AW17246 Arsenic, Total	mg/L	0.00000965	0.0022	0.10	0.103	0.103	0.108	0.085 to 0.115	102	70 to 130	0.226	20	
AW17246 Selenium, Total	mg/L	0.0000542	0.0044	0.10	0.104	0.105	0.105	0.085 to 0.115	104	70 to 130	1.06	20	
AW17246 Thallium, Total	mg/L	0.00000286	0.00044	0.10	0.102	0.102	0.0975	0.085 to 0.115	102	70 to 130	0.377	20	
AW17474 Mercury, Total by CVAA	mg/L	0.0000346	0.0005	0.004	0.00401	0.00401	0.00403	0.0034 to 0.0046	100	70 to 130	0.0224	20	
AW17246 Antimony, Total	mg/L	0.0000765	0.00132	0.10	0.104	0.104	0.104	0.085 to 0.115	104	70 to 130	0.229	20	
AW17246 Boron, Total	mg/L	-0.00132	0.044	1.00	0.980	0.966	0.973	0.85 to 1.15	98.0	70 to 130	1.44	20	
AW17246 Barium, Total	mg/L	0.0000386	0.0044	0.10	0.156	0.156	0.103	0.085 to 0.115	106	70 to 130	0.0636	20	
AW17246 Beryllium, Total	mg/L	0.00000546	0.00132	0.10	0.0929	0.0936	0.0967	0.085 to 0.115	92.9	70 to 130	0.709	20	
AW17246 Cobalt, Total	mg/L	0.00000193	0.0044	0.10	0.0993	0.0997	0.0965	0.085 to 0.115	99.3	70 to 130	0.367	20	

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 Recovery for Calcium is out of range.
 The spike amount is less than 30% the sample amount, therefore will not be qualified. SGC 11/9/16

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 11-Jul-16
 Customer ID:
 Delivery Date: 12-Jul-16

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AW17246

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample		LFB Limit	Rec		Prec Limit	
							Duplicate	LFB		Rec	Limit		
AW17477	Solids, Dissolved	mg/L	0	25			176	49	40 to 60			0.00	5
AW17477	Chloride, Total	mg/L	0.000	0.25	10.00	15.5	5.70	9.86	9 to 11	97.9	80 to 120	0.175	20
AW17477	Sulfate, Total	mg/L	0.000	1.0	20.00	19.9	0.923	19.3	18 to 22	94.9	80 to 120	0.871	20
AW17477	Fluoride, Total	mg/L	0.000	0.3	2.00	1.96	0.110	1.94	1.8 to 2.2	92.5	80 to 120	0.00	20

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17
 Recovery for Calcium is out of range.
 The spike amount is less than 30% the sample amount, therefore will not be qualified. SGC 11/9/16

CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 11-Jul-16
 Customer ID:
 Delivery Date: 12-Jul-16

Description: Gaston Ash Pond - MW-15 R

Laboratory ID Number: AW17247

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0302	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	7/21/2016	EPA 200.7		1.015	0.02	0.1	0.829	mg/L
* Calcium, Total	HRG	7/21/2016	EPA 200.7		1.015	0.1	0.5	38.1	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/18/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	7/21/2016	EPA 200.7		1.015	0.01	0.05	J 0.0133	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0542	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/14/2016	SM 2540C		1		25	359	mg/L
* Chloride, Total	SES	7/13/2016	EPA 300.0		1	0.04	0.25	23.0	mg/L
* Fluoride, Total	SES	7/13/2016	EPA 300.0		1	0.01	0.3	J 0.076	mg/L
* Sulfate, Total	SES	7/14/2016	EPA 300.0		10	3.0	10	133	mg/L

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 11-Jul-16
 Customer ID:
 Delivery Date: 12-Jul-16

Description: Gaston Ash Pond - MW-15 R

Laboratory ID Number: AW17247

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW17712 Calcium, Total	mg/L	-0.0109	0.22	5.00	85.9	85.4	4.48	4.25 to 5.75	38.0	70 to 130	0.584	20	
AW17712 Cobalt, Total	mg/L	0.00000269	0.0044	0.10	0.0989	0.101	0.0955	0.085 to 0.115	98.9	70 to 130	1.80	20	
AW17712 Chromium, Total	mg/L	0.00000674	0.0044	0.10	0.101	0.103	0.0995	0.085 to 0.115	101	70 to 130	1.73	20	
AW17474 Mercury, Total by CVAA	mg/L	0.0000346	0.0005	0.004	0.00401	0.00401	0.00403	0.0034 to 0.0046	100	70 to 130	0.0224	20	
AW17712 Cadmium, Total	mg/L	0.00000357	0.00044	0.10	0.103	0.104	0.0989	0.085 to 0.115	103	70 to 130	1.85	20	
AW17712 Arsenic, Total	mg/L	0.0000110	0.0022	0.10	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.40	20	
AW17712 Selenium, Total	mg/L	0.0000390	0.0044	0.10	0.104	0.106	0.108	0.085 to 0.115	104	70 to 130	1.41	20	
AW17712 Thallium, Total	mg/L	0.00000323	0.00044	0.10	0.102	0.104	0.0976	0.085 to 0.115	102	70 to 130	1.43	20	
AW17712 Antimony, Total	mg/L	0.0000650	0.00132	0.10	0.103	0.106	0.103	0.085 to 0.115	103	70 to 130	2.51	20	
AW17712 Boron, Total	mg/L	0.000522	0.044	1.00	2.56	2.58	0.956	0.85 to 1.15	98.0	70 to 130	0.778	20	
AW17712 Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.102	0.103	0.100	0.085 to 0.115	102	70 to 130	1.78	20	
AW17712 Barium, Total	mg/L	0.00000330	0.0044	0.10	0.133	0.136	0.103	0.085 to 0.115	105	70 to 130	1.78	20	
AW17712 Beryllium, Total	mg/L	0.00000582	0.00132	0.10	0.0937	0.0951	0.0997	0.085 to 0.115	93.7	70 to 130	1.49	20	
AW17712 Lead, Total	mg/L	0.00000478	0.0022	0.10	0.104	0.106	0.0984	0.085 to 0.115	104	70 to 130	1.32	20	
AW17712 Lithium, Total	mg/L	0.000412	0.022	0.20	0.210	0.227	0.184	0.17 to 0.23	105	70 to 130	7.78	20	

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 11-Jul-16
 Customer ID:
 Delivery Date: 12-Jul-16

Description: Gaston Ash Pond - MW-15 R

Laboratory ID Number: AW17247

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW17477	Fluoride, Total	mg/L	0.000	0.3	2.00	1.96	0.110	1.94	1.8 to 2.2	92.5	80 to 120	0.00	20
AW17477	Solids, Dissolved	mg/L	0	25			176	49	40 to 60			0.00	5
AW17477	Chloride, Total	mg/L	0.000	0.25	10.00	15.5	5.70	9.86	9 to 11	97.9	80 to 120	0.175	20
AW17477	Sulfate, Total	mg/L	0.000	1.0	20.00	19.9	0.923	19.3	18 to 22	94.9	80 to 120	0.871	20

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Expiration: June 30, 2018

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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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 11-Jul-16
 Customer ID:
 Delivery Date: 13-Jul-16

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AW17471

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	J 0.00969	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	7/21/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	7/21/2016	EPA 200.7		1.015	0.1	0.5	30.0	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/18/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	7/21/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	J 0.00691	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/14/2016	SM 2540C		1		25	146	mg/L
* Chloride, Total	SES	7/13/2016	EPA 300.0		1	0.04	0.25	1.93	mg/L
* Fluoride, Total	SES	7/13/2016	EPA 300.0		1	0.01	0.3	J 0.057	mg/L
* Sulfate, Total	SES	7/13/2016	EPA 300.0		1	0.3	1	4.63	mg/L

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 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 11-Jul-16
 Customer ID:
 Delivery Date: 13-Jul-16

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AW17471

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW17712 Chromium, Total	mg/L	0.0000674	0.0044	0.10	0.101	0.103	0.0995	0.085 to 0.115	101	70 to 130	1.73	20	
AW17712 Calcium, Total	mg/L	-0.0109	0.22	5.00	85.9	85.4	4.48	4.25 to 5.75	38.0	70 to 130	0.584	20	
AW17474 Mercury, Total by CVAA	mg/L	0.0000346	0.0005	0.004	0.00401	0.00401	0.00403	0.0034 to 0.0046	100	70 to 130	0.0224	20	
AW17712 Cadmium, Total	mg/L	0.00000357	0.00044	0.10	0.103	0.104	0.0989	0.085 to 0.115	103	70 to 130	1.85	20	
AW17712 Cobalt, Total	mg/L	0.00000269	0.0044	0.10	0.0989	0.101	0.0955	0.085 to 0.115	98.9	70 to 130	1.80	20	
AW17712 Antimony, Total	mg/L	0.0000650	0.00132	0.10	0.103	0.106	0.103	0.085 to 0.115	103	70 to 130	2.51	20	
AW17712 Boron, Total	mg/L	0.000522	0.044	1.00	2.56	2.58	0.956	0.85 to 1.15	98.0	70 to 130	0.778	20	
AW17712 Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.102	0.103	0.100	0.085 to 0.115	102	70 to 130	1.78	20	
AW17712 Arsenic, Total	mg/L	0.0000110	0.0022	0.10	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.40	20	
AW17712 Selenium, Total	mg/L	0.0000390	0.0044	0.10	0.104	0.106	0.108	0.085 to 0.115	104	70 to 130	1.41	20	
AW17712 Thallium, Total	mg/L	0.00000323	0.00044	0.10	0.102	0.104	0.0976	0.085 to 0.115	102	70 to 130	1.43	20	
AW17712 Barium, Total	mg/L	0.00000330	0.0044	0.10	0.133	0.136	0.103	0.085 to 0.115	105	70 to 130	1.78	20	
AW17712 Beryllium, Total	mg/L	0.00000582	0.00132	0.10	0.0937	0.0951	0.0997	0.085 to 0.115	93.7	70 to 130	1.49	20	
AW17712 Lead, Total	mg/L	0.00000478	0.0022	0.10	0.104	0.106	0.0984	0.085 to 0.115	104	70 to 130	1.32	20	
AW17712 Lithium, Total	mg/L	0.000412	0.022	0.20	0.210	0.227	0.184	0.17 to 0.23	105	70 to 130	7.78	20	

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Alabama Power General Test Laboratory
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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 11-Jul-16
 Customer ID:
 Delivery Date: 13-Jul-16

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AW17471

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW17477	Chloride, Total	mg/L	0.000	0.25	10.00	15.5	5.70	9.86	9 to 11	97.9	80 to 120	0.175	20
AW17477	Solids, Dissolved	mg/L	0	25			176	49	40 to 60			0.00	5
AW17477	Fluoride, Total	mg/L	0.000	0.3	2.00	1.96	0.110	1.94	1.8 to 2.2	92.5	80 to 120	0.00	20
AW17477	Sulfate, Total	mg/L	0.000	1.0	20.00	19.9	0.923	19.3	18 to 22	94.9	80 to 120	0.871	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 11-Jul-16
 Customer ID:
 Delivery Date: 13-Jul-16

Description: Gaston Ash Pond - MW-3 Dup

Laboratory ID Number: AW17472

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	J 0.00959	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	7/21/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	7/21/2016	EPA 200.7		1.015	0.1	0.5	29.4	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/18/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	7/21/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	J 0.00718	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/14/2016	SM 2540C		1		25	142	mg/L
* Chloride, Total	SES	7/13/2016	EPA 300.0		1	0.04	0.25	1.95	mg/L
* Fluoride, Total	SES	7/13/2016	EPA 300.0		1	0.01	0.3	J 0.056	mg/L
* Sulfate, Total	SES	7/13/2016	EPA 300.0		1	0.3	1	4.77	mg/L

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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 11-Jul-16
 Customer ID:
 Delivery Date: 13-Jul-16

Description: Gaston Ash Pond - MW-3 Dup

Laboratory ID Number: AW17472

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW17712 Cobalt, Total	mg/L	0.00000269	0.0044	0.10	0.0989	0.101	0.0955	0.085 to 0.115	98.9	70 to 130	1.80	20	
AW17712 Chromium, Total	mg/L	0.00000674	0.0044	0.10	0.101	0.103	0.0995	0.085 to 0.115	101	70 to 130	1.73	20	
AW17474 Mercury, Total by CVAA	mg/L	0.0000346	0.0005	0.004	0.00401	0.00401	0.00403	0.0034 to 0.0046	100	70 to 130	0.0224	20	
AW17712 Cadmium, Total	mg/L	0.00000357	0.00044	0.10	0.103	0.104	0.0989	0.085 to 0.115	103	70 to 130	1.85	20	
AW17712 Calcium, Total	mg/L	-0.0109	0.22	5.00	85.9	85.4	4.48	4.25 to 5.75	38.0	70 to 130	0.584	20	
AW17712 Arsenic, Total	mg/L	0.0000110	0.0022	0.10	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.40	20	
AW17712 Selenium, Total	mg/L	0.0000390	0.0044	0.10	0.104	0.106	0.108	0.085 to 0.115	104	70 to 130	1.41	20	
AW17712 Thallium, Total	mg/L	0.00000323	0.00044	0.10	0.102	0.104	0.0976	0.085 to 0.115	102	70 to 130	1.43	20	
AW17712 Antimony, Total	mg/L	0.0000650	0.00132	0.10	0.103	0.106	0.103	0.085 to 0.115	103	70 to 130	2.51	20	
AW17712 Boron, Total	mg/L	0.000522	0.044	1.00	2.56	2.58	0.956	0.85 to 1.15	98.0	70 to 130	0.778	20	
AW17712 Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.102	0.103	0.100	0.085 to 0.115	102	70 to 130	1.78	20	
AW17712 Barium, Total	mg/L	0.00000330	0.0044	0.10	0.133	0.136	0.103	0.085 to 0.115	105	70 to 130	1.78	20	
AW17712 Beryllium, Total	mg/L	0.00000582	0.00132	0.10	0.0937	0.0951	0.0997	0.085 to 0.115	93.7	70 to 130	1.49	20	
AW17712 Lead, Total	mg/L	0.00000478	0.0022	0.10	0.104	0.106	0.0984	0.085 to 0.115	104	70 to 130	1.32	20	
AW17712 Lithium, Total	mg/L	0.000412	0.022	0.20	0.210	0.227	0.184	0.17 to 0.23	105	70 to 130	7.78	20	

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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 11-Jul-16
 Customer ID:
 Delivery Date: 13-Jul-16

Description: Gaston Ash Pond - MW-3 Dup

Laboratory ID Number: AW17472

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW17477	Sulfate, Total	mg/L	0.000	1.0	20.00	19.9	0.923	19.3	18 to 22	94.9	80 to 120	0.871	20
AW17477	Solids, Dissolved	mg/L	0	25			176	49	40 to 60			0.00	5
AW17477	Chloride, Total	mg/L	0.000	0.25	10.00	15.5	5.70	9.86	9 to 11	97.9	80 to 120	0.175	20
AW17477	Fluoride, Total	mg/L	0.000	0.3	2.00	1.96	0.110	1.94	1.8 to 2.2	92.5	80 to 120	0.00	20

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Certificate Of Analysis  **Alabama Power**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 11-Jul-16
 Customer ID:
 Delivery Date: 13-Jul-16

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AW17473

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0286	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	7/21/2016	EPA 200.7		1.015	0.02	0.1	0.375	mg/L
* Calcium, Total	HRG	7/21/2016	EPA 200.7		10.15	1.0	5.0	56.5	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/18/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	7/21/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/14/2016	SM 2540C		1		25	305	mg/L
* Chloride, Total	SES	7/13/2016	EPA 300.0		1	0.04	0.25	20.3	mg/L
* Fluoride, Total	SES	7/13/2016	EPA 300.0		1	0.01	0.3	J 0.054	mg/L
* Sulfate, Total	SES	7/13/2016	EPA 300.0		1	0.3	1	33.2	mg/L

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Batch QC Summary



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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 11-Jul-16
 Customer ID:
 Delivery Date: 13-Jul-16

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AW17473

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW17712 Cobalt, Total	mg/L	0.00000269	0.0044	0.10	0.0989	0.101	0.0955	0.085 to 0.115	98.9	70 to 130	1.80	20	
AW17712 Chromium, Total	mg/L	0.00000674	0.0044	0.10	0.101	0.103	0.0995	0.085 to 0.115	101	70 to 130	1.73	20	
AW17474 Mercury, Total by CVAA	mg/L	0.0000346	0.0005	0.004	0.00401	0.00401	0.00403	0.0034 to 0.0046	100	70 to 130	0.0224	20	
AW17712 Cadmium, Total	mg/L	0.00000357	0.00044	0.10	0.103	0.104	0.0989	0.085 to 0.115	103	70 to 130	1.85	20	
AW17712 Antimony, Total	mg/L	0.0000650	0.00132	0.10	0.103	0.106	0.103	0.085 to 0.115	103	70 to 130	2.51	20	
AW17712 Boron, Total	mg/L	0.000522	0.044	1.00	2.56	2.58	0.956	0.85 to 1.15	98.0	70 to 130	0.778	20	
AW17712 Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.102	0.103	0.100	0.085 to 0.115	102	70 to 130	1.78	20	
AW17712 Barium, Total	mg/L	0.00000330	0.0044	0.10	0.133	0.136	0.103	0.085 to 0.115	105	70 to 130	1.78	20	
AW17712 Beryllium, Total	mg/L	0.00000582	0.00132	0.10	0.0937	0.0951	0.0997	0.085 to 0.115	93.7	70 to 130	1.49	20	
AW17712 Lead, Total	mg/L	0.00000478	0.0022	0.10	0.104	0.106	0.0984	0.085 to 0.115	104	70 to 130	1.32	20	
AW17712 Lithium, Total	mg/L	0.000412	0.022	0.20	0.210	0.227	0.184	0.17 to 0.23	105	70 to 130	7.78	20	
AW17712 Arsenic, Total	mg/L	0.0000110	0.0022	0.10	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.40	20	
AW17712 Selenium, Total	mg/L	0.0000390	0.0044	0.10	0.104	0.106	0.108	0.085 to 0.115	104	70 to 130	1.41	20	
AW17712 Thallium, Total	mg/L	0.00000323	0.00044	0.10	0.102	0.104	0.0976	0.085 to 0.115	102	70 to 130	1.43	20	
AW17712 Calcium, Total	mg/L	-0.0109	0.22	5.00	85.9	85.4	4.48	4.25 to 5.75	38.0	70 to 130	0.584	20	

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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 11-Jul-16
 Customer ID:
 Delivery Date: 13-Jul-16

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AW17473

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW17477	Solids, Dissolved	mg/L	0	25				176	49	40 to 60			0.00	5
AW17477	Chloride, Total	mg/L	0.000	0.25	10.00	15.5		5.70	9.86	9 to 11	97.9	80 to 120	0.175	20
AW17477	Sulfate, Total	mg/L	0.000	1.0	20.00	19.9		0.923	19.3	18 to 22	94.9	80 to 120	0.871	20
AW17477	Fluoride, Total	mg/L	0.000	0.3	2.00	1.96		0.110	1.94	1.8 to 2.2	92.5	80 to 120	0.00	20

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Certificate Of Analysis  **Alabama Power**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 11-Jul-16
 Customer ID:
 Delivery Date: 13-Jul-16

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AW17474

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	J 0.00960	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	7/21/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	7/21/2016	EPA 200.7		1.015	0.1	0.5	32.5	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/18/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	7/21/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/14/2016	SM 2540C		1		25	167	mg/L
* Chloride, Total	SES	7/13/2016	EPA 300.0		1	0.04	0.25	1.73	mg/L
* Fluoride, Total	SES	7/13/2016	EPA 300.0		1	0.01	0.3	J 0.054	mg/L
* Sulfate, Total	SES	7/13/2016	EPA 300.0		1	0.3	1	3.41	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 11-Jul-16
 Customer ID:
 Delivery Date: 13-Jul-16

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AW17474

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW17712 Chromium, Total	mg/L	0.00000674	0.0044	0.10	0.101	0.103	0.0995	0.085 to 0.115	101	70 to 130	1.73	20	
AW17712 Calcium, Total	mg/L	-0.0109	0.22	5.00	85.9	85.4	4.48	4.25 to 5.75	38.0	70 to 130	0.584	20	
AW17712 Cobalt, Total	mg/L	0.00000269	0.0044	0.10	0.0989	0.101	0.0955	0.085 to 0.115	98.9	70 to 130	1.80	20	
AW17474 Mercury, Total by CVAA	mg/L	0.0000346	0.0005	0.004	0.00401	0.00401	0.00403	0.0034 to 0.0046	100	70 to 130	0.0224	20	
AW17712 Cadmium, Total	mg/L	0.00000357	0.00044	0.10	0.103	0.104	0.0989	0.085 to 0.115	103	70 to 130	1.85	20	
AW17712 Arsenic, Total	mg/L	0.0000110	0.0022	0.10	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.40	20	
AW17712 Selenium, Total	mg/L	0.0000390	0.0044	0.10	0.104	0.106	0.108	0.085 to 0.115	104	70 to 130	1.41	20	
AW17712 Thallium, Total	mg/L	0.00000323	0.00044	0.10	0.102	0.104	0.0976	0.085 to 0.115	102	70 to 130	1.43	20	
AW17712 Antimony, Total	mg/L	0.0000650	0.00132	0.10	0.103	0.106	0.103	0.085 to 0.115	103	70 to 130	2.51	20	
AW17712 Boron, Total	mg/L	0.000522	0.044	1.00	2.56	2.58	0.956	0.85 to 1.15	98.0	70 to 130	0.778	20	
AW17712 Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.102	0.103	0.100	0.085 to 0.115	102	70 to 130	1.78	20	
AW17712 Barium, Total	mg/L	0.00000330	0.0044	0.10	0.133	0.136	0.103	0.085 to 0.115	105	70 to 130	1.78	20	
AW17712 Beryllium, Total	mg/L	0.00000582	0.00132	0.10	0.0937	0.0951	0.0997	0.085 to 0.115	93.7	70 to 130	1.49	20	
AW17712 Lead, Total	mg/L	0.00000478	0.0022	0.10	0.104	0.106	0.0984	0.085 to 0.115	104	70 to 130	1.32	20	
AW17712 Lithium, Total	mg/L	0.000412	0.022	0.20	0.210	0.227	0.184	0.17 to 0.23	105	70 to 130	7.78	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 11-Jul-16
 Customer ID:
 Delivery Date: 13-Jul-16

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AW17474

Sample	Analysis	Units	MB	Sample			LFB		Rec		Prec		
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW17477	Sulfate, Total	mg/L	0.000	1.0	20.00	19.9	0.923	19.3	18 to 22	94.9	80 to 120	0.871	20
AW17477	Chloride, Total	mg/L	0.000	0.25	10.00	15.5	5.70	9.86	9 to 11	97.9	80 to 120	0.175	20
AW17477	Solids, Dissolved	mg/L	0	25			176	49	40 to 60			0.00	5
AW17477	Fluoride, Total	mg/L	0.000	0.3	2.00	1.96	0.110	1.94	1.8 to 2.2	92.5	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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CC:

Reported: 7/10/2017
 Version: 2.0

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 12-Jul-16
 Customer ID:
 Delivery Date: 13-Jul-16

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AW17475

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	J 0.00459	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0200	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	7/21/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	7/21/2016	EPA 200.7		10.15	1.0	5.0	53.8	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/21/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	7/21/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0164	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/14/2016	SM 2540C		1		25	289	mg/L
* Chloride, Total	SES	7/13/2016	EPA 300.0		1	0.04	0.25	2.93	mg/L
* Fluoride, Total	SES	7/13/2016	EPA 300.0		1	0.01	0.3	J 0.092	mg/L
* Sulfate, Total	SES	7/13/2016	EPA 300.0		1	0.3	1	24.6	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.

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 12-Jul-16
 Customer ID:
 Delivery Date: 13-Jul-16

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AW17475

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	Spike				Limit	Rec	Limit	Prec			
AW17712 Chromium, Total	mg/L	0.00000674	0.0044	0.10	0.101	0.103	0.0995	0.085 to 0.115		101	70 to 130		1.73	20
AW17712 Cadmium, Total	mg/L	0.00000357	0.00044	0.10	0.103	0.104	0.0989	0.085 to 0.115		103	70 to 130		1.85	20
AW17712 Cobalt, Total	mg/L	0.00000269	0.0044	0.10	0.0989	0.101	0.0955	0.085 to 0.115		98.9	70 to 130		1.80	20
AW18251 Mercury, Total by CVAA	mg/L	0.0000289	0.0005	0.004	0.00381	0.00388	0.00387	0.0034 to 0.0046		95.2	70 to 130		1.81	20
AW17712 Calcium, Total	mg/L	-0.0109	0.22	5.00	85.9	85.4	4.48	4.25 to 5.75		38.0	70 to 130		0.584	20
AW17712 Arsenic, Total	mg/L	0.0000110	0.0022	0.10	0.102	0.104	0.101	0.085 to 0.115		102	70 to 130		1.40	20
AW17712 Selenium, Total	mg/L	0.0000390	0.0044	0.10	0.104	0.106	0.108	0.085 to 0.115		104	70 to 130		1.41	20
AW17712 Thallium, Total	mg/L	0.00000323	0.00044	0.10	0.102	0.104	0.0976	0.085 to 0.115		102	70 to 130		1.43	20
AW17712 Barium, Total	mg/L	0.00000330	0.0044	0.10	0.133	0.136	0.103	0.085 to 0.115		105	70 to 130		1.78	20
AW17712 Beryllium, Total	mg/L	0.00000582	0.00132	0.10	0.0937	0.0951	0.0997	0.085 to 0.115		93.7	70 to 130		1.49	20
AW17712 Lead, Total	mg/L	0.00000478	0.0022	0.10	0.104	0.106	0.0984	0.085 to 0.115		104	70 to 130		1.32	20
AW17712 Lithium, Total	mg/L	0.000412	0.022	0.20	0.210	0.227	0.184	0.17 to 0.23		105	70 to 130		7.78	20
AW17712 Antimony, Total	mg/L	0.0000650	0.00132	0.10	0.103	0.106	0.103	0.085 to 0.115		103	70 to 130		2.51	20
AW17712 Boron, Total	mg/L	0.000522	0.044	1.00	2.56	2.58	0.956	0.85 to 1.15		98.0	70 to 130		0.778	20
AW17712 Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.102	0.103	0.100	0.085 to 0.115		102	70 to 130		1.78	20

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 12-Jul-16
 Customer ID:
 Delivery Date: 13-Jul-16

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AW17475

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW17477	Solids, Dissolved	mg/L	0	25				176	49	40 to 60			0.00	5
AW17477	Chloride, Total	mg/L	0.000	0.25	10.00	15.5		5.70	9.86	9 to 11	97.9	80 to 120	0.175	20
AW17477	Sulfate, Total	mg/L	0.000	1.0	20.00	19.9		0.923	19.3	18 to 22	94.9	80 to 120	0.871	20
AW17477	Fluoride, Total	mg/L	0.000	0.3	2.00	1.96		0.110	1.94	1.8 to 2.2	92.5	80 to 120	0.00	20

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Expiration: June 30, 2018

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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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 12-Jul-16
 Customer ID:
 Delivery Date: 13-Jul-16

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AW17476

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	J 0.00206	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0251	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	7/21/2016	EPA 200.7		1.015	0.02	0.1	0.170	mg/L
* Calcium, Total	HRG	7/21/2016	EPA 200.7		10.15	1.0	5.0	53.6	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/21/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	7/21/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/14/2016	SM 2540C		1		25	292	mg/L
* Chloride, Total	SES	7/13/2016	EPA 300.0		1	0.04	0.25	4.66	mg/L
* Fluoride, Total	SES	7/13/2016	EPA 300.0		1	0.01	0.3	J 0.105	mg/L
* Sulfate, Total	SES	7/13/2016	EPA 300.0		1	0.3	1	24.3	mg/L

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Laboratory certification ID: E571114

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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 12-Jul-16
 Customer ID:
 Delivery Date: 13-Jul-16

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AW17476

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW18251 Mercury, Total by CVAA	mg/L	0.0000289	0.0005	0.004	0.00381	0.00388	0.00387	0.0034 to 0.0046		95.2	70 to 130	1.81	20
AW17712 Cadmium, Total	mg/L	0.00000357	0.00044	0.10	0.103	0.104	0.0989	0.085 to 0.115		103	70 to 130	1.85	20
AW17712 Cobalt, Total	mg/L	0.00000269	0.0044	0.10	0.0989	0.101	0.0955	0.085 to 0.115		98.9	70 to 130	1.80	20
AW17712 Chromium, Total	mg/L	0.00000674	0.0044	0.10	0.101	0.103	0.0995	0.085 to 0.115		101	70 to 130	1.73	20
AW17712 Antimony, Total	mg/L	0.0000650	0.00132	0.10	0.103	0.106	0.103	0.085 to 0.115		103	70 to 130	2.51	20
AW17712 Boron, Total	mg/L	0.000522	0.044	1.00	2.56	2.58	0.956	0.85 to 1.15		98.0	70 to 130	0.778	20
AW17712 Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.102	0.103	0.100	0.085 to 0.115		102	70 to 130	1.78	20
AW17712 Calcium, Total	mg/L	-0.0109	0.22	5.00	85.9	85.4	4.48	4.25 to 5.75		38.0	70 to 130	0.584	20
AW17712 Barium, Total	mg/L	0.00000330	0.0044	0.10	0.133	0.136	0.103	0.085 to 0.115		105	70 to 130	1.78	20
AW17712 Beryllium, Total	mg/L	0.00000582	0.00132	0.10	0.0937	0.0951	0.0997	0.085 to 0.115		93.7	70 to 130	1.49	20
AW17712 Lead, Total	mg/L	0.00000478	0.0022	0.10	0.104	0.106	0.0984	0.085 to 0.115		104	70 to 130	1.32	20
AW17712 Lithium, Total	mg/L	0.000412	0.022	0.20	0.210	0.227	0.184	0.17 to 0.23		105	70 to 130	7.78	20
AW17712 Arsenic, Total	mg/L	0.0000110	0.0022	0.10	0.102	0.104	0.101	0.085 to 0.115		102	70 to 130	1.40	20
AW17712 Selenium, Total	mg/L	0.0000390	0.0044	0.10	0.104	0.106	0.108	0.085 to 0.115		104	70 to 130	1.41	20
AW17712 Thallium, Total	mg/L	0.00000323	0.00044	0.10	0.102	0.104	0.0976	0.085 to 0.115		102	70 to 130	1.43	20

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Expiration: June 30, 2018

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 12-Jul-16
 Customer ID:
 Delivery Date: 13-Jul-16

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AW17476

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample		LFB Limit	Rec		Prec Limit	
							Duplicate	LFB		Rec	Limit		
AW17477	Solids, Dissolved	mg/L	0	25			176	49	40 to 60			0.00	5
AW17477	Fluoride, Total	mg/L	0.000	0.3	2.00	1.96	0.110	1.94	1.8 to 2.2	92.5	80 to 120	0.00	20
AW17477	Chloride, Total	mg/L	0.000	0.25	10.00	15.5	5.70	9.86	9 to 11	97.9	80 to 120	0.175	20
AW17477	Sulfate, Total	mg/L	0.000	1.0	20.00	19.9	0.923	19.3	18 to 22	94.9	80 to 120	0.871	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/10/2017
 Version: 2.0

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 12-Jul-16
 Customer ID:
 Delivery Date: 13-Jul-16

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AW17477

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	J 0.00183	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.102	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	7/21/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	7/21/2016	EPA 200.7		1.015	0.1	0.5	31.6	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/21/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	7/21/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/14/2016	SM 2540C		1		25	176	mg/L
* Chloride, Total	SES	7/13/2016	EPA 300.0		1	0.04	0.25	5.71	mg/L
* Fluoride, Total	SES	7/13/2016	EPA 300.0		1	0.01	0.3	J 0.110	mg/L
* Sulfate, Total	SES	7/13/2016	EPA 300.0		1	0.3	1	J 0.915	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: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 12-Jul-16
 Customer ID:
 Delivery Date: 13-Jul-16

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AW17477

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW17712 Calcium, Total	mg/L	-0.0109	0.22	5.00	85.9	85.4	4.48	4.25 to 5.75	38.0	70 to 130	0.584	20	
AW18251 Mercury, Total by CVAA	mg/L	0.0000289	0.0005	0.004	0.00381	0.00388	0.00387	0.0034 to 0.0046	95.2	70 to 130	1.81	20	
AW17712 Cadmium, Total	mg/L	0.00000357	0.00044	0.10	0.103	0.104	0.0989	0.085 to 0.115	103	70 to 130	1.85	20	
AW17712 Cobalt, Total	mg/L	0.00000269	0.0044	0.10	0.0989	0.101	0.0955	0.085 to 0.115	98.9	70 to 130	1.80	20	
AW17712 Chromium, Total	mg/L	0.00000674	0.0044	0.10	0.101	0.103	0.0995	0.085 to 0.115	101	70 to 130	1.73	20	
AW17712 Arsenic, Total	mg/L	0.0000110	0.0022	0.10	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.40	20	
AW17712 Selenium, Total	mg/L	0.0000390	0.0044	0.10	0.104	0.106	0.108	0.085 to 0.115	104	70 to 130	1.41	20	
AW17712 Thallium, Total	mg/L	0.00000323	0.00044	0.10	0.102	0.104	0.0976	0.085 to 0.115	102	70 to 130	1.43	20	
AW17712 Barium, Total	mg/L	0.00000330	0.0044	0.10	0.133	0.136	0.103	0.085 to 0.115	105	70 to 130	1.78	20	
AW17712 Beryllium, Total	mg/L	0.00000582	0.00132	0.10	0.0937	0.0951	0.0997	0.085 to 0.115	93.7	70 to 130	1.49	20	
AW17712 Lead, Total	mg/L	0.00000478	0.0022	0.10	0.104	0.106	0.0984	0.085 to 0.115	104	70 to 130	1.32	20	
AW17712 Lithium, Total	mg/L	0.000412	0.022	0.20	0.210	0.227	0.184	0.17 to 0.23	105	70 to 130	7.78	20	
AW17712 Antimony, Total	mg/L	0.0000650	0.00132	0.10	0.103	0.106	0.103	0.085 to 0.115	103	70 to 130	2.51	20	
AW17712 Boron, Total	mg/L	0.000522	0.044	1.00	2.56	2.58	0.956	0.85 to 1.15	98.0	70 to 130	0.778	20	
AW17712 Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.102	0.103	0.100	0.085 to 0.115	102	70 to 130	1.78	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 12-Jul-16
 Customer ID:
 Delivery Date: 13-Jul-16

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AW17477

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
			Limit	Limit			Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW17477	Solids, Dissolved	mg/L	0	25			176	49	40 to 60			0.00	5
AW17477	Chloride, Total	mg/L	0.000	0.25	10.00	15.5	5.70	9.86	9 to 11	97.9	80 to 120	0.175	20
AW17477	Sulfate, Total	mg/L	0.000	1.0	20.00	19.9	0.923	19.3	18 to 22	94.9	80 to 120	0.871	20
AW17477	Fluoride, Total	mg/L	0.000	0.3	2.00	1.96	0.110	1.94	1.8 to 2.2	92.5	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/10/2017
 Version: 2.0

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AW17709

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	0.00512	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0784	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	7/21/2016	EPA 200.7		1.015	0.02	0.1	3.70	mg/L
* Calcium, Total	HRG	7/21/2016	EPA 200.7		10.15	1.0	5.0	158	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/21/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	7/21/2016	EPA 200.7		1.015	0.01	0.05	0.135	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.774	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/18/2016	SM 2540C		1		50	874	mg/L
* Chloride, Total	SES	7/15/2016	EPA 300.0		1	0.04	0.25	16.2	mg/L
* Fluoride, Total	SES	7/15/2016	EPA 300.0		1	0.01	0.3	J 0.053	mg/L
* Sulfate, Total	SES	7/16/2016	EPA 300.0		10	3.0	10	560	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AW17709

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB	Rec		Prec	Limit	
			Limit	Spike					Limit	Rec			
AW17712	Cadmium, Total	mg/L	0.0000357	0.00044	0.10	0.103	0.104	0.0989	0.085 to 0.115	103	70 to 130	1.85	20
AW17712	Calcium, Total	mg/L	-0.0109	0.22	5.00	85.9	85.4	4.48	4.25 to 5.75	38.0	70 to 130	0.584	20
AW18251	Mercury, Total by CVAA	mg/L	0.0000289	0.0005	0.004	0.00381	0.00388	0.00387	0.0034 to 0.0046	95.2	70 to 130	1.81	20
AW17712	Cobalt, Total	mg/L	0.0000269	0.0044	0.10	0.0989	0.101	0.0955	0.085 to 0.115	98.9	70 to 130	1.80	20
AW17712	Chromium, Total	mg/L	0.0000674	0.0044	0.10	0.101	0.103	0.0995	0.085 to 0.115	101	70 to 130	1.73	20
AW17712	Antimony, Total	mg/L	0.0000650	0.00132	0.10	0.103	0.106	0.103	0.085 to 0.115	103	70 to 130	2.51	20
AW17712	Boron, Total	mg/L	0.000522	0.044	1.00	2.56	2.58	0.956	0.85 to 1.15	98.0	70 to 130	0.778	20
AW17712	Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.102	0.103	0.100	0.085 to 0.115	102	70 to 130	1.78	20
AW17712	Barium, Total	mg/L	0.0000330	0.0044	0.10	0.133	0.136	0.103	0.085 to 0.115	105	70 to 130	1.78	20
AW17712	Beryllium, Total	mg/L	0.0000582	0.00132	0.10	0.0937	0.0951	0.0997	0.085 to 0.115	93.7	70 to 130	1.49	20
AW17712	Lead, Total	mg/L	0.0000478	0.0022	0.10	0.104	0.106	0.0984	0.085 to 0.115	104	70 to 130	1.32	20
AW17712	Lithium, Total	mg/L	0.000412	0.022	0.20	0.210	0.227	0.184	0.17 to 0.23	105	70 to 130	7.78	20
AW17712	Arsenic, Total	mg/L	0.0000110	0.0022	0.10	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.40	20
AW17712	Selenium, Total	mg/L	0.0000390	0.0044	0.10	0.104	0.106	0.108	0.085 to 0.115	104	70 to 130	1.41	20
AW17712	Thallium, Total	mg/L	0.0000323	0.00044	0.10	0.102	0.104	0.0976	0.085 to 0.115	102	70 to 130	1.43	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AW17709

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW17718	Fluoride, Total	mg/L	0.000	0.3		2.00	1.97	0.000	1.99	1.8 to 2.2	98.5	80 to 120	0	20
AW17714	Solids, Dissolved	mg/L	-2.0	25				478	49	40 to 60			1.06	5
AW17718	Chloride, Total	mg/L	0.000	0.25		10.00	9.70	0.000	9.89	9 to 11	97.0	80 to 120	0	20
AW17718	Sulfate, Total	mg/L	0.000	1.0		20.00	19.5	0.340	19.6	18 to 22	95.8	80 to 120	0.878	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/10/2017
 Version: 2.0

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AW17712

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0279	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	7/21/2016	EPA 200.7		1.015	0.02	0.1	1.58	mg/L
* Calcium, Total	HRG	7/21/2016	EPA 200.7		10.15	1.0	5.0	84.0	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/21/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	7/21/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/18/2016	SM 2540C		1		25	412	mg/L
* Chloride, Total	SES	7/15/2016	EPA 300.0		1	0.04	0.25	12.6	mg/L
* Fluoride, Total	SES	7/15/2016	EPA 300.0		1	0.01	0.3	J 0.054	mg/L
* Sulfate, Total	SES	7/16/2016	EPA 300.0		10	3.0	10	155	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17
 Recovery for Calcium is out of range.
 The spike amount is less than 30% the sample amount, therefore will not be qualified. SGC 11/9/16

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AW17712

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW17712 Cadmium, Total	mg/L	0.00000357	0.00044	0.10	0.103	0.104	0.0989	0.085 to 0.115	103	70 to 130	1.85	20	
AW17712 Chromium, Total	mg/L	0.00000674	0.0044	0.10	0.101	0.103	0.0995	0.085 to 0.115	101	70 to 130	1.73	20	
AW17712 Calcium, Total	mg/L	-0.0109	0.22	5.00	85.9	85.4	4.48	4.25 to 5.75	38.0	70 to 130	0.584	20	
AW18251 Mercury, Total by CVAA	mg/L	0.0000289	0.0005	0.004	0.00381	0.00388	0.00387	0.0034 to 0.0046	95.2	70 to 130	1.81	20	
AW17712 Arsenic, Total	mg/L	0.0000110	0.0022	0.10	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.40	20	
AW17712 Selenium, Total	mg/L	0.0000390	0.0044	0.10	0.104	0.106	0.108	0.085 to 0.115	104	70 to 130	1.41	20	
AW17712 Thallium, Total	mg/L	0.00000323	0.00044	0.10	0.102	0.104	0.0976	0.085 to 0.115	102	70 to 130	1.43	20	
AW17712 Cobalt, Total	mg/L	0.00000269	0.0044	0.10	0.0989	0.101	0.0955	0.085 to 0.115	98.9	70 to 130	1.80	20	
AW17712 Antimony, Total	mg/L	0.0000650	0.00132	0.10	0.103	0.106	0.103	0.085 to 0.115	103	70 to 130	2.51	20	
AW17712 Boron, Total	mg/L	0.000522	0.044	1.00	2.56	2.58	0.956	0.85 to 1.15	98.0	70 to 130	0.778	20	
AW17712 Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.102	0.103	0.100	0.085 to 0.115	102	70 to 130	1.78	20	
AW17712 Barium, Total	mg/L	0.00000330	0.0044	0.10	0.133	0.136	0.103	0.085 to 0.115	105	70 to 130	1.78	20	
AW17712 Beryllium, Total	mg/L	0.00000582	0.00132	0.10	0.0937	0.0951	0.0997	0.085 to 0.115	93.7	70 to 130	1.49	20	
AW17712 Lead, Total	mg/L	0.00000478	0.0022	0.10	0.104	0.106	0.0984	0.085 to 0.115	104	70 to 130	1.32	20	
AW17712 Lithium, Total	mg/L	0.000412	0.022	0.20	0.210	0.227	0.184	0.17 to 0.23	105	70 to 130	7.78	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17
 Recovery for Calcium is out of range.
 The spike amount is less than 30% the sample amount, therefore will not be qualified. SGC 11/9/16

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AW17712

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW17718	Fluoride, Total	mg/L	0.000	0.3	2.00	1.97	0.000	1.99	1.8 to 2.2	98.5	80 to 120	0	20
AW17714	Solids, Dissolved	mg/L	-2.0	25			478	49	40 to 60			1.06	5
AW17718	Chloride, Total	mg/L	0.000	0.25	10.00	9.70	0.000	9.89	9 to 11	97.0	80 to 120	0	20
AW17718	Sulfate, Total	mg/L	0.000	1.0	20.00	19.5	0.340	19.6	18 to 22	95.8	80 to 120	0.878	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: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17
 Recovery for Calcium is out of range.
 The spike amount is less than 30% the sample amount, therefore will not be qualified. SGC 11/9/16

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AW17713

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0222	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	8/1/2016	EPA 200.7		1.015	0.02	0.1	2.41	mg/L
* Calcium, Total	HRG	8/1/2016	EPA 200.7		10.15	1.0	5.0	62.7	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/21/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	8/1/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0170	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/18/2016	SM 2540C		1		25	391	mg/L
* Chloride, Total	SES	7/16/2016	EPA 300.0		10	0.40	2.50	24.8	mg/L
* Fluoride, Total	SES	7/15/2016	EPA 300.0		1	0.01	0.3	J 0.067	mg/L
* Sulfate, Total	SES	7/16/2016	EPA 300.0		10	3.0	10	176	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AW17713

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW17722 Thallium, Total	mg/L	0.00000323	0.00044	0.10	0.101	0.103	0.0976	0.085 to 0.115	101	70 to 130	2.25	20	
AW17722 Cobalt, Total	mg/L	0.00000269	0.0044	0.10	0.0995	0.100	0.0955	0.085 to 0.115	99.5	70 to 130	0.709	20	
AW17722 Antimony, Total	mg/L	0.0000650	0.00132	0.10	0.102	0.103	0.103	0.085 to 0.115	102	70 to 130	0.808	20	
AW17722 Beryllium, Total	mg/L	0.00000582	0.00132	0.10	0.0969	0.0991	0.0997	0.085 to 0.115	96.9	70 to 130	2.29	20	
AW17722 Cadmium, Total	mg/L	0.00000357	0.00044	0.10	0.106	0.105	0.0989	0.085 to 0.115	106	70 to 130	0.382	20	
AW17722 Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.100	0.101	0.100	0.085 to 0.115	100	70 to 130	0.362	20	
AW17722 Boron, Total	mg/L	0.00246	0.044	1.00	0.964	0.960	0.955	0.85 to 1.15	96.4	70 to 130	0.416	20	
AW17722 Selenium, Total	mg/L	0.0000390	0.0044	0.10	0.104	0.105	0.108	0.085 to 0.115	104	70 to 130	1.65	20	
AW17722 Arsenic, Total	mg/L	0.0000110	0.0022	0.10	0.100	0.102	0.101	0.085 to 0.115	100	70 to 130	2.20	20	
AW17722 Barium, Total	mg/L	0.00000330	0.0044	0.10	0.105	0.105	0.103	0.085 to 0.115	105	70 to 130	0.121	20	
AW17722 Calcium, Total	mg/L	-0.0126	0.22	5.00	4.96	4.87	4.97	4.25 to 5.75	99.2	70 to 130	1.83	20	
AW18251 Mercury, Total by CVAA	mg/L	0.0000289	0.0005	0.004	0.00381	0.00388	0.00387	0.0034 to 0.0046	95.2	70 to 130	1.81	20	
AW17722 Chromium, Total	mg/L	0.00000674	0.0044	0.10	0.103	0.105	0.0995	0.085 to 0.115	103	70 to 130	1.86	20	
AW17722 Lead, Total	mg/L	0.00000478	0.0022	0.10	0.103	0.105	0.0984	0.085 to 0.115	103	70 to 130	1.78	20	
AW17722 Lithium, Total	mg/L	-0.0000177	0.022	0.20	0.200	0.196	0.201	0.17 to 0.23	100	70 to 130	2.02	20	

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AW17713

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW17718	Fluoride, Total	mg/L	0.000	0.3	2.00	1.97	0.000	1.99	1.8 to 2.2	98.5	80 to 120	0	20
AW17718	Sulfate, Total	mg/L	0.000	1.0	20.00	19.5	0.340	19.6	18 to 22	95.8	80 to 120	0.878	20
AW17718	Chloride, Total	mg/L	0.000	0.25	10.00	9.70	0.000	9.89	9 to 11	97.0	80 to 120	0	20
AW17714	Solids, Dissolved	mg/L	-2.0	25			478	49	40 to 60			1.06	5

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AW17714

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	0.00666	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0425	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	8/1/2016	EPA 200.7		1.015	0.02	0.1	1.63	mg/L
* Calcium, Total	HRG	8/1/2016	EPA 200.7		10.15	1.0	5.0	66.6	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/21/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	8/1/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0119	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/18/2016	SM 2540C		1		50	468	mg/L
* Chloride, Total	SES	7/16/2016	EPA 300.0		10	0.40	2.50	34.8	mg/L
* Fluoride, Total	SES	7/15/2016	EPA 300.0		1	0.01	0.3	J 0.118	mg/L
* Sulfate, Total	SES	7/16/2016	EPA 300.0		10	3.0	10	159	mg/L

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AW17714

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW17722 Cobalt, Total	mg/L	0.00000269	0.0044	0.10	0.0995	0.100	0.0955	0.085 to 0.115	99.5	70 to 130	0.709	20	
AW17722 Thallium, Total	mg/L	0.00000323	0.00044	0.10	0.101	0.103	0.0976	0.085 to 0.115	101	70 to 130	2.25	20	
AW17722 Antimony, Total	mg/L	0.0000650	0.00132	0.10	0.102	0.103	0.103	0.085 to 0.115	102	70 to 130	0.808	20	
AW17722 Beryllium, Total	mg/L	0.00000582	0.00132	0.10	0.0969	0.0991	0.0997	0.085 to 0.115	96.9	70 to 130	2.29	20	
AW17722 Boron, Total	mg/L	0.00246	0.044	1.00	0.964	0.960	0.955	0.85 to 1.15	96.4	70 to 130	0.416	20	
AW17722 Selenium, Total	mg/L	0.0000390	0.0044	0.10	0.104	0.105	0.108	0.085 to 0.115	104	70 to 130	1.65	20	
AW17722 Cadmium, Total	mg/L	0.00000357	0.00044	0.10	0.106	0.105	0.0989	0.085 to 0.115	106	70 to 130	0.382	20	
AW17722 Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.100	0.101	0.100	0.085 to 0.115	100	70 to 130	0.362	20	
AW17722 Chromium, Total	mg/L	0.00000674	0.0044	0.10	0.103	0.105	0.0995	0.085 to 0.115	103	70 to 130	1.86	20	
AW17722 Lead, Total	mg/L	0.00000478	0.0022	0.10	0.103	0.105	0.0984	0.085 to 0.115	103	70 to 130	1.78	20	
AW17722 Lithium, Total	mg/L	-0.0000177	0.022	0.20	0.200	0.196	0.201	0.17 to 0.23	100	70 to 130	2.02	20	
AW17722 Arsenic, Total	mg/L	0.0000110	0.0022	0.10	0.100	0.102	0.101	0.085 to 0.115	100	70 to 130	2.20	20	
AW17722 Barium, Total	mg/L	0.00000330	0.0044	0.10	0.105	0.105	0.103	0.085 to 0.115	105	70 to 130	0.121	20	
AW17722 Calcium, Total	mg/L	-0.0126	0.22	5.00	4.96	4.87	4.97	4.25 to 5.75	99.2	70 to 130	1.83	20	
AW18251 Mercury, Total by CVAA	mg/L	0.0000289	0.0005	0.004	0.00381	0.00388	0.00387	0.0034 to 0.0046	95.2	70 to 130	1.81	20	

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AW17714

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW17718	Chloride, Total	mg/L	0.000	0.25	10.00	9.70	0.000	9.89	9 to 11	97.0	80 to 120	0	20
AW17718	Fluoride, Total	mg/L	0.000	0.3	2.00	1.97	0.000	1.99	1.8 to 2.2	98.5	80 to 120	0	20
AW17718	Sulfate, Total	mg/L	0.000	1.0	20.00	19.5	0.340	19.6	18 to 22	95.8	80 to 120	0.878	20
AW17714	Solids, Dissolved	mg/L	-2.0	25			478	49	40 to 60			1.06	5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/10/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW17715

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	8/1/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	8/1/2016	EPA 200.7		1.015	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/21/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	8/1/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/18/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	7/15/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	7/15/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	7/15/2016	EPA 300.0		1	0.3	1	J 0.336	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW17715

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	Spike				Limit	Rec	Limit	Prec			
AW17722 Thallium, Total	mg/L	0.00000323	0.00044	0.10	0.101	0.103	0.0976	0.085 to 0.115		101	70 to 130		2.25	20
AW17722 Cobalt, Total	mg/L	0.00000269	0.0044	0.10	0.0995	0.100	0.0955	0.085 to 0.115		99.5	70 to 130		0.709	20
AW17722 Boron, Total	mg/L	0.00246	0.044	1.00	0.964	0.960	0.955	0.85 to 1.15		96.4	70 to 130		0.416	20
AW17722 Selenium, Total	mg/L	0.0000390	0.0044	0.10	0.104	0.105	0.108	0.085 to 0.115		104	70 to 130		1.65	20
AW17722 Antimony, Total	mg/L	0.0000650	0.00132	0.10	0.102	0.103	0.103	0.085 to 0.115		102	70 to 130		0.808	20
AW17722 Beryllium, Total	mg/L	0.00000582	0.00132	0.10	0.0969	0.0991	0.0997	0.085 to 0.115		96.9	70 to 130		2.29	20
AW17722 Arsenic, Total	mg/L	0.0000110	0.0022	0.10	0.100	0.102	0.101	0.085 to 0.115		100	70 to 130		2.20	20
AW17722 Barium, Total	mg/L	0.00000330	0.0044	0.10	0.105	0.105	0.103	0.085 to 0.115		105	70 to 130		0.121	20
AW17722 Calcium, Total	mg/L	-0.0126	0.22	5.00	4.96	4.87	4.97	4.25 to 5.75		99.2	70 to 130		1.83	20
AW18251 Mercury, Total by CVAA	mg/L	0.0000289	0.0005	0.004	0.00381	0.00388	0.00387	0.0034 to 0.0046		95.2	70 to 130		1.81	20
AW17722 Chromium, Total	mg/L	0.00000674	0.0044	0.10	0.103	0.105	0.0995	0.085 to 0.115		103	70 to 130		1.86	20
AW17722 Lead, Total	mg/L	0.00000478	0.0022	0.10	0.103	0.105	0.0984	0.085 to 0.115		103	70 to 130		1.78	20
AW17722 Lithium, Total	mg/L	-0.0000177	0.022	0.20	0.200	0.196	0.201	0.17 to 0.23		100	70 to 130		2.02	20
AW17722 Cadmium, Total	mg/L	0.00000357	0.00044	0.10	0.106	0.105	0.0989	0.085 to 0.115		106	70 to 130		0.382	20
AW17722 Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.100	0.101	0.100	0.085 to 0.115		100	70 to 130		0.362	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW17715

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample		LFB Limit	Rec		Prec Limit	
							Duplicate	LFB		Rec	Limit		Prec
AW17718	Fluoride, Total	mg/L	0.000	0.3	2.00	1.97	0.000	1.99	1.8 to 2.2	98.5	80 to 120	0	20
AW17718	Chloride, Total	mg/L	0.000	0.25	10.00	9.70	0.000	9.89	9 to 11	97.0	80 to 120	0	20
AW17724	Solids, Dissolved	mg/L	3.0	25			212	55	40 to 60			2.17	5
AW17718	Sulfate, Total	mg/L	0.000	1.0	20.00	19.5	0.340	19.6	18 to 22	95.8	80 to 120	0.878	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AW17716

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	J 0.00407	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0336	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	8/1/2016	EPA 200.7		1.015	0.02	0.1	1.32	mg/L
* Calcium, Total	HRG	8/1/2016	EPA 200.7		10.15	1.0	5.0	41.9	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/29/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	8/1/2016	EPA 200.7		1.015	0.01	0.05	0.0788	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.305	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/18/2016	SM 2540C		1		25	255	mg/L
* Chloride, Total	SES	7/15/2016	EPA 300.0		1	0.04	0.25	10.1	mg/L
* Fluoride, Total	SES	7/15/2016	EPA 300.0		1	0.01	0.3	J 0.124	mg/L
* Sulfate, Total	SES	7/16/2016	EPA 300.0		10	3.0	10	135	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17



Corrected Copy

To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AW17716

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW17722 Cobalt, Total	mg/L	0.00000269	0.0044	0.10	0.0995	0.100	0.0955	0.085 to 0.115	99.5	70 to 130	0.709	20	
AW17722 Thallium, Total	mg/L	0.00000323	0.00044	0.10	0.101	0.103	0.0976	0.085 to 0.115	101	70 to 130	2.25	20	
AW17722 Antimony, Total	mg/L	0.0000650	0.00132	0.10	0.102	0.103	0.103	0.085 to 0.115	102	70 to 130	0.808	20	
AW17722 Beryllium, Total	mg/L	0.00000582	0.00132	0.10	0.0969	0.0991	0.0997	0.085 to 0.115	96.9	70 to 130	2.29	20	
AW17722 Boron, Total	mg/L	0.00246	0.044	1.00	0.964	0.960	0.955	0.85 to 1.15	96.4	70 to 130	0.416	20	
AW17722 Selenium, Total	mg/L	0.0000390	0.0044	0.10	0.104	0.105	0.108	0.085 to 0.115	104	70 to 130	1.65	20	
AW17722 Chromium, Total	mg/L	0.00000674	0.0044	0.10	0.103	0.105	0.0995	0.085 to 0.115	103	70 to 130	1.86	20	
AW17722 Lead, Total	mg/L	0.00000478	0.0022	0.10	0.103	0.105	0.0984	0.085 to 0.115	103	70 to 130	1.78	20	
AW17722 Lithium, Total	mg/L	-0.0000177	0.022	0.20	0.200	0.196	0.201	0.17 to 0.23	100	70 to 130	2.02	20	
AW17722 Cadmium, Total	mg/L	0.00000357	0.00044	0.10	0.106	0.105	0.0989	0.085 to 0.115	106	70 to 130	0.382	20	
AW17722 Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.100	0.101	0.100	0.085 to 0.115	100	70 to 130	0.362	20	
AW17722 Arsenic, Total	mg/L	0.0000110	0.0022	0.10	0.100	0.102	0.101	0.085 to 0.115	100	70 to 130	2.20	20	
AW17722 Barium, Total	mg/L	0.00000330	0.0044	0.10	0.105	0.105	0.103	0.085 to 0.115	105	70 to 130	0.121	20	
AW17722 Calcium, Total	mg/L	-0.0126	0.22	5.00	4.96	4.87	4.97	4.25 to 5.75	99.2	70 to 130	1.83	20	
AW17725 Mercury, Total by CVAA	mg/L	0.0000927	0.0005	0.004	0.00396	0.00398	0.00392	0.0034 to 0.0046	99.0	70 to 130	0.559	20	

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AW17716

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW17718	Fluoride, Total	mg/L	0.000	0.3	2.00	1.97	0.000	1.99	1.8 to 2.2	98.5	80 to 120	0	20
AW17718	Chloride, Total	mg/L	0.000	0.25	10.00	9.70	0.000	9.89	9 to 11	97.0	80 to 120	0	20
AW17718	Sulfate, Total	mg/L	0.000	1.0	20.00	19.5	0.340	19.6	18 to 22	95.8	80 to 120	0.878	20
AW17724	Solids, Dissolved	mg/L	3.0	25			212	55	40 to 60			2.17	5

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AW17717

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	J 0.000882	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	0.0130	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0965	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	8/1/2016	EPA 200.7		1.015	0.02	0.1	2.96	mg/L
* Calcium, Total	HRG	8/1/2016	EPA 200.7		10.15	1.0	5.0	73.0	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	J 0.000277	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/29/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	8/1/2016	EPA 200.7		1.015	0.01	0.05	0.616	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	2.10	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/18/2016	SM 2540C		1		25	434	mg/L
* Chloride, Total	SES	7/15/2016	EPA 300.0		1	0.04	0.25	13.8	mg/L
* Fluoride, Total	SES	7/15/2016	EPA 300.0		1	0.01	0.3	J 0.213	mg/L
* Sulfate, Total	SES	7/16/2016	EPA 300.0		10	3.0	10	246	mg/L

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AW17717

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW17722 Thallium, Total	mg/L	0.00000323	0.00044	0.10	0.101	0.103	0.0976	0.085 to 0.115	101	70 to 130	2.25	20	
AW17722 Cobalt, Total	mg/L	0.00000269	0.0044	0.10	0.0995	0.100	0.0955	0.085 to 0.115	99.5	70 to 130	0.709	20	
AW17722 Arsenic, Total	mg/L	0.0000110	0.0022	0.10	0.100	0.102	0.101	0.085 to 0.115	100	70 to 130	2.20	20	
AW17722 Barium, Total	mg/L	0.00000330	0.0044	0.10	0.105	0.105	0.103	0.085 to 0.115	105	70 to 130	0.121	20	
AW17722 Calcium, Total	mg/L	-0.0126	0.22	5.00	4.96	4.87	4.97	4.25 to 5.75	99.2	70 to 130	1.83	20	
AW17725 Mercury, Total by CVAA	mg/L	0.0000927	0.0005	0.004	0.00396	0.00398	0.00392	0.0034 to 0.0046	99.0	70 to 130	0.559	20	
AW17722 Boron, Total	mg/L	0.00246	0.044	1.00	0.964	0.960	0.955	0.85 to 1.15	96.4	70 to 130	0.416	20	
AW17722 Selenium, Total	mg/L	0.0000390	0.0044	0.10	0.104	0.105	0.108	0.085 to 0.115	104	70 to 130	1.65	20	
AW17722 Cadmium, Total	mg/L	0.00000357	0.00044	0.10	0.106	0.105	0.0989	0.085 to 0.115	106	70 to 130	0.382	20	
AW17722 Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.100	0.101	0.100	0.085 to 0.115	100	70 to 130	0.362	20	
AW17722 Antimony, Total	mg/L	0.0000650	0.00132	0.10	0.102	0.103	0.103	0.085 to 0.115	102	70 to 130	0.808	20	
AW17722 Beryllium, Total	mg/L	0.00000582	0.00132	0.10	0.0969	0.0991	0.0997	0.085 to 0.115	96.9	70 to 130	2.29	20	
AW17722 Chromium, Total	mg/L	0.00000674	0.0044	0.10	0.103	0.105	0.0995	0.085 to 0.115	103	70 to 130	1.86	20	
AW17722 Lead, Total	mg/L	0.00000478	0.0022	0.10	0.103	0.105	0.0984	0.085 to 0.115	103	70 to 130	1.78	20	
AW17722 Lithium, Total	mg/L	-0.0000177	0.022	0.20	0.200	0.196	0.201	0.17 to 0.23	100	70 to 130	2.02	20	

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Expiration: June 30, 2018

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AW17717

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW17718	Fluoride, Total	mg/L	0.000	0.3		2.00	1.97	0.000	1.99	1.8 to 2.2	98.5	80 to 120	0	20
AW17724	Solids, Dissolved	mg/L	3.0	25				212	55	40 to 60			2.17	5
AW17718	Chloride, Total	mg/L	0.000	0.25		10.00	9.70	0.000	9.89	9 to 11	97.0	80 to 120	0	20
AW17718	Sulfate, Total	mg/L	0.000	1.0		20.00	19.5	0.340	19.6	18 to 22	95.8	80 to 120	0.878	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/10/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPEB
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AW17718

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	8/1/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	8/1/2016	EPA 200.7		1.015	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/29/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	8/1/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/18/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	7/15/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	7/15/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	7/15/2016	EPA 300.0		1	0.3	1	J 0.343	mg/L

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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, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPEB
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AW17718

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	Spike				Limit	Rec	Limit	Prec			
AW17722 Thallium, Total	mg/L	0.00000323	0.00044	0.10	0.101	0.103	0.0976	0.085 to 0.115		101	70 to 130		2.25	20
AW17722 Cobalt, Total	mg/L	0.00000269	0.0044	0.10	0.0995	0.100	0.0955	0.085 to 0.115		99.5	70 to 130		0.709	20
AW17722 Boron, Total	mg/L	0.00246	0.044	1.00	0.964	0.960	0.955	0.85 to 1.15		96.4	70 to 130		0.416	20
AW17722 Selenium, Total	mg/L	0.0000390	0.0044	0.10	0.104	0.105	0.108	0.085 to 0.115		104	70 to 130		1.65	20
AW17722 Chromium, Total	mg/L	0.00000674	0.0044	0.10	0.103	0.105	0.0995	0.085 to 0.115		103	70 to 130		1.86	20
AW17722 Lead, Total	mg/L	0.00000478	0.0022	0.10	0.103	0.105	0.0984	0.085 to 0.115		103	70 to 130		1.78	20
AW17722 Lithium, Total	mg/L	-0.0000177	0.022	0.20	0.200	0.196	0.201	0.17 to 0.23		100	70 to 130		2.02	20
AW17722 Arsenic, Total	mg/L	0.0000110	0.0022	0.10	0.100	0.102	0.101	0.085 to 0.115		100	70 to 130		2.20	20
AW17722 Barium, Total	mg/L	0.00000330	0.0044	0.10	0.105	0.105	0.103	0.085 to 0.115		105	70 to 130		0.121	20
AW17722 Calcium, Total	mg/L	-0.0126	0.22	5.00	4.96	4.87	4.97	4.25 to 5.75		99.2	70 to 130		1.83	20
AW17725 Mercury, Total by CVAA	mg/L	0.0000927	0.0005	0.004	0.00396	0.00398	0.00392	0.0034 to 0.0046		99.0	70 to 130		0.559	20
AW17722 Antimony, Total	mg/L	0.0000650	0.00132	0.10	0.102	0.103	0.103	0.085 to 0.115		102	70 to 130		0.808	20
AW17722 Beryllium, Total	mg/L	0.00000582	0.00132	0.10	0.0969	0.0991	0.0997	0.085 to 0.115		96.9	70 to 130		2.29	20
AW17722 Cadmium, Total	mg/L	0.00000357	0.00044	0.10	0.106	0.105	0.0989	0.085 to 0.115		106	70 to 130		0.382	20
AW17722 Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.100	0.101	0.100	0.085 to 0.115		100	70 to 130		0.362	20

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPEB
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AW17718

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW17718	Sulfate, Total	mg/L	0.000	1.0	20.00	19.5	0.340	19.6	18 to 22	95.8	80 to 120	0.878	20
AW17718	Chloride, Total	mg/L	0.000	0.25	10.00	9.70	0.000	9.89	9 to 11	97.0	80 to 120	0	20
AW17724	Solids, Dissolved	mg/L	3.0	25			212	55	40 to 60			2.17	5
AW17718	Fluoride, Total	mg/L	0.000	0.3	2.00	1.97	0.000	1.99	1.8 to 2.2	98.5	80 to 120	0	20

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/10/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AW17719

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	J 0.00400	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0555	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	8/1/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	8/1/2016	EPA 200.7		10.15	1.0	5.0	43.1	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/29/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	8/1/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0138	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/18/2016	SM 2540C		1		25	225	mg/L
* Chloride, Total	SES	7/15/2016	EPA 300.0		1	0.04	0.25	10.3	mg/L
* Fluoride, Total	SES	7/15/2016	EPA 300.0		1	0.01	0.3	J 0.064	mg/L
* Sulfate, Total	SES	7/15/2016	EPA 300.0		1	0.3	1	24.2	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AW17719

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW17722 Thallium, Total	mg/L	0.00000323	0.00044	0.10	0.101	0.103	0.0976	0.085 to 0.115	101	70 to 130	2.25	20	
AW17722 Cobalt, Total	mg/L	0.00000269	0.0044	0.10	0.0995	0.100	0.0955	0.085 to 0.115	99.5	70 to 130	0.709	20	
AW17722 Cadmium, Total	mg/L	0.00000357	0.00044	0.10	0.106	0.105	0.0989	0.085 to 0.115	106	70 to 130	0.382	20	
AW17722 Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.100	0.101	0.100	0.085 to 0.115	100	70 to 130	0.362	20	
AW17722 Arsenic, Total	mg/L	0.0000110	0.0022	0.10	0.100	0.102	0.101	0.085 to 0.115	100	70 to 130	2.20	20	
AW17722 Barium, Total	mg/L	0.00000330	0.0044	0.10	0.105	0.105	0.103	0.085 to 0.115	105	70 to 130	0.121	20	
AW17722 Calcium, Total	mg/L	-0.0126	0.22	5.00	4.96	4.87	4.97	4.25 to 5.75	99.2	70 to 130	1.83	20	
AW17725 Mercury, Total by CVAA	mg/L	0.0000927	0.0005	0.004	0.00396	0.00398	0.00392	0.0034 to 0.0046	99.0	70 to 130	0.559	20	
AW17722 Chromium, Total	mg/L	0.00000674	0.0044	0.10	0.103	0.105	0.0995	0.085 to 0.115	103	70 to 130	1.86	20	
AW17722 Lead, Total	mg/L	0.00000478	0.0022	0.10	0.103	0.105	0.0984	0.085 to 0.115	103	70 to 130	1.78	20	
AW17722 Lithium, Total	mg/L	-0.0000177	0.022	0.20	0.200	0.196	0.201	0.17 to 0.23	100	70 to 130	2.02	20	
AW17722 Boron, Total	mg/L	0.00246	0.044	1.00	0.964	0.960	0.955	0.85 to 1.15	96.4	70 to 130	0.416	20	
AW17722 Selenium, Total	mg/L	0.0000390	0.0044	0.10	0.104	0.105	0.108	0.085 to 0.115	104	70 to 130	1.65	20	
AW17722 Antimony, Total	mg/L	0.0000650	0.00132	0.10	0.102	0.103	0.103	0.085 to 0.115	102	70 to 130	0.808	20	
AW17722 Beryllium, Total	mg/L	0.00000582	0.00132	0.10	0.0969	0.0991	0.0997	0.085 to 0.115	96.9	70 to 130	2.29	20	

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AW17719

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW17728	Sulfate, Total	mg/L	0.334	1.0	200	381	171	19.4	18 to 22	104	80 to 120	0.583	20
AW17728	Chloride, Total	mg/L	0.000	0.25	100	128	26.6	9.91	9 to 11	101	80 to 120	1.12	20
AW17724	Solids, Dissolved	mg/L	3.0	25			212	55	40 to 60			2.17	5
AW17728	Fluoride, Total	mg/L	0.000	0.3	2.00	2.04	0.095	1.94	1.8 to 2.2	97.2	80 to 120	1.05	20

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Expiration: June 30, 2018

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CC:

Reported: 7/10/2017
 Version: 2.0

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AW17720

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0139	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	8/1/2016	EPA 200.7		1.015	0.02	0.1	J 0.0305	mg/L
* Calcium, Total	HRG	8/1/2016	EPA 200.7		1.015	0.1	0.5	36.7	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/29/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	8/1/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/18/2016	SM 2540C		1		25	179	mg/L
* Chloride, Total	SES	7/15/2016	EPA 300.0		1	0.04	0.25	3.32	mg/L
* Fluoride, Total	SES	7/15/2016	EPA 300.0		1	0.01	0.3	J 0.060	mg/L
* Sulfate, Total	SES	7/15/2016	EPA 300.0		1	0.3	1	4.11	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AW17720

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW17722 Thallium, Total	mg/L	0.00000323	0.00044	0.10	0.101	0.103	0.0976	0.085 to 0.115	101	70 to 130	2.25	20	
AW17722 Cobalt, Total	mg/L	0.00000269	0.0044	0.10	0.0995	0.100	0.0955	0.085 to 0.115	99.5	70 to 130	0.709	20	
AW17722 Boron, Total	mg/L	0.00246	0.044	1.00	0.964	0.960	0.955	0.85 to 1.15	96.4	70 to 130	0.416	20	
AW17722 Selenium, Total	mg/L	0.0000390	0.0044	0.10	0.104	0.105	0.108	0.085 to 0.115	104	70 to 130	1.65	20	
AW17722 Cadmium, Total	mg/L	0.00000357	0.00044	0.10	0.106	0.105	0.0989	0.085 to 0.115	106	70 to 130	0.382	20	
AW17722 Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.100	0.101	0.100	0.085 to 0.115	100	70 to 130	0.362	20	
AW17722 Antimony, Total	mg/L	0.0000650	0.00132	0.10	0.102	0.103	0.103	0.085 to 0.115	102	70 to 130	0.808	20	
AW17722 Beryllium, Total	mg/L	0.00000582	0.00132	0.10	0.0969	0.0991	0.0997	0.085 to 0.115	96.9	70 to 130	2.29	20	
AW17722 Arsenic, Total	mg/L	0.0000110	0.0022	0.10	0.100	0.102	0.101	0.085 to 0.115	100	70 to 130	2.20	20	
AW17722 Barium, Total	mg/L	0.00000330	0.0044	0.10	0.105	0.105	0.103	0.085 to 0.115	105	70 to 130	0.121	20	
AW17722 Calcium, Total	mg/L	-0.0126	0.22	5.00	4.96	4.87	4.97	4.25 to 5.75	99.2	70 to 130	1.83	20	
AW17725 Mercury, Total by CVAA	mg/L	0.0000927	0.0005	0.004	0.00396	0.00398	0.00392	0.0034 to 0.0046	99.0	70 to 130	0.559	20	
AW17722 Chromium, Total	mg/L	0.00000674	0.0044	0.10	0.103	0.105	0.0995	0.085 to 0.115	103	70 to 130	1.86	20	
AW17722 Lead, Total	mg/L	0.00000478	0.0022	0.10	0.103	0.105	0.0984	0.085 to 0.115	103	70 to 130	1.78	20	
AW17722 Lithium, Total	mg/L	-0.0000177	0.022	0.20	0.200	0.196	0.201	0.17 to 0.23	100	70 to 130	2.02	20	

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AW17720

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW17728	Sulfate, Total	mg/L	0.334	1.0	200	381	171	19.4	18 to 22	104	80 to 120	0.583	20
AW17728	Chloride, Total	mg/L	0.000	0.25	100	128	26.6	9.91	9 to 11	101	80 to 120	1.12	20
AW17724	Solids, Dissolved	mg/L	3.0	25			212	55	40 to 60			2.17	5
AW17728	Fluoride, Total	mg/L	0.000	0.3	2.00	2.04	0.095	1.94	1.8 to 2.2	97.2	80 to 120	1.05	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/10/2017
 Version: 2.0

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

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AW17721

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0120	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	8/1/2016	EPA 200.7		1.015	0.02	0.1	0.125	mg/L
* Calcium, Total	HRG	8/1/2016	EPA 200.7		1.015	0.1	0.5	36.4	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/29/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	8/1/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/18/2016	SM 2540C		1		25	192	mg/L
* Chloride, Total	SES	7/15/2016	EPA 300.0		1	0.04	0.25	5.93	mg/L
* Fluoride, Total	SES	7/15/2016	EPA 300.0		1	0.01	0.3	J 0.049	mg/L
* Sulfate, Total	SES	7/15/2016	EPA 300.0		1	0.3	1	32.4	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AW17721

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	Spike				Limit	Rec	Limit	Prec			
AW17722 Thallium, Total	mg/L	0.00000323	0.00044	0.10	0.101	0.103	0.0976	0.085 to 0.115		101	70 to 130		2.25	20
AW17722 Cadmium, Total	mg/L	0.00000357	0.00044	0.10	0.106	0.105	0.0989	0.085 to 0.115		106	70 to 130		0.382	20
AW17722 Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.100	0.101	0.100	0.085 to 0.115		100	70 to 130		0.362	20
AW17722 Antimony, Total	mg/L	0.0000650	0.00132	0.10	0.102	0.103	0.103	0.085 to 0.115		102	70 to 130		0.808	20
AW17722 Beryllium, Total	mg/L	0.00000582	0.00132	0.10	0.0969	0.0991	0.0997	0.085 to 0.115		96.9	70 to 130		2.29	20
AW17722 Arsenic, Total	mg/L	0.0000110	0.0022	0.10	0.100	0.102	0.101	0.085 to 0.115		100	70 to 130		2.20	20
AW17722 Barium, Total	mg/L	0.00000330	0.0044	0.10	0.105	0.105	0.103	0.085 to 0.115		105	70 to 130		0.121	20
AW17722 Calcium, Total	mg/L	-0.0126	0.22	5.00	4.96	4.87	4.97	4.25 to 5.75		99.2	70 to 130		1.83	20
AW17725 Mercury, Total by CVAA	mg/L	0.0000927	0.0005	0.004	0.00396	0.00398	0.00392	0.0034 to 0.0046		99.0	70 to 130		0.559	20
AW17722 Chromium, Total	mg/L	0.00000674	0.0044	0.10	0.103	0.105	0.0995	0.085 to 0.115		103	70 to 130		1.86	20
AW17722 Lead, Total	mg/L	0.00000478	0.0022	0.10	0.103	0.105	0.0984	0.085 to 0.115		103	70 to 130		1.78	20
AW17722 Lithium, Total	mg/L	-0.0000177	0.022	0.20	0.200	0.196	0.201	0.17 to 0.23		100	70 to 130		2.02	20
AW17722 Boron, Total	mg/L	0.00246	0.044	1.00	0.964	0.960	0.955	0.85 to 1.15		96.4	70 to 130		0.416	20
AW17722 Selenium, Total	mg/L	0.0000390	0.0044	0.10	0.104	0.105	0.108	0.085 to 0.115		104	70 to 130		1.65	20
AW17722 Cobalt, Total	mg/L	0.00000269	0.0044	0.10	0.0995	0.100	0.0955	0.085 to 0.115		99.5	70 to 130		0.709	20

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Alabama Power General Test Laboratory
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 Calera, AL 35040
 (205) 664-6032 or 6171
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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AW17721

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW17728	Sulfate, Total	mg/L	0.334	1.0	200	381	171	19.4	18 to 22	104	80 to 120	0.583	20
AW17728	Chloride, Total	mg/L	0.000	0.25	100	128	26.6	9.91	9 to 11	101	80 to 120	1.12	20
AW17724	Solids, Dissolved	mg/L	3.0	25			212	55	40 to 60			2.17	5
AW17728	Fluoride, Total	mg/L	0.000	0.3	2.00	2.04	0.095	1.94	1.8 to 2.2	97.2	80 to 120	1.05	20

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CC:

Reported: 7/10/2017
 Version: 2.0

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

Certificate Of Analysis  **Alabama Power**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW17722

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	8/1/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	8/1/2016	EPA 200.7		1.015	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/29/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	8/1/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/18/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	7/15/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	7/15/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	7/15/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW17722

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW17722 Cobalt, Total	mg/L	0.00000269	0.0044	0.10	0.0995	0.100	0.0955	0.085 to 0.115	99.5	70 to 130	0.709	20	
AW17722 Thallium, Total	mg/L	0.00000323	0.00044	0.10	0.101	0.103	0.0976	0.085 to 0.115	101	70 to 130	2.25	20	
AW17722 Antimony, Total	mg/L	0.0000650	0.00132	0.10	0.102	0.103	0.103	0.085 to 0.115	102	70 to 130	0.808	20	
AW17722 Beryllium, Total	mg/L	0.00000582	0.00132	0.10	0.0969	0.0991	0.0997	0.085 to 0.115	96.9	70 to 130	2.29	20	
AW17722 Boron, Total	mg/L	0.00246	0.044	1.00	0.964	0.960	0.955	0.85 to 1.15	96.4	70 to 130	0.416	20	
AW17722 Selenium, Total	mg/L	0.0000390	0.0044	0.10	0.104	0.105	0.108	0.085 to 0.115	104	70 to 130	1.65	20	
AW17722 Cadmium, Total	mg/L	0.00000357	0.00044	0.10	0.106	0.105	0.0989	0.085 to 0.115	106	70 to 130	0.382	20	
AW17722 Molybdenum, Total	mg/L	0.0000140	0.0044	0.10	0.100	0.101	0.100	0.085 to 0.115	100	70 to 130	0.362	20	
AW17722 Arsenic, Total	mg/L	0.0000110	0.0022	0.10	0.100	0.102	0.101	0.085 to 0.115	100	70 to 130	2.20	20	
AW17722 Barium, Total	mg/L	0.00000330	0.0044	0.10	0.105	0.105	0.103	0.085 to 0.115	105	70 to 130	0.121	20	
AW17722 Calcium, Total	mg/L	-0.0126	0.22	5.00	4.96	4.87	4.97	4.25 to 5.75	99.2	70 to 130	1.83	20	
AW17725 Mercury, Total by CVAA	mg/L	0.0000927	0.0005	0.004	0.00396	0.00398	0.00392	0.0034 to 0.0046	99.0	70 to 130	0.559	20	
AW17722 Chromium, Total	mg/L	0.00000674	0.0044	0.10	0.103	0.105	0.0995	0.085 to 0.115	103	70 to 130	1.86	20	
AW17722 Lead, Total	mg/L	0.00000478	0.0022	0.10	0.103	0.105	0.0984	0.085 to 0.115	103	70 to 130	1.78	20	
AW17722 Lithium, Total	mg/L	-0.0000177	0.022	0.20	0.200	0.196	0.201	0.17 to 0.23	100	70 to 130	2.02	20	

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Alabama Power General Test Laboratory
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 FAX (205) 257-1654

Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW17722

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW17728	Sulfate, Total	mg/L	0.334	1.0	200	381	171	19.4	18 to 22	104	80 to 120	0.583	20
AW17728	Chloride, Total	mg/L	0.000	0.25	100	128	26.6	9.91	9 to 11	101	80 to 120	1.12	20
AW17724	Solids, Dissolved	mg/L	3.0	25			212	55	40 to 60			2.17	5
AW17728	Fluoride, Total	mg/L	0.000	0.3	2.00	2.04	0.095	1.94	1.8 to 2.2	97.2	80 to 120	1.05	20

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CC:

Reported: 7/10/2017
 Version: 2.0

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Certificate Of Analysis  **Alabama Power**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AW17723

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	J 0.00210	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0735	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	8/3/2016	EPA 200.7		1.015	0.02	0.1	0.299	mg/L
* Calcium, Total	HRG	8/3/2016	EPA 200.7		10.15	1.0	5.0	62.9	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/29/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	8/3/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/18/2016	SM 2540C		1		25	352	mg/L
* Chloride, Total	SES	7/15/2016	EPA 300.0		1	0.04	0.25	19.6	mg/L
* Fluoride, Total	SES	7/15/2016	EPA 300.0		1	0.01	0.3	J 0.058	mg/L
* Sulfate, Total	SES	7/15/2016	EPA 300.0		1	0.3	1	86.2	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AW17723

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW17993 Molybdenum, Total	mg/L	0.0000142	0.0044	0.10	0.116	0.115	0.0997	0.085 to 0.115	98.4	70 to 130	0.964	20	
AW17993 Arsenic, Total	mg/L	0.0000115	0.0022	0.10	0.106	0.104	0.102	0.085 to 0.115	103	70 to 130	1.21	20	
AW17993 Barium, Total	mg/L	0.0000114	0.0044	0.10	0.146	0.146	0.100	0.085 to 0.115	100	70 to 130	0.580	20	
AW17993 Beryllium, Total	mg/L	0.00000680	0.00132	0.10	0.105	0.104	0.108	0.085 to 0.115	105	70 to 130	0.935	20	
AW17993 Boron, Total	mg/L	0.00311	0.044	1.00	2.21	2.20	0.956	0.85 to 1.15	91.0	70 to 130	0.454	20	
AW17993 Calcium, Total	mg/L	-0.0185	0.22	5.00	113	123	5.03	4.25 to 5.75	80.0	70 to 130	8.47	20	
AW17725 Mercury, Total by CVAA	mg/L	0.0000927	0.0005	0.004	0.00396	0.00398	0.00392	0.0034 to 0.0046	99.0	70 to 130	0.559	20	
AW17993 Lithium, Total	mg/L	0.000449	0.022	0.200	0.296	0.293	0.215	0.17 to 0.23	126	70 to 130	1.02	20	
AW17993 Chromium, Total	mg/L	0.00000861	0.0044	0.10	0.103	0.102	0.101	0.085 to 0.115	103	70 to 130	0.662	20	
AW17993 Thallium, Total	mg/L	0.00000422	0.00044	0.10	0.101	0.102	0.0967	0.085 to 0.115	101	70 to 130	0.634	20	
AW17993 Cadmium, Total	mg/L	0.000000589	0.00044	0.10	0.107	0.106	0.109	0.085 to 0.115	107	70 to 130	0.903	20	
AW17993 Cobalt, Total	mg/L	0.00000361	0.0044	0.10	0.0953	0.0949	0.0960	0.085 to 0.115	95.3	70 to 130	0.436	20	
AW17993 Lead, Total	mg/L	0.00000898	0.0022	0.10	0.101	0.101	0.0981	0.085 to 0.115	101	70 to 130	0.0934	20	
AW17993 Antimony, Total	mg/L	0.0000814	0.00132	0.10	0.0998	0.0989	0.0999	0.085 to 0.115	99.8	70 to 130	0.920	20	
AW17993 Selenium, Total	mg/L	0.0000609	0.0044	0.10	0.104	0.102	0.107	0.085 to 0.115	104	70 to 130	1.80	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AW17723

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW17728	Sulfate, Total	mg/L	0.334	1.0	200	381	171	19.4	18 to 22	104	80 to 120	0.583	20
AW17728	Chloride, Total	mg/L	0.000	0.25	100	128	26.6	9.91	9 to 11	101	80 to 120	1.12	20
AW17724	Solids, Dissolved	mg/L	3.0	25			212	55	40 to 60			2.17	5
AW17728	Fluoride, Total	mg/L	0.000	0.3	2.00	2.04	0.095	1.94	1.8 to 2.2	97.2	80 to 120	1.05	20

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Expiration: June 30, 2018

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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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AW17724

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0338	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	8/3/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	8/3/2016	EPA 200.7		10.15	1.0	5.0	45.6	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/29/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	8/3/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/18/2016	SM 2540C		1		25	203	mg/L
* Chloride, Total	SES	7/15/2016	EPA 300.0		1	0.04	0.25	4.33	mg/L
* Fluoride, Total	SES	7/15/2016	EPA 300.0		1	0.01	0.3	J 0.060	mg/L
* Sulfate, Total	SES	7/15/2016	EPA 300.0		1	0.3	1	J 0.380	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AW17724

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW17993 Molybdenum, Total	mg/L	0.0000142	0.0044	0.10	0.116	0.115	0.0997	0.085 to 0.115	98.4	70 to 130	0.964	20	
AW17993 Arsenic, Total	mg/L	0.0000115	0.0022	0.10	0.106	0.104	0.102	0.085 to 0.115	103	70 to 130	1.21	20	
AW17993 Boron, Total	mg/L	0.00311	0.044	1.00	2.21	2.20	0.956	0.85 to 1.15	91.0	70 to 130	0.454	20	
AW17993 Calcium, Total	mg/L	-0.0185	0.22	5.00	113	123	5.03	4.25 to 5.75	80.0	70 to 130	8.47	20	
AW17725 Mercury, Total by CVAA	mg/L	0.0000927	0.0005	0.004	0.00396	0.00398	0.00392	0.0034 to 0.0046	99.0	70 to 130	0.559	20	
AW17993 Lithium, Total	mg/L	0.000449	0.022	0.200	0.296	0.293	0.215	0.17 to 0.23	126	70 to 130	1.02	20	
AW17993 Barium, Total	mg/L	0.0000114	0.0044	0.10	0.146	0.146	0.100	0.085 to 0.115	100	70 to 130	0.580	20	
AW17993 Beryllium, Total	mg/L	0.00000680	0.00132	0.10	0.105	0.104	0.108	0.085 to 0.115	105	70 to 130	0.935	20	
AW17993 Antimony, Total	mg/L	0.0000814	0.00132	0.10	0.0998	0.0989	0.0999	0.085 to 0.115	99.8	70 to 130	0.920	20	
AW17993 Selenium, Total	mg/L	0.0000609	0.0044	0.10	0.104	0.102	0.107	0.085 to 0.115	104	70 to 130	1.80	20	
AW17993 Cadmium, Total	mg/L	0.000000589	0.00044	0.10	0.107	0.106	0.109	0.085 to 0.115	107	70 to 130	0.903	20	
AW17993 Cobalt, Total	mg/L	0.00000361	0.0044	0.10	0.0953	0.0949	0.0960	0.085 to 0.115	95.3	70 to 130	0.436	20	
AW17993 Lead, Total	mg/L	0.00000898	0.0022	0.10	0.101	0.101	0.0981	0.085 to 0.115	101	70 to 130	0.0934	20	
AW17993 Chromium, Total	mg/L	0.00000861	0.0044	0.10	0.103	0.102	0.101	0.085 to 0.115	103	70 to 130	0.662	20	
AW17993 Thallium, Total	mg/L	0.00000422	0.00044	0.10	0.101	0.102	0.0967	0.085 to 0.115	101	70 to 130	0.634	20	

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AW17724

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW17728	Sulfate, Total	mg/L	0.334	1.0	200	381	171	19.4	18 to 22	104	80 to 120	0.583	20
AW17728	Chloride, Total	mg/L	0.000	0.25	100	128	26.6	9.91	9 to 11	101	80 to 120	1.12	20
AW17724	Solids, Dissolved	mg/L	3.0	25			212	55	40 to 60			2.17	5
AW17728	Fluoride, Total	mg/L	0.000	0.3	2.00	2.04	0.095	1.94	1.8 to 2.2	97.2	80 to 120	1.05	20

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CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW17725

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	8/3/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	8/3/2016	EPA 200.7		1.015	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/29/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	8/3/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/18/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	7/15/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	7/15/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	7/15/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW17725

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW17993 Molybdenum, Total	mg/L	0.0000142	0.0044	0.10	0.116	0.115	0.0997	0.085 to 0.115	98.4	70 to 130	0.964	20	
AW17993 Arsenic, Total	mg/L	0.0000115	0.0022	0.10	0.106	0.104	0.102	0.085 to 0.115	103	70 to 130	1.21	20	
AW17993 Barium, Total	mg/L	0.0000114	0.0044	0.10	0.146	0.146	0.100	0.085 to 0.115	100	70 to 130	0.580	20	
AW17993 Beryllium, Total	mg/L	0.00000680	0.00132	0.10	0.105	0.104	0.108	0.085 to 0.115	105	70 to 130	0.935	20	
AW17993 Boron, Total	mg/L	0.00311	0.044	1.00	2.21	2.20	0.956	0.85 to 1.15	91.0	70 to 130	0.454	20	
AW17993 Calcium, Total	mg/L	-0.0185	0.22	5.00	113	123	5.03	4.25 to 5.75	80.0	70 to 130	8.47	20	
AW17993 Chromium, Total	mg/L	0.00000861	0.0044	0.10	0.103	0.102	0.101	0.085 to 0.115	103	70 to 130	0.662	20	
AW17993 Thallium, Total	mg/L	0.00000422	0.00044	0.10	0.101	0.102	0.0967	0.085 to 0.115	101	70 to 130	0.634	20	
AW17993 Cadmium, Total	mg/L	0.000000589	0.00044	0.10	0.107	0.106	0.109	0.085 to 0.115	107	70 to 130	0.903	20	
AW17993 Cobalt, Total	mg/L	0.00000361	0.0044	0.10	0.0953	0.0949	0.0960	0.085 to 0.115	95.3	70 to 130	0.436	20	
AW17993 Lead, Total	mg/L	0.00000898	0.0022	0.10	0.101	0.101	0.0981	0.085 to 0.115	101	70 to 130	0.0934	20	
AW17993 Antimony, Total	mg/L	0.0000814	0.00132	0.10	0.0998	0.0989	0.0999	0.085 to 0.115	99.8	70 to 130	0.920	20	
AW17993 Selenium, Total	mg/L	0.0000609	0.0044	0.10	0.104	0.102	0.107	0.085 to 0.115	104	70 to 130	1.80	20	
AW17725 Mercury, Total by CVAA	mg/L	0.0000927	0.0005	0.004	0.00396	0.00398	0.00392	0.0034 to 0.0046	99.0	70 to 130	0.559	20	
AW17993 Lithium, Total	mg/L	0.000449	0.022	0.200	0.296	0.293	0.215	0.17 to 0.23	126	70 to 130	1.02	20	

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW17725

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW17728	Solids, Dissolved	mg/L	3.0	25			440	55	40 to 60			0.571	5
AW17728	Fluoride, Total	mg/L	0.000	0.3	2.00	2.04	0.095	1.94	1.8 to 2.2	97.2	80 to 120	1.05	20
AW17728	Sulfate, Total	mg/L	0.334	1.0	200	381	171	19.4	18 to 22	104	80 to 120	0.583	20
AW17728	Chloride, Total	mg/L	0.000	0.25	100	128	26.6	9.91	9 to 11	101	80 to 120	1.12	20

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CC:

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 744 County Road 87, GSC#8
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 FAX (205) 257-1654

Certificate Of Analysis  **Alabama Power**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AW17726

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0281	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	8/3/2016	EPA 200.7		1.015	0.02	0.1	2.18	mg/L
* Calcium, Total	HRG	8/3/2016	EPA 200.7		10.15	1.0	5.0	67.7	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/29/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	8/3/2016	EPA 200.7		1.015	0.01	0.05	J 0.0499	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.273	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/18/2016	SM 2540C		1		25	424	mg/L
* Chloride, Total	SES	7/16/2016	EPA 300.0		10	0.40	2.50	29.5	mg/L
* Fluoride, Total	SES	7/15/2016	EPA 300.0		1	0.01	0.3	J 0.058	mg/L
* Sulfate, Total	SES	7/16/2016	EPA 300.0		10	3.0	10	173	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AW17726

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW17993 Molybdenum, Total	mg/L	0.0000142	0.0044	0.10	0.116	0.115	0.0997	0.085 to 0.115	98.4	70 to 130	0.964	20	
AW17993 Arsenic, Total	mg/L	0.0000115	0.0022	0.10	0.106	0.104	0.102	0.085 to 0.115	103	70 to 130	1.21	20	
AW17993 Lithium, Total	mg/L	0.000449	0.022	0.200	0.296	0.293	0.215	0.17 to 0.23	126	70 to 130	1.02	20	
AW17993 Barium, Total	mg/L	0.0000114	0.0044	0.10	0.146	0.146	0.100	0.085 to 0.115	100	70 to 130	0.580	20	
AW17993 Beryllium, Total	mg/L	0.00000680	0.00132	0.10	0.105	0.104	0.108	0.085 to 0.115	105	70 to 130	0.935	20	
AW18162 Mercury, Total by CVAA	mg/L	0.0000971	0.0005	0.004	0.00395	0.00397	0.00391	0.0034 to 0.0046	98.8	70 to 130	0.616	20	
AW17993 Boron, Total	mg/L	0.00311	0.044	1.00	2.21	2.20	0.956	0.85 to 1.15	91.0	70 to 130	0.454	20	
AW17993 Calcium, Total	mg/L	-0.0185	0.22	5.00	113	123	5.03	4.25 to 5.75	80.0	70 to 130	8.47	20	
AW17993 Chromium, Total	mg/L	0.00000861	0.0044	0.10	0.103	0.102	0.101	0.085 to 0.115	103	70 to 130	0.662	20	
AW17993 Thallium, Total	mg/L	0.00000422	0.00044	0.10	0.101	0.102	0.0967	0.085 to 0.115	101	70 to 130	0.634	20	
AW17993 Cadmium, Total	mg/L	0.000000589	0.00044	0.10	0.107	0.106	0.109	0.085 to 0.115	107	70 to 130	0.903	20	
AW17993 Cobalt, Total	mg/L	0.00000361	0.0044	0.10	0.0953	0.0949	0.0960	0.085 to 0.115	95.3	70 to 130	0.436	20	
AW17993 Lead, Total	mg/L	0.00000898	0.0022	0.10	0.101	0.101	0.0981	0.085 to 0.115	101	70 to 130	0.0934	20	
AW17993 Antimony, Total	mg/L	0.0000814	0.00132	0.10	0.0998	0.0989	0.0999	0.085 to 0.115	99.8	70 to 130	0.920	20	
AW17993 Selenium, Total	mg/L	0.0000609	0.0044	0.10	0.104	0.102	0.107	0.085 to 0.115	104	70 to 130	1.80	20	

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AW17726

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample		LFB Limit	Rec		Prec Limit	
							Duplicate	LFB		Rec	Limit		
AW17728	Solids, Dissolved	mg/L	3.0	25			440	55	40 to 60			0.571	5
AW17728	Fluoride, Total	mg/L	0.000	0.3	2.00	2.04	0.095	1.94	1.8 to 2.2	97.2	80 to 120	1.05	20
AW17728	Chloride, Total	mg/L	0.000	0.25	100	128	26.6	9.91	9 to 11	101	80 to 120	1.12	20
AW17728	Sulfate, Total	mg/L	0.334	1.0	200	381	171	19.4	18 to 22	104	80 to 120	0.583	20

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CC:

Alabama Power General Test Laboratory
 744 County Road 87, GSC#8
 Calera, AL 35040
 (205) 664-6032 or 6171
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Certificate Of Analysis  **Alabama Power**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-5 Dup

Laboratory ID Number: AW17727

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0318	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	8/3/2016	EPA 200.7		1.015	0.02	0.1	2.15	mg/L
* Calcium, Total	HRG	8/3/2016	EPA 200.7		10.15	1.0	5.0	66.6	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/29/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	8/3/2016	EPA 200.7		1.015	0.01	0.05	J 0.0480	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.278	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/18/2016	SM 2540C		1		25	427	mg/L
* Chloride, Total	SES	7/16/2016	EPA 300.0		10	0.40	2.50	29.3	mg/L
* Fluoride, Total	SES	7/15/2016	EPA 300.0		1	0.01	0.3	J 0.059	mg/L
* Sulfate, Total	SES	7/16/2016	EPA 300.0		10	3.0	10	172	mg/L

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-5 Dup

Laboratory ID Number: AW17727

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW17993 Molybdenum, Total	mg/L	0.0000142	0.0044	0.10	0.116	0.115	0.0997	0.085 to 0.115	98.4	70 to 130	0.964	20	
AW17993 Lithium, Total	mg/L	0.000449	0.022	0.200	0.296	0.293	0.215	0.17 to 0.23	126	70 to 130	1.02	20	
AW17993 Boron, Total	mg/L	0.00311	0.044	1.00	2.21	2.20	0.956	0.85 to 1.15	91.0	70 to 130	0.454	20	
AW17993 Calcium, Total	mg/L	-0.0185	0.22	5.00	113	123	5.03	4.25 to 5.75	80.0	70 to 130	8.47	20	
AW17993 Arsenic, Total	mg/L	0.0000115	0.0022	0.10	0.106	0.104	0.102	0.085 to 0.115	103	70 to 130	1.21	20	
AW17993 Antimony, Total	mg/L	0.0000814	0.00132	0.10	0.0998	0.0989	0.0999	0.085 to 0.115	99.8	70 to 130	0.920	20	
AW17993 Selenium, Total	mg/L	0.0000609	0.0044	0.10	0.104	0.102	0.107	0.085 to 0.115	104	70 to 130	1.80	20	
AW17993 Chromium, Total	mg/L	0.00000861	0.0044	0.10	0.103	0.102	0.101	0.085 to 0.115	103	70 to 130	0.662	20	
AW17993 Thallium, Total	mg/L	0.00000422	0.00044	0.10	0.101	0.102	0.0967	0.085 to 0.115	101	70 to 130	0.634	20	
AW17993 Barium, Total	mg/L	0.0000114	0.0044	0.10	0.146	0.146	0.100	0.085 to 0.115	100	70 to 130	0.580	20	
AW17993 Beryllium, Total	mg/L	0.00000680	0.00132	0.10	0.105	0.104	0.108	0.085 to 0.115	105	70 to 130	0.935	20	
AW18162 Mercury, Total by CVAA	mg/L	0.0000971	0.0005	0.004	0.00395	0.00397	0.00391	0.0034 to 0.0046	98.8	70 to 130	0.616	20	
AW17993 Cadmium, Total	mg/L	0.000000589	0.00044	0.10	0.107	0.106	0.109	0.085 to 0.115	107	70 to 130	0.903	20	
AW17993 Cobalt, Total	mg/L	0.00000361	0.0044	0.10	0.0953	0.0949	0.0960	0.085 to 0.115	95.3	70 to 130	0.436	20	
AW17993 Lead, Total	mg/L	0.00000898	0.0022	0.10	0.101	0.101	0.0981	0.085 to 0.115	101	70 to 130	0.0934	20	

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-5 Dup

Laboratory ID Number: AW17727

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW17728	Chloride, Total	mg/L	0.000	0.25	100	128	26.6	9.91	9 to 11	101	80 to 120	1.12	20
AW17728	Fluoride, Total	mg/L	0.000	0.3	2.00	2.04	0.095	1.94	1.8 to 2.2	97.2	80 to 120	1.05	20
AW17728	Solids, Dissolved	mg/L	3.0	25			440	55	40 to 60			0.571	5
AW17728	Sulfate, Total	mg/L	0.334	1.0	200	381	171	19.4	18 to 22	104	80 to 120	0.583	20

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CC:

Reported: 7/10/2017
 Version: 2.0

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

Certificate Of Analysis  **Alabama Power**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AW17728

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	J 0.00305	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.103	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	8/3/2016	EPA 200.7		1.015	0.02	0.1	1.73	mg/L
* Calcium, Total	HRG	8/3/2016	EPA 200.7		10.15	1.0	5.0	61.5	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/29/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	8/3/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0633	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/18/2016	SM 2540C		1		25	435	mg/L
* Chloride, Total	SES	7/18/2016	EPA 300.0		10	0.40	2.50	26.9	mg/L
* Fluoride, Total	SES	7/15/2016	EPA 300.0		1	0.01	0.3	J 0.096	mg/L
* Sulfate, Total	SES	7/18/2016	EPA 300.0		10	3.0	10	172	mg/L

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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AW17728

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW17993 Molybdenum, Total	mg/L	0.0000142	0.0044	0.10	0.116	0.115	0.0997	0.085 to 0.115	98.4	70 to 130	0.964	20	
AW17993 Lithium, Total	mg/L	0.000449	0.022	0.200	0.296	0.293	0.215	0.17 to 0.23	126	70 to 130	1.02	20	
AW17993 Barium, Total	mg/L	0.0000114	0.0044	0.10	0.146	0.146	0.100	0.085 to 0.115	100	70 to 130	0.580	20	
AW17993 Beryllium, Total	mg/L	0.00000680	0.00132	0.10	0.105	0.104	0.108	0.085 to 0.115	105	70 to 130	0.935	20	
AW18162 Mercury, Total by CVAA	mg/L	0.0000971	0.0005	0.004	0.00395	0.00397	0.00391	0.0034 to 0.0046	98.8	70 to 130	0.616	20	
AW17993 Arsenic, Total	mg/L	0.0000115	0.0022	0.10	0.106	0.104	0.102	0.085 to 0.115	103	70 to 130	1.21	20	
AW17993 Boron, Total	mg/L	0.00311	0.044	1.00	2.21	2.20	0.956	0.85 to 1.15	91.0	70 to 130	0.454	20	
AW17993 Calcium, Total	mg/L	-0.0185	0.22	5.00	113	123	5.03	4.25 to 5.75	80.0	70 to 130	8.47	20	
AW17993 Chromium, Total	mg/L	0.00000861	0.0044	0.10	0.103	0.102	0.101	0.085 to 0.115	103	70 to 130	0.662	20	
AW17993 Thallium, Total	mg/L	0.00000422	0.00044	0.10	0.101	0.102	0.0967	0.085 to 0.115	101	70 to 130	0.634	20	
AW17993 Cadmium, Total	mg/L	0.000000589	0.00044	0.10	0.107	0.106	0.109	0.085 to 0.115	107	70 to 130	0.903	20	
AW17993 Cobalt, Total	mg/L	0.00000361	0.0044	0.10	0.0953	0.0949	0.0960	0.085 to 0.115	95.3	70 to 130	0.436	20	
AW17993 Lead, Total	mg/L	0.00000898	0.0022	0.10	0.101	0.101	0.0981	0.085 to 0.115	101	70 to 130	0.0934	20	
AW17993 Antimony, Total	mg/L	0.0000814	0.00132	0.10	0.0998	0.0989	0.0999	0.085 to 0.115	99.8	70 to 130	0.920	20	
AW17993 Selenium, Total	mg/L	0.0000609	0.0044	0.10	0.104	0.102	0.107	0.085 to 0.115	104	70 to 130	1.80	20	

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Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Jul-16
 Customer ID:
 Delivery Date: 14-Jul-16

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AW17728

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW17728	Chloride, Total	mg/L	0.000	0.25	100	128	26.6	9.91	9 to 11	101	80 to 120	1.12	20
AW17728	Fluoride, Total	mg/L	0.000	0.3	2.00	2.04	0.095	1.94	1.8 to 2.2	97.2	80 to 120	1.05	20
AW17728	Solids, Dissolved	mg/L	3.0	25			440	55	40 to 60			0.571	5
AW17728	Sulfate, Total	mg/L	0.334	1.0	200	381	171	19.4	18 to 22	104	80 to 120	0.583	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

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CC:

Reported: 7/10/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-Jul-16
 Customer ID:
 Delivery Date: 18-Jul-16

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AW17992

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	J 0.00240	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0428	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	8/3/2016	EPA 200.7		1.015	0.02	0.1	1.31	mg/L
* Calcium, Total	HRG	8/3/2016	EPA 200.7		10.15	1.0	5.0	109	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/29/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	8/3/2016	EPA 200.7		1.015	0.01	0.05	J 0.0439	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0161	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	J 0.000359	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/21/2016	SM 2540C		1		50	546	mg/L
* Chloride, Total	SES	7/20/2016	EPA 300.0		1	0.04	0.25	10.3	mg/L
* Fluoride, Total	SES	7/20/2016	EPA 300.0		1	0.01	0.3	J 0.058	mg/L
* Sulfate, Total	SES	7/21/2016	EPA 300.0		10	3.0	10	154	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-Jul-16
 Customer ID:
 Delivery Date: 18-Jul-16

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AW17992

Sample Analysis	Units	MB	MB				LFB		Rec		Prec	
			Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	
AW17993 Molybdenum, Total	mg/L	0.0000142	0.0044	0.10	0.116	0.115	0.0997	0.085 to 0.115	98.4	70 to 130	0.964	20
AW17993 Arsenic, Total	mg/L	0.0000115	0.0022	0.10	0.106	0.104	0.102	0.085 to 0.115	103	70 to 130	1.21	20
AW17993 Lithium, Total	mg/L	0.000449	0.022	0.200	0.296	0.293	0.215	0.17 to 0.23	126	70 to 130	1.02	20
AW17993 Boron, Total	mg/L	0.00311	0.044	1.00	2.21	2.20	0.956	0.85 to 1.15	91.0	70 to 130	0.454	20
AW17993 Calcium, Total	mg/L	-0.0185	0.22	5.00	113	123	5.03	4.25 to 5.75	80.0	70 to 130	8.47	20
AW17993 Barium, Total	mg/L	0.0000114	0.0044	0.10	0.146	0.146	0.100	0.085 to 0.115	100	70 to 130	0.580	20
AW17993 Beryllium, Total	mg/L	0.00000680	0.00132	0.10	0.105	0.104	0.108	0.085 to 0.115	105	70 to 130	0.935	20
AW18162 Mercury, Total by CVAA	mg/L	0.0000971	0.0005	0.004	0.00395	0.00397	0.00391	0.0034 to 0.0046	98.8	70 to 130	0.616	20
AW17993 Chromium, Total	mg/L	0.00000861	0.0044	0.10	0.103	0.102	0.101	0.085 to 0.115	103	70 to 130	0.662	20
AW17993 Thallium, Total	mg/L	0.00000422	0.00044	0.10	0.101	0.102	0.0967	0.085 to 0.115	101	70 to 130	0.634	20
AW17993 Cadmium, Total	mg/L	0.000000589	0.00044	0.10	0.107	0.106	0.109	0.085 to 0.115	107	70 to 130	0.903	20
AW17993 Cobalt, Total	mg/L	0.00000361	0.0044	0.10	0.0953	0.0949	0.0960	0.085 to 0.115	95.3	70 to 130	0.436	20
AW17993 Lead, Total	mg/L	0.00000898	0.0022	0.10	0.101	0.101	0.0981	0.085 to 0.115	101	70 to 130	0.0934	20
AW17993 Antimony, Total	mg/L	0.0000814	0.00132	0.10	0.0998	0.0989	0.0999	0.085 to 0.115	99.8	70 to 130	0.920	20
AW17993 Selenium, Total	mg/L	0.0000609	0.0044	0.10	0.104	0.102	0.107	0.085 to 0.115	104	70 to 130	1.80	20

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Batch QC Summary



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 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-Jul-16
 Customer ID:
 Delivery Date: 18-Jul-16

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AW17992

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW18163	Chloride, Total	mg/L	0.000	0.25	10.00	26.2		17.0	9.89	9 to 11	93.0	80 to 120	0.590	20
AW18163	Sulfate, Total	mg/L	0.000	1.0	20.00	87.1		69.3	19.3	18 to 22	89.0	80 to 120	0.00	20
AW17992	Solids, Dissolved	mg/L	4.0	25				536	53	40 to 60			0.924	5
AW18163	Fluoride, Total	mg/L	0.000	0.3	2.00	2.14		0.112	1.94	1.8 to 2.2	101	80 to 120	0.897	20

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Certificate Of Analysis  **Alabama Power**

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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 18-Jul-16
 Customer ID:
 Delivery Date: 18-Jul-16

Description: Gaston Ash Pond - MW-18 Dup

Laboratory ID Number: AW17993

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	11/9/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	J 0.00255	mg/L
* Barium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0459	mg/L
* Beryllium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	8/3/2016	EPA 200.7		1.015	0.02	0.1	1.30	mg/L
* Calcium, Total	HRG	8/3/2016	EPA 200.7		10.15	1.0	5.0	109	mg/L
* Cadmium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	7/29/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	8/3/2016	EPA 200.7		1.015	0.01	0.05	J 0.0436	mg/L
* Molybdenum, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	0.0176	mg/L
* Lead, Total	RDA	7/21/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	RDA	7/21/2016	EPA 200.8		5.075	0.0002	0.001	J 0.000385	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	7/21/2016	SM 2540C		1		50	532	mg/L
* Chloride, Total	SES	7/20/2016	EPA 300.0		1	0.04	0.25	10.2	mg/L
* Fluoride, Total	SES	7/20/2016	EPA 300.0		1	0.01	0.3	J 0.058	mg/L
* Sulfate, Total	SES	7/21/2016	EPA 300.0		10	3.0	10	153	mg/L

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 The spike amount is less than 30% the sample amount, therefore will not be qualified. SGC 11/9/16

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Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec
			Limit	Spike				Limit	Rec	Limit	Prec	Limit
AW17993 Lithium, Total	mg/L	0.000449	0.022	0.200	0.296	0.293	0.215	0.17 to 0.23	126	70 to 130	1.02	20
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AW17993 Calcium, Total	mg/L	-0.0185	0.22	5.00	113	123	5.03	4.25 to 5.75	80.0	70 to 130	8.47	20
AW17993 Antimony, Total	mg/L	0.0000814	0.00132	0.10	0.0998	0.0989	0.0999	0.085 to 0.115	99.8	70 to 130	0.920	20
AW17993 Selenium, Total	mg/L	0.0000609	0.0044	0.10	0.104	0.102	0.107	0.085 to 0.115	104	70 to 130	1.80	20
AW17993 Barium, Total	mg/L	0.0000114	0.0044	0.10	0.146	0.146	0.100	0.085 to 0.115	100	70 to 130	0.580	20
AW17993 Beryllium, Total	mg/L	0.00000680	0.00132	0.10	0.105	0.104	0.108	0.085 to 0.115	105	70 to 130	0.935	20
AW18162 Mercury, Total by CVAA	mg/L	0.0000971	0.0005	0.004	0.00395	0.00397	0.00391	0.0034 to 0.0046	98.8	70 to 130	0.616	20
AW17993 Chromium, Total	mg/L	0.00000861	0.0044	0.10	0.103	0.102	0.101	0.085 to 0.115	103	70 to 130	0.662	20
AW17993 Thallium, Total	mg/L	0.00000422	0.00044	0.10	0.101	0.102	0.0967	0.085 to 0.115	101	70 to 130	0.634	20
AW17993 Cadmium, Total	mg/L	0.000000589	0.00044	0.10	0.107	0.106	0.109	0.085 to 0.115	107	70 to 130	0.903	20
AW17993 Cobalt, Total	mg/L	0.00000361	0.0044	0.10	0.0953	0.0949	0.0960	0.085 to 0.115	95.3	70 to 130	0.436	20
AW17993 Lead, Total	mg/L	0.00000898	0.0022	0.10	0.101	0.101	0.0981	0.085 to 0.115	101	70 to 130	0.0934	20

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 John Pugh

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 Sample Date: 18-Jul-16
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 Delivery Date: 18-Jul-16

Description: Gaston Ash Pond - MW-18 Dup

Laboratory ID Number: AW17993

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW18163	Chloride, Total	mg/L	0.000	0.25	10.00	26.2	17.0	9.89	9 to 11	93.0	80 to 120	0.590	20
AW18163	Sulfate, Total	mg/L	0.000	1.0	20.00	87.1	69.3	19.3	18 to 22	89.0	80 to 120	0.00	20
AW17992	Solids, Dissolved	mg/L	4.0	25			536	53	40 to 60			0.924	5
AW18163	Fluoride, Total	mg/L	0.000	0.3	2.00	2.14	0.112	1.94	1.8 to 2.2	101	80 to 120	0.897	20

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 The spike amount is less than 30% the sample amount, therefore will not be qualified. SGC 11/9/16

CC:

Reported: 7/10/2017
 Version: 2.0

Definitions



Abbreviation	Description
DF	Dilution Factor
LFB	Lab Fortified Blank
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 07/12/2016 09:00

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Nick Pitts	Location	Gaston Ash Pond
Analysis Requested	Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle		
Comments			

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-14	07/11/2016	15:07	3	Groundwater		AW17246
MW-15R	07/11/2016	16:37	3	Groundwater		AW17247

Relinquished By	Received By	Date/Time
<i>[Signature]</i>	Sarah Copeland <small>Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o.ou, email=sgcopel@southernco.com, c=US Date: 2016.07.12 09:14:57 -05'00'</small>	07/12/2016 08:47

SmarTroll ID	4696-23443-3-2	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	3901-20010-2-2	Cooler Temp
		1.5 degrees C
		Thermometer ID
		1506-3968-4-4
		pH Strip ID
		4831-24390-20-17



Chain of Custody

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

 Field Complete

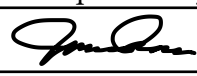
 Lab Complete

 Lab ETA

Requested Complete Date	<input type="text" value="Routine"/>	Results To	<input type="text" value="Dustin Brooks, John Pugh, Greg Dyer"/>
Site Representative	<input type="text" value="Byron Corina"/>	Requested By	<input type="text" value="Greg Dyer"/>
Collector	<input type="text" value="Jason Rouss"/>	Location	<input type="text" value="Gaston Ash Pond"/>

Analysis Requested	<input type="text" value="Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle"/>
Comments	<input type="text"/>

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-3	07/11/2016	14:00	3	Groundwater		AW17471
MW-3 Dup	07/11/2016	14:00	3	Sample Duplicate		AW17472
MW-4	07/11/2016	15:25	3	Groundwater		AW17473
MW-2	07/11/2016	16:58	3	Groundwater		AW17474
MW-1	07/12/2016	10:08	3	Groundwater		AW17475
MW-8	07/12/2016	11:55	3	Groundwater		AW17476
MW-9	07/12/2016	13:25	3	Groundwater		AW17477

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: 2016.07.14 07:48:58 -05'00'</small>	07/13/2016 08:40
<input type="text"/>	<input type="text"/>	<input type="text"/>
<input type="text"/>	<input type="text"/>	<input type="text"/>

SmarTroll ID
 Turbidity ID

All metals and radiological bottles have pH < 2
 Cooler Temp
 Thermometer ID
 pH Strip ID



Chain of Custody

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Field Complete

Lab Complete

Lab ETA 07/14/2016 16:00

Requested Complete Date Routine
 Site Representative Byron Corina
 Collector Jason Rouss

Results To Dustin Brooks, John Pugh, Greg Dyer
 Requested By Greg Dyer
 Location Gaston Ash Pond

Analysis Requested Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle
 Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-19	07/13/2016	12:12	3	Groundwater		AW17719
MW-10	07/13/2016	13:47	4	Groundwater		AW17720
MW-11	07/13/2016	15:17	3	Groundwater		AW17721
FB-2	07/13/2016	15:28	3	Field Blank		AW17722
MW-12	07/13/2016	17:10	3	Groundwater		AW17723
MW-13	07/14/2016	10:30	3	Groundwater		AW17724
FB-3	07/14/2016	10:48	3	Field Blank		AW17725
MW-5	07/14/2016	12:15	3	Groundwater		AW17726
MW-5 Dup	07/14/2016	12:15	3	Sample Duplicate		AW17727
MW-22	07/14/2016	13:40	3	Groundwater		AW17728

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: 2016.07.14 17:15:16 -05'00'</small>	07/14/2016 16:22

SmarTroll ID 4696-23444-3-3
 Turbidity ID 4677-23342-4-1

All metals and radiological bottles have pH < 2
 Cooler Temp 1.7 degrees C
 Thermometer ID 1506-3968-4-4
 pH Strip ID 4831-24390-20-17



Chain of Custody

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Field Complete

Lab Complete

Lab ETA

Requested Complete Date

Site Representative

Collector

Results To

Requested By

Location

Analysis Requested

Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-20	07/13/2016	11:40	3	Groundwater		AW17709
MW-18	07/13/2016	13:07	3	Groundwater		AW17710
MW-18 Dup	07/13/2016	13:07	3	Sample Duplicate		AW17711
MW-7	07/13/2016	14:47	3	Groundwater		AW17712
MW-6	07/13/2016	15:55	4	Groundwater		AW17713
MW-21	07/13/2016	16:40	3	Groundwater		AW17714
FB-1	07/13/2016	17:30	3	Field Blank		AW17715
MW-16	07/14/2016	10:00	3	Groundwater		AW17716
MW-17	07/14/2016	11:15	3	Groundwater		AW17717
EB-1	07/14/2016	11:45	3	Equipment Blank		AW17718

Relinquished By 	Received By Sarah Copeland <small>Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o.ou, email=sgcopela@southerncco.com, c=US Date: 2016.07.14 17:17:01 -05'00'</small>	Date/Time 07/14/2016 15:16

SmarTroll ID <input type="text" value="4696-23441-1-1"/>	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID <input type="text" value="5025-25562-10-7"/>	
Cooler Temp <input type="text" value="0.5 degrees C"/>	
Thermometer ID <input type="text" value="1506-3968-4-4"/>	
pH Strip ID <input type="text" value="4831-24390-20-17"/>	



Chain of Custody

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Field Complete
 Lab Complete

Lab ETA 07/18/2016 12:55

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Jason Rouss	Location	Gaston Ash Pond
Analysis Requested	Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle		
Comments	Resample of original MW-18; original sample has been deleted. SGC 7/18/16		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-18	07/18/2016	10:55	3	Groundwater		AW17992
MW-18 Dup	07/18/2016	10:55	3	Sample Duplicate		AW17993

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: 2016.07.18 16:06:21 -05'00'</small>	07/18/2016 16:00

SmarTroll ID	4696-23444-3-3	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	4677-23342-4-1	
Cooler Temp	1.7 degrees Celsius	
Thermometer ID	1506-3968-4-4	
pH Strip ID	4831-24390-20-17	

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: 400-124796-1

TestAmerica Sample Delivery Group: Gaston Ash Pond (3)

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:

8/23/2016 4:51:17 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

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

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

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Case Narrative

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

TestAmerica Job ID: 400-124796-1
SDG: Gaston Ash Pond (3)

Job ID: 400-124796-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-124796-1

RAD

Method(s) PrecSep_0: Radium-228 Prep Batch 160-262398: The following samples were prepared at a reduced aliquot due to limited sample available: AW17246 MW-14 (400-124796-1), AW17247 MW-15R (400-124796-2), AW17471 MW-3 (400-124796-3), AW17472 MW-3 DUP (400-124796-4), AW17473 MW-4 (400-124796-5), AW17474 MW-2 (400-124796-6), AW17475 MW-1 (400-124796-7), AW17476 MW-8 (400-124796-8), AW17477 MW-9 (400-124796-9), AW17709 MW-20 (400-124796-10), AW17712 MW-7 (400-124796-11), AW17713 MW-6 (400-124796-12), AW17714 MW-21 (400-124796-13), AW17715 FB-1 (400-124796-14), AW17716 MW-16 (400-124796-15), AW17717 MW-17 (400-124796-16), AW17718 EB-1 (400-124796-17), AW17719 MW-19 (400-124796-18), AW17720 MW-10 (400-124796-19), AW17720 MW-10 (400-124796-19[DUJ]) and AW17721 MW-11 (400-124796-20).

Method(s) PrecSep_0: Radium-228 Prep Batch 160-262400: A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision. AW17722 FB-2 (400-124796-21), AW17723 MW-12 (400-124796-22), AW17724 MW-13 (400-124796-23), AW17725 FB-3 (400-124796-24), AW17726 MW-5 (400-124796-25), AW17727 MW-5 DUP (400-124796-26), AW17728 MW-22 (400-124796-27), AW17992 MW-18 (400-124796-28) and AW17993 MW-18 DUP (400-124796-29).

Method(s) PrecSep-21: Radium-226 Prep Batch 160-262394: The following samples were prepared at a reduced aliquot due to limited sample available: AW17246 MW-14 (400-124796-1), AW17247 MW-15R (400-124796-2), AW17471 MW-3 (400-124796-3), AW17472 MW-3 DUP (400-124796-4), AW17473 MW-4 (400-124796-5), AW17474 MW-2 (400-124796-6), AW17475 MW-1 (400-124796-7), AW17476 MW-8 (400-124796-8), AW17477 MW-9 (400-124796-9), AW17709 MW-20 (400-124796-10), AW17712 MW-7 (400-124796-11), AW17713 MW-6 (400-124796-12), AW17714 MW-21 (400-124796-13), AW17715 FB-1 (400-124796-14), AW17716 MW-16 (400-124796-15), AW17717 MW-17 (400-124796-16), AW17718 EB-1 (400-124796-17), AW17719 MW-19 (400-124796-18), AW17720 MW-10 (400-124796-19), AW17720 MW-10 (400-124796-19[DUJ]) and AW17721 MW-11 (400-124796-20).

Method(s) PrecSep-21: Radium-226 Prep Batch 160-262399: A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision. AW17722 FB-2 (400-124796-21), AW17723 MW-12 (400-124796-22), AW17724 MW-13 (400-124796-23), AW17725 FB-3 (400-124796-24), AW17726 MW-5 (400-124796-25), AW17727 MW-5 DUP (400-124796-26), AW17728 MW-22 (400-124796-27), AW17992 MW-18 (400-124796-28) and AW17993 MW-18 DUP (400-124796-29).

Method Summary

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

TestAmerica Job ID: 400-124796-1
SDG: Gaston Ash Pond (3)

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: 400-124796-1
SDG: Gaston Ash Pond (3)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-124796-1	AW17246 MW-14	Water	07/11/16 15:07	07/21/16 15:15
400-124796-2	AW17247 MW-15R	Water	07/11/16 16:37	07/21/16 15:15
400-124796-3	AW17471 MW-3	Water	07/11/16 14:00	07/21/16 15:15
400-124796-4	AW17472 MW-3 DUP	Water	07/11/16 14:00	07/21/16 15:15
400-124796-5	AW17473 MW-4	Water	07/11/16 15:25	07/21/16 15:15
400-124796-6	AW17474 MW-2	Water	07/11/16 16:58	07/21/16 15:15
400-124796-7	AW17475 MW-1	Water	07/12/16 10:08	07/21/16 15:15
400-124796-8	AW17476 MW-8	Water	07/12/16 11:55	07/21/16 15:15
400-124796-9	AW17477 MW-9	Water	07/12/16 13:25	07/21/16 15:15
400-124796-10	AW17709 MW-20	Water	07/13/16 11:40	07/21/16 15:15
400-124796-11	AW17712 MW-7	Water	07/13/16 14:47	07/21/16 15:15
400-124796-12	AW17713 MW-6	Water	07/13/16 15:55	07/21/16 15:15
400-124796-13	AW17714 MW-21	Water	07/13/16 16:40	07/21/16 15:15
400-124796-14	AW17715 FB-1	Water	07/13/16 17:30	07/21/16 15:15
400-124796-15	AW17716 MW-16	Water	07/14/16 10:00	07/21/16 15:15
400-124796-16	AW17717 MW-17	Water	07/14/16 11:15	07/21/16 15:15
400-124796-17	AW17718 EB-1	Water	07/14/16 11:45	07/21/16 15:15
400-124796-18	AW17719 MW-19	Water	07/13/16 12:12	07/21/16 15:15
400-124796-19	AW17720 MW-10	Water	07/13/16 13:47	07/21/16 15:15
400-124796-20	AW17721 MW-11	Water	07/13/16 15:17	07/21/16 15:15
400-124796-21	AW17722 FB-2	Water	07/13/16 15:28	07/21/16 15:15
400-124796-22	AW17723 MW-12	Water	07/13/16 17:10	07/21/16 15:15
400-124796-23	AW17724 MW-13	Water	07/14/16 10:30	07/21/16 15:15
400-124796-24	AW17725 FB-3	Water	07/14/16 10:48	07/21/16 15:15
400-124796-25	AW17726 MW-5	Water	07/14/16 12:15	07/21/16 15:15
400-124796-26	AW17727 MW-5 DUP	Water	07/14/16 12:15	07/21/16 15:15
400-124796-27	AW17728 MW-22	Water	07/14/16 13:40	07/21/16 15:15
400-124796-28	AW17992 MW-18	Water	07/18/16 10:55	07/21/16 15:15
400-124796-29	AW17993 MW-18 DUP	Water	07/18/16 10:55	07/21/16 15:15

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17246 MW-14

Lab Sample ID: 400-124796-1

Date Collected: 07/11/16 15:07

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.295		0.169	0.172	1.00	0.239	pCi/L	07/27/16 17:03	08/18/16 05:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		40 - 110					07/27/16 17:03	08/18/16 05:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.215	U	0.330	0.330	1.00	0.553	pCi/L	07/27/16 18:13	08/16/16 13:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		40 - 110					07/27/16 18:13	08/16/16 13:41	1
Y Carrier	88.2		40 - 110					07/27/16 18:13	08/16/16 13:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.510	U	0.371	0.372	5.00	0.553	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17247 MW-15R

Lab Sample ID: 400-124796-2

Date Collected: 07/11/16 16:37

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0328	U	0.119	0.119	1.00	0.238	pCi/L	07/27/16 17:03	08/18/16 05:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		40 - 110					07/27/16 17:03	08/18/16 05:05	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.335	U	0.296	0.297	1.00	0.473	pCi/L	07/27/16 18:13	08/16/16 13:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		40 - 110					07/27/16 18:13	08/16/16 13:41	1
Y Carrier	87.1		40 - 110					07/27/16 18:13	08/16/16 13:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.302	U	0.319	0.320	5.00	0.473	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17471 MW-3

Lab Sample ID: 400-124796-3

Date Collected: 07/11/16 14:00

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0134	U	0.124	0.124	1.00	0.234	pCi/L	07/27/16 17:03	08/18/16 05:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		40 - 110					07/27/16 17:03	08/18/16 05:06	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.105	U	0.348	0.348	1.00	0.602	pCi/L	07/27/16 18:13	08/16/16 13:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		40 - 110					07/27/16 18:13	08/16/16 13:41	1
Y Carrier	84.9		40 - 110					07/27/16 18:13	08/16/16 13:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.118	U	0.369	0.369	5.00	0.602	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17472 MW-3 DUP

Lab Sample ID: 400-124796-4

Date Collected: 07/11/16 14:00

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00842	U	0.0794	0.0794	1.00	0.158	pCi/L	07/27/16 17:03	08/18/16 05:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.7		40 - 110					07/27/16 17:03	08/18/16 05:06	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.134	U	0.293	0.293	1.00	0.503	pCi/L	07/27/16 18:13	08/16/16 13:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.7		40 - 110					07/27/16 18:13	08/16/16 13:41	1
Y Carrier	88.2		40 - 110					07/27/16 18:13	08/16/16 13:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.143	U	0.304	0.304	5.00	0.503	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17473 MW-4

Lab Sample ID: 400-124796-5

Date Collected: 07/11/16 15:25

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.105	U	0.140	0.140	1.00	0.234	pCi/L	07/27/16 17:03	08/18/16 05:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.5		40 - 110					07/27/16 17:03	08/18/16 05:06	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.126	U	0.292	0.293	1.00	0.550	pCi/L	07/27/16 18:13	08/16/16 13:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.5		40 - 110					07/27/16 18:13	08/16/16 13:41	1
Y Carrier	87.1		40 - 110					07/27/16 18:13	08/16/16 13:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0210	U	0.324	0.324	5.00	0.550	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17474 MW-2

Lab Sample ID: 400-124796-6

Date Collected: 07/11/16 16:58

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0263	U	0.0885	0.0885	1.00	0.167	pCi/L	07/27/16 17:03	08/18/16 05:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					07/27/16 17:03	08/18/16 05:06	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.253	U	0.277	0.278	1.00	0.453	pCi/L	07/27/16 18:13	08/16/16 13:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					07/27/16 18:13	08/16/16 13:41	1
Y Carrier	86.7		40 - 110					07/27/16 18:13	08/16/16 13:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.279	U	0.291	0.292	5.00	0.453	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17475 MW-1

Lab Sample ID: 400-124796-7

Date Collected: 07/12/16 10:08

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.294		0.147	0.149	1.00	0.187	pCi/L	07/27/16 17:03	08/18/16 05:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					07/27/16 17:03	08/18/16 05:06	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.436	U	0.296	0.298	1.00	0.453	pCi/L	07/27/16 18:13	08/16/16 13:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					07/27/16 18:13	08/16/16 13:41	1
Y Carrier	84.1		40 - 110					07/27/16 18:13	08/16/16 13:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.730		0.330	0.333	5.00	0.453	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17476 MW-8

Lab Sample ID: 400-124796-8

Date Collected: 07/12/16 11:55

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.107	U	0.107	0.108	1.00	0.169	pCi/L	07/27/16 17:03	08/18/16 05:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		40 - 110					07/27/16 17:03	08/18/16 05:06	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.165	U	0.306	0.306	1.00	0.576	pCi/L	07/27/16 18:13	08/16/16 13:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		40 - 110					07/27/16 18:13	08/16/16 13:41	1
Y Carrier	82.6		40 - 110					07/27/16 18:13	08/16/16 13:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0583	U	0.324	0.325	5.00	0.576	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17477 MW-9

Lab Sample ID: 400-124796-9

Date Collected: 07/12/16 13:25

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0221	U	0.145	0.145	1.00	0.266	pCi/L	07/27/16 17:03	08/18/16 05:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.3		40 - 110					07/27/16 17:03	08/18/16 05:06	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.186	U	0.297	0.297	1.00	0.501	pCi/L	07/27/16 18:13	08/16/16 13:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.3		40 - 110					07/27/16 18:13	08/16/16 13:42	1
Y Carrier	87.1		40 - 110					07/27/16 18:13	08/16/16 13:42	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	0.208	U	0.330	0.331	5.00	0.501	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17709 MW-20

Lab Sample ID: 400-124796-10

Date Collected: 07/13/16 11:40

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	17.3		0.887	1.79	1.00	0.153	pCi/L	07/27/16 17:03	08/18/16 05:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.6		40 - 110					07/27/16 17:03	08/18/16 05:06	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.799		0.348	0.355	1.00	0.490	pCi/L	07/27/16 18:13	08/16/16 13:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.6		40 - 110					07/27/16 18:13	08/16/16 13:42	1
Y Carrier	89.0		40 - 110					07/27/16 18:13	08/16/16 13:42	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	18.1		0.952	1.83	5.00	0.490	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17712 MW-7

Lab Sample ID: 400-124796-11

Date Collected: 07/13/16 14:47

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.144	U	0.120	0.120	1.00	0.181	pCi/L	07/27/16 17:03	08/18/16 05:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		40 - 110					07/27/16 17:03	08/18/16 05:06	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0435	U	0.252	0.252	1.00	0.447	pCi/L	07/27/16 18:13	08/16/16 13:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		40 - 110					07/27/16 18:13	08/16/16 13:42	1
Y Carrier	92.0		40 - 110					07/27/16 18:13	08/16/16 13:42	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	0.187	U	0.279	0.279	5.00	0.447	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17713 MW-6

Lab Sample ID: 400-124796-12

Date Collected: 07/13/16 15:55

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0639	U	0.132	0.132	1.00	0.231	pCi/L	07/27/16 17:03	08/18/16 05:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					07/27/16 17:03	08/18/16 05:06	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0170	U	0.258	0.258	1.00	0.470	pCi/L	07/27/16 18:13	08/16/16 13:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					07/27/16 18:13	08/16/16 13:42	1
Y Carrier	86.7		40 - 110					07/27/16 18:13	08/16/16 13:42	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	0.0469	U	0.290	0.290	5.00	0.470	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17714 MW-21

Lab Sample ID: 400-124796-13

Date Collected: 07/13/16 16:40

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.177	U	0.140	0.141	1.00	0.213	pCi/L	07/27/16 17:03	08/18/16 05:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					07/27/16 17:03	08/18/16 05:06	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.178	U	0.283	0.283	1.00	0.477	pCi/L	07/27/16 18:13	08/16/16 13:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					07/27/16 18:13	08/16/16 13:42	1
Y Carrier	86.4		40 - 110					07/27/16 18:13	08/16/16 13:42	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	0.355	U	0.316	0.316	5.00	0.477	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17715 FB-1

Lab Sample ID: 400-124796-14

Date Collected: 07/13/16 17:30

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0315	U	0.107	0.107	1.00	0.195	pCi/L	07/27/16 17:03	08/18/16 06:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					07/27/16 17:03	08/18/16 06:48	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.120	U	0.222	0.222	1.00	0.431	pCi/L	07/27/16 18:13	08/16/16 13:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					07/27/16 18:13	08/16/16 13:42	1
Y Carrier	86.7		40 - 110					07/27/16 18:13	08/16/16 13:42	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	-0.0889	U	0.246	0.247	5.00	0.431	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17716 MW-16

Lab Sample ID: 400-124796-15

Date Collected: 07/14/16 10:00

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	2.04		0.316	0.366	1.00	0.219	pCi/L	07/27/16 17:03	08/18/16 06:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.9		40 - 110					07/27/16 17:03	08/18/16 06:48	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.611	U	0.415	0.419	1.00	0.651	pCi/L	07/27/16 18:13	08/16/16 13:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.9		40 - 110					07/27/16 18:13	08/16/16 13:36	1
Y Carrier	89.0		40 - 110					07/27/16 18:13	08/16/16 13:36	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.65		0.522	0.556	5.00	0.651	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17717 MW-17

Lab Sample ID: 400-124796-16

Date Collected: 07/14/16 11:15

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.437		0.168	0.173	1.00	0.196	pCi/L	07/27/16 17:03	08/18/16 06:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		40 - 110					07/27/16 17:03	08/18/16 06:49	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.427	U	0.344	0.346	1.00	0.546	pCi/L	07/27/16 18:13	08/16/16 13:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		40 - 110					07/27/16 18:13	08/16/16 13:36	1
Y Carrier	88.6		40 - 110					07/27/16 18:13	08/16/16 13:36	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.864		0.383	0.387	5.00	0.546	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17718 EB-1

Lab Sample ID: 400-124796-17

Date Collected: 07/14/16 11:45

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0430	U	0.0830	0.0831	1.00	0.184	pCi/L	07/27/16 17:03	08/18/16 06:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					07/27/16 17:03	08/18/16 06:49	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.164	U	0.319	0.319	1.00	0.542	pCi/L	07/27/16 18:13	08/16/16 13:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					07/27/16 18:13	08/16/16 13:36	1
Y Carrier	86.4		40 - 110					07/27/16 18:13	08/16/16 13:36	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.121	U	0.329	0.330	5.00	0.542	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17719 MW-19

Lab Sample ID: 400-124796-18

Date Collected: 07/13/16 12:12

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.310		0.154	0.157	1.00	0.203	pCi/L	07/27/16 17:03	08/18/16 06:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					07/27/16 17:03	08/18/16 06:49	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.274	U	0.350	0.351	1.00	0.580	pCi/L	07/27/16 18:13	08/16/16 13:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					07/27/16 18:13	08/16/16 13:36	1
Y Carrier	92.3		40 - 110					07/27/16 18:13	08/16/16 13:36	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.584		0.382	0.384	5.00	0.580	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17720 MW-10

Lab Sample ID: 400-124796-19

Date Collected: 07/13/16 13:47

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.113	U	0.122	0.122	1.00	0.197	pCi/L	07/27/16 17:03	08/18/16 06:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					07/27/16 17:03	08/18/16 06:49	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.234	U	0.307	0.308	1.00	0.511	pCi/L	07/27/16 18:13	08/16/16 13:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					07/27/16 18:13	08/16/16 13:36	1
Y Carrier	89.7		40 - 110					07/27/16 18:13	08/16/16 13:36	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.347	U	0.331	0.332	5.00	0.511	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17721 MW-11

Lab Sample ID: 400-124796-20

Date Collected: 07/13/16 15:17

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00406	U	0.0736	0.0736	1.00	0.150	pCi/L	07/27/16 17:03	08/18/16 06:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					07/27/16 17:03	08/18/16 06:49	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.173	U	0.303	0.304	1.00	0.514	pCi/L	07/27/16 18:13	08/16/16 13:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					07/27/16 18:13	08/16/16 13:36	1
Y Carrier	91.6		40 - 110					07/27/16 18:13	08/16/16 13:36	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.177	U	0.312	0.313	5.00	0.514	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17722 FB-2

Lab Sample ID: 400-124796-21

Date Collected: 07/13/16 15:28

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.00511	U	0.0748	0.0748	1.00	0.151	pCi/L	07/27/16 18:19	08/18/16 06:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.4		40 - 110					07/27/16 18:19	08/18/16 06:50	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.219	U	0.311	0.312	1.00	0.599	pCi/L	07/27/16 18:45	08/15/16 12:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.4		40 - 110					07/27/16 18:45	08/15/16 12:25	1
Y Carrier	68.4		40 - 110					07/27/16 18:45	08/15/16 12:25	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	-0.224	U	0.320	0.321	5.00	0.599	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17723 MW-12

Lab Sample ID: 400-124796-22

Date Collected: 07/13/16 17:10

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.477		0.144	0.151	1.00	0.132	pCi/L	07/27/16 18:19	08/18/16 06:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.9		40 - 110					07/27/16 18:19	08/18/16 06:50	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.231	U	0.350	0.351	1.00	0.589	pCi/L	07/27/16 18:45	08/15/16 12:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.9		40 - 110					07/27/16 18:45	08/15/16 12:26	1
Y Carrier	64.3		40 - 110					07/27/16 18:45	08/15/16 12:26	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	0.707		0.379	0.382	5.00	0.589	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17724 MW-13

Lab Sample ID: 400-124796-23

Date Collected: 07/14/16 10:30

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.435		0.153	0.158	1.00	0.177	pCi/L	07/27/16 18:19	08/18/16 06:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					07/27/16 18:19	08/18/16 06:50	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.217	U	0.374	0.374	1.00	0.633	pCi/L	07/27/16 18:45	08/15/16 12:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					07/27/16 18:45	08/15/16 12:26	1
Y Carrier	63.2		40 - 110					07/27/16 18:45	08/15/16 12:26	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	0.652		0.404	0.406	5.00	0.633	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17725 FB-3

Lab Sample ID: 400-124796-24

Date Collected: 07/14/16 10:48

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0261	U	0.0555	0.0556	1.00	0.130	pCi/L	07/27/16 18:19	08/18/16 06:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					07/27/16 18:19	08/18/16 06:50	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.250	U	0.314	0.315	1.00	0.598	pCi/L	07/27/16 18:45	08/15/16 12:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					07/27/16 18:45	08/15/16 12:41	1
Y Carrier	80.7		40 - 110					07/27/16 18:45	08/15/16 12:41	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.276	U	0.319	0.319	5.00	0.598	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17726 MW-5

Lab Sample ID: 400-124796-25

Date Collected: 07/14/16 12:15

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.289		0.114	0.117	1.00	0.119	pCi/L	07/27/16 18:19	08/18/16 06:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					07/27/16 18:19	08/18/16 06:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.551		0.345	0.349	1.00	0.531	pCi/L	07/27/16 18:45	08/15/16 12:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					07/27/16 18:45	08/15/16 12:27	1
Y Carrier	86.4		40 - 110					07/27/16 18:45	08/15/16 12:27	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	0.840		0.364	0.368	5.00	0.531	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17727 MW-5 DUP

Lab Sample ID: 400-124796-26

Date Collected: 07/14/16 12:15

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.296		0.123	0.125	1.00	0.141	pCi/L	07/27/16 18:19	08/18/16 06:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					07/27/16 18:19	08/18/16 06:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.427	U	0.330	0.332	1.00	0.520	pCi/L	07/27/16 18:45	08/15/16 12:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					07/27/16 18:45	08/15/16 12:27	1
Y Carrier	83.4		40 - 110					07/27/16 18:45	08/15/16 12:27	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	0.724		0.352	0.355	5.00	0.520	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17728 MW-22

Lab Sample ID: 400-124796-27

Date Collected: 07/14/16 13:40

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.416		0.133	0.139	1.00	0.126	pCi/L	07/27/16 18:19	08/18/16 06:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					07/27/16 18:19	08/18/16 06:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.295	U	0.312	0.313	1.00	0.509	pCi/L	07/27/16 18:45	08/15/16 12:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					07/27/16 18:45	08/15/16 12:27	1
Y Carrier	81.1		40 - 110					07/27/16 18:45	08/15/16 12:27	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	0.711		0.339	0.342	5.00	0.509	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17992 MW-18

Lab Sample ID: 400-124796-28

Date Collected: 07/18/16 10:55

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.608		0.159	0.168	1.00	0.138	pCi/L	07/27/16 18:19	08/18/16 06:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					07/27/16 18:19	08/18/16 06:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.586		0.321	0.326	1.00	0.477	pCi/L	07/27/16 18:45	08/15/16 12:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					07/27/16 18:45	08/15/16 12:27	1
Y Carrier	81.5		40 - 110					07/27/16 18:45	08/15/16 12:27	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	1.19		0.359	0.367	5.00	0.477	pCi/L		08/18/16 20:35	1

Client Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17993 MW-18 DUP

Lab Sample ID: 400-124796-29

Date Collected: 07/18/16 10:55

Matrix: Water

Date Received: 07/21/16 15:15

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.431		0.129	0.134	1.00	0.116	pCi/L	07/27/16 18:19	08/18/16 06:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.7		40 - 110					07/27/16 18:19	08/18/16 06:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.400	U	0.284	0.287	1.00	0.442	pCi/L	07/27/16 18:45	08/15/16 12:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.7		40 - 110					07/27/16 18:45	08/15/16 12:27	1
Y Carrier	87.1		40 - 110					07/27/16 18:45	08/15/16 12:27	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	0.830		0.312	0.317	5.00	0.442	pCi/L		08/18/16 20:35	1

Definitions/Glossary

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

TestAmerica Job ID: 400-124796-1
SDG: Gaston Ash Pond (3)

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17246 MW-14

Lab Sample ID: 400-124796-1

Date Collected: 07/11/16 15:07

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262394	07/27/16 17:03	CMC	TAL SL
Total/NA	Analysis	9315		1	265417	08/18/16 05:01	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262398	07/27/16 18:13	CMC	TAL SL
Total/NA	Analysis	9320		1	265057	08/16/16 13:41	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Client Sample ID: AW17247 MW-15R

Lab Sample ID: 400-124796-2

Date Collected: 07/11/16 16:37

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262394	07/27/16 17:03	CMC	TAL SL
Total/NA	Analysis	9315		1	265416	08/18/16 05:05	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262398	07/27/16 18:13	CMC	TAL SL
Total/NA	Analysis	9320		1	265057	08/16/16 13:41	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Client Sample ID: AW17471 MW-3

Lab Sample ID: 400-124796-3

Date Collected: 07/11/16 14:00

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262394	07/27/16 17:03	CMC	TAL SL
Total/NA	Analysis	9315		1	265416	08/18/16 05:06	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262398	07/27/16 18:13	CMC	TAL SL
Total/NA	Analysis	9320		1	265057	08/16/16 13:41	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Client Sample ID: AW17472 MW-3 DUP

Lab Sample ID: 400-124796-4

Date Collected: 07/11/16 14:00

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262394	07/27/16 17:03	CMC	TAL SL
Total/NA	Analysis	9315		1	265416	08/18/16 05:06	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262398	07/27/16 18:13	CMC	TAL SL
Total/NA	Analysis	9320		1	265057	08/16/16 13:41	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-124796-1
SDG: Gaston Ash Pond (3)

Client Sample ID: AW17473 MW-4

Lab Sample ID: 400-124796-5

Date Collected: 07/11/16 15:25

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262394	07/27/16 17:03	CMC	TAL SL
Total/NA	Analysis	9315		1	265416	08/18/16 05:06	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262398	07/27/16 18:13	CMC	TAL SL
Total/NA	Analysis	9320		1	265057	08/16/16 13:41	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Client Sample ID: AW17474 MW-2

Lab Sample ID: 400-124796-6

Date Collected: 07/11/16 16:58

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262394	07/27/16 17:03	CMC	TAL SL
Total/NA	Analysis	9315		1	265416	08/18/16 05:06	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262398	07/27/16 18:13	CMC	TAL SL
Total/NA	Analysis	9320		1	265057	08/16/16 13:41	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Client Sample ID: AW17475 MW-1

Lab Sample ID: 400-124796-7

Date Collected: 07/12/16 10:08

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262394	07/27/16 17:03	CMC	TAL SL
Total/NA	Analysis	9315		1	265416	08/18/16 05:06	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262398	07/27/16 18:13	CMC	TAL SL
Total/NA	Analysis	9320		1	265057	08/16/16 13:41	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Client Sample ID: AW17476 MW-8

Lab Sample ID: 400-124796-8

Date Collected: 07/12/16 11:55

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262394	07/27/16 17:03	CMC	TAL SL
Total/NA	Analysis	9315		1	265416	08/18/16 05:06	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262398	07/27/16 18:13	CMC	TAL SL
Total/NA	Analysis	9320		1	265057	08/16/16 13:41	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17477 MW-9

Lab Sample ID: 400-124796-9

Date Collected: 07/12/16 13:25

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262394	07/27/16 17:03	CMC	TAL SL
Total/NA	Analysis	9315		1	265416	08/18/16 05:06	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262398	07/27/16 18:13	CMC	TAL SL
Total/NA	Analysis	9320		1	265057	08/16/16 13:42	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Client Sample ID: AW17709 MW-20

Lab Sample ID: 400-124796-10

Date Collected: 07/13/16 11:40

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262394	07/27/16 17:03	CMC	TAL SL
Total/NA	Analysis	9315		1	265416	08/18/16 05:06	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262398	07/27/16 18:13	CMC	TAL SL
Total/NA	Analysis	9320		1	265057	08/16/16 13:42	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Client Sample ID: AW17712 MW-7

Lab Sample ID: 400-124796-11

Date Collected: 07/13/16 14:47

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262394	07/27/16 17:03	CMC	TAL SL
Total/NA	Analysis	9315		1	265416	08/18/16 05:06	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262398	07/27/16 18:13	CMC	TAL SL
Total/NA	Analysis	9320		1	265057	08/16/16 13:42	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Client Sample ID: AW17713 MW-6

Lab Sample ID: 400-124796-12

Date Collected: 07/13/16 15:55

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262394	07/27/16 17:03	CMC	TAL SL
Total/NA	Analysis	9315		1	265416	08/18/16 05:06	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262398	07/27/16 18:13	CMC	TAL SL
Total/NA	Analysis	9320		1	265057	08/16/16 13:42	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17714 MW-21

Lab Sample ID: 400-124796-13

Date Collected: 07/13/16 16:40

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262394	07/27/16 17:03	CMC	TAL SL
Total/NA	Analysis	9315		1	265416	08/18/16 05:06	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262398	07/27/16 18:13	CMC	TAL SL
Total/NA	Analysis	9320		1	265057	08/16/16 13:42	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Client Sample ID: AW17715 FB-1

Lab Sample ID: 400-124796-14

Date Collected: 07/13/16 17:30

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262394	07/27/16 17:03	CMC	TAL SL
Total/NA	Analysis	9315		1	265409	08/18/16 06:48	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262398	07/27/16 18:13	CMC	TAL SL
Total/NA	Analysis	9320		1	265057	08/16/16 13:42	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Client Sample ID: AW17716 MW-16

Lab Sample ID: 400-124796-15

Date Collected: 07/14/16 10:00

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262394	07/27/16 17:03	CMC	TAL SL
Total/NA	Analysis	9315		1	265409	08/18/16 06:48	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262398	07/27/16 18:13	CMC	TAL SL
Total/NA	Analysis	9320		1	265059	08/16/16 13:36	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Client Sample ID: AW17717 MW-17

Lab Sample ID: 400-124796-16

Date Collected: 07/14/16 11:15

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262394	07/27/16 17:03	CMC	TAL SL
Total/NA	Analysis	9315		1	265409	08/18/16 06:49	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262398	07/27/16 18:13	CMC	TAL SL
Total/NA	Analysis	9320		1	265059	08/16/16 13:36	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Client Sample ID: AW17718 EB-1

Lab Sample ID: 400-124796-17

Date Collected: 07/14/16 11:45

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262394	07/27/16 17:03	CMC	TAL SL
Total/NA	Analysis	9315		1	265409	08/18/16 06:49	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262398	07/27/16 18:13	CMC	TAL SL
Total/NA	Analysis	9320		1	265059	08/16/16 13:36	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Client Sample ID: AW17719 MW-19

Lab Sample ID: 400-124796-18

Date Collected: 07/13/16 12:12

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262394	07/27/16 17:03	CMC	TAL SL
Total/NA	Analysis	9315		1	265409	08/18/16 06:49	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262398	07/27/16 18:13	CMC	TAL SL
Total/NA	Analysis	9320		1	265059	08/16/16 13:36	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Client Sample ID: AW17720 MW-10

Lab Sample ID: 400-124796-19

Date Collected: 07/13/16 13:47

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262394	07/27/16 17:03	CMC	TAL SL
Total/NA	Analysis	9315		1	265409	08/18/16 06:49	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262398	07/27/16 18:13	CMC	TAL SL
Total/NA	Analysis	9320		1	265059	08/16/16 13:36	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Client Sample ID: AW17721 MW-11

Lab Sample ID: 400-124796-20

Date Collected: 07/13/16 15:17

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262394	07/27/16 17:03	CMC	TAL SL
Total/NA	Analysis	9315		1	265409	08/18/16 06:49	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262398	07/27/16 18:13	CMC	TAL SL
Total/NA	Analysis	9320		1	265059	08/16/16 13:36	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-124796-1
SDG: Gaston Ash Pond (3)

Client Sample ID: AW17722 FB-2

Lab Sample ID: 400-124796-21

Date Collected: 07/13/16 15:28

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262399	07/27/16 18:19	CMC	TAL SL
Total/NA	Analysis	9315		1	265409	08/18/16 06:50	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262400	07/27/16 18:45	CMC	TAL SL
Total/NA	Analysis	9320		1	264774	08/15/16 12:25	JLW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Client Sample ID: AW17723 MW-12

Lab Sample ID: 400-124796-22

Date Collected: 07/13/16 17:10

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262399	07/27/16 18:19	CMC	TAL SL
Total/NA	Analysis	9315		1	265409	08/18/16 06:50	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262400	07/27/16 18:45	CMC	TAL SL
Total/NA	Analysis	9320		1	264774	08/15/16 12:26	JLW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Client Sample ID: AW17724 MW-13

Lab Sample ID: 400-124796-23

Date Collected: 07/14/16 10:30

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262399	07/27/16 18:19	CMC	TAL SL
Total/NA	Analysis	9315		1	265409	08/18/16 06:50	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262400	07/27/16 18:45	CMC	TAL SL
Total/NA	Analysis	9320		1	264774	08/15/16 12:26	JLW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Client Sample ID: AW17725 FB-3

Lab Sample ID: 400-124796-24

Date Collected: 07/14/16 10:48

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262399	07/27/16 18:19	CMC	TAL SL
Total/NA	Analysis	9315		1	265409	08/18/16 06:50	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262400	07/27/16 18:45	CMC	TAL SL
Total/NA	Analysis	9320		1	264774	08/15/16 12:41	JLW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-124796-1
SDG: Gaston Ash Pond (3)

Client Sample ID: AW17726 MW-5

Lab Sample ID: 400-124796-25

Date Collected: 07/14/16 12:15

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262399	07/27/16 18:19	CMC	TAL SL
Total/NA	Analysis	9315		1	265409	08/18/16 06:51	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262400	07/27/16 18:45	CMC	TAL SL
Total/NA	Analysis	9320		1	264774	08/15/16 12:27	JLW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Client Sample ID: AW17727 MW-5 DUP

Lab Sample ID: 400-124796-26

Date Collected: 07/14/16 12:15

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262399	07/27/16 18:19	CMC	TAL SL
Total/NA	Analysis	9315		1	265409	08/18/16 06:51	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262400	07/27/16 18:45	CMC	TAL SL
Total/NA	Analysis	9320		1	264774	08/15/16 12:27	JLW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Client Sample ID: AW17728 MW-22

Lab Sample ID: 400-124796-27

Date Collected: 07/14/16 13:40

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262399	07/27/16 18:19	CMC	TAL SL
Total/NA	Analysis	9315		1	265409	08/18/16 06:51	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262400	07/27/16 18:45	CMC	TAL SL
Total/NA	Analysis	9320		1	264774	08/15/16 12:27	JLW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

Client Sample ID: AW17992 MW-18

Lab Sample ID: 400-124796-28

Date Collected: 07/18/16 10:55

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262399	07/27/16 18:19	CMC	TAL SL
Total/NA	Analysis	9315		1	265409	08/18/16 06:51	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262400	07/27/16 18:45	CMC	TAL SL
Total/NA	Analysis	9320		1	264774	08/15/16 12:27	JLW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	TAL SL

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-124796-1
SDG: Gaston Ash Pond (3)

Client Sample ID: AW17993 MW-18 DUP

Lab Sample ID: 400-124796-29

Date Collected: 07/18/16 10:55

Matrix: Water

Date Received: 07/21/16 15:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			262399	07/27/16 18:19	CMC	TAL SL
Total/NA	Analysis	9315		1	265409	08/18/16 06:51	RTM	TAL SL
Total/NA	Prep	PrecSep_0			262400	07/27/16 18:45	CMC	TAL SL
Total/NA	Analysis	9320		1	264774	08/15/16 12:27	JLW	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	265525	08/18/16 20:35	ALS	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: 400-124796-1
 SDG: Gaston Ash Pond (3)

Rad

Prep Batch: 262394

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-124796-1	AW17246 MW-14	Total/NA	Water	PrecSep-21	
400-124796-2	AW17247 MW-15R	Total/NA	Water	PrecSep-21	
400-124796-3	AW17471 MW-3	Total/NA	Water	PrecSep-21	
400-124796-4	AW17472 MW-3 DUP	Total/NA	Water	PrecSep-21	
400-124796-5	AW17473 MW-4	Total/NA	Water	PrecSep-21	
400-124796-6	AW17474 MW-2	Total/NA	Water	PrecSep-21	
400-124796-7	AW17475 MW-1	Total/NA	Water	PrecSep-21	
400-124796-8	AW17476 MW-8	Total/NA	Water	PrecSep-21	
400-124796-9	AW17477 MW-9	Total/NA	Water	PrecSep-21	
400-124796-10	AW17709 MW-20	Total/NA	Water	PrecSep-21	
400-124796-11	AW17712 MW-7	Total/NA	Water	PrecSep-21	
400-124796-12	AW17713 MW-6	Total/NA	Water	PrecSep-21	
400-124796-13	AW17714 MW-21	Total/NA	Water	PrecSep-21	
400-124796-14	AW17715 FB-1	Total/NA	Water	PrecSep-21	
400-124796-15	AW17716 MW-16	Total/NA	Water	PrecSep-21	
400-124796-16	AW17717 MW-17	Total/NA	Water	PrecSep-21	
400-124796-17	AW17718 EB-1	Total/NA	Water	PrecSep-21	
400-124796-18	AW17719 MW-19	Total/NA	Water	PrecSep-21	
400-124796-19	AW17720 MW-10	Total/NA	Water	PrecSep-21	
400-124796-20	AW17721 MW-11	Total/NA	Water	PrecSep-21	
MB 160-262394/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-262394/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-124796-19 DU	AW17720 MW-10	Total/NA	Water	PrecSep-21	

Prep Batch: 262398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-124796-1	AW17246 MW-14	Total/NA	Water	PrecSep_0	
400-124796-2	AW17247 MW-15R	Total/NA	Water	PrecSep_0	
400-124796-3	AW17471 MW-3	Total/NA	Water	PrecSep_0	
400-124796-4	AW17472 MW-3 DUP	Total/NA	Water	PrecSep_0	
400-124796-5	AW17473 MW-4	Total/NA	Water	PrecSep_0	
400-124796-6	AW17474 MW-2	Total/NA	Water	PrecSep_0	
400-124796-7	AW17475 MW-1	Total/NA	Water	PrecSep_0	
400-124796-8	AW17476 MW-8	Total/NA	Water	PrecSep_0	
400-124796-9	AW17477 MW-9	Total/NA	Water	PrecSep_0	
400-124796-10	AW17709 MW-20	Total/NA	Water	PrecSep_0	
400-124796-11	AW17712 MW-7	Total/NA	Water	PrecSep_0	
400-124796-12	AW17713 MW-6	Total/NA	Water	PrecSep_0	
400-124796-13	AW17714 MW-21	Total/NA	Water	PrecSep_0	
400-124796-14	AW17715 FB-1	Total/NA	Water	PrecSep_0	
400-124796-15	AW17716 MW-16	Total/NA	Water	PrecSep_0	
400-124796-16	AW17717 MW-17	Total/NA	Water	PrecSep_0	
400-124796-17	AW17718 EB-1	Total/NA	Water	PrecSep_0	
400-124796-18	AW17719 MW-19	Total/NA	Water	PrecSep_0	
400-124796-19	AW17720 MW-10	Total/NA	Water	PrecSep_0	
400-124796-20	AW17721 MW-11	Total/NA	Water	PrecSep_0	
MB 160-262398/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-262398/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-124796-19 DU	AW17720 MW-10	Total/NA	Water	PrecSep_0	

QC Association Summary

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Rad (Continued)

Prep Batch: 262399

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-124796-21	AW17722 FB-2	Total/NA	Water	PrecSep-21	
400-124796-22	AW17723 MW-12	Total/NA	Water	PrecSep-21	
400-124796-23	AW17724 MW-13	Total/NA	Water	PrecSep-21	
400-124796-24	AW17725 FB-3	Total/NA	Water	PrecSep-21	
400-124796-25	AW17726 MW-5	Total/NA	Water	PrecSep-21	
400-124796-26	AW17727 MW-5 DUP	Total/NA	Water	PrecSep-21	
400-124796-27	AW17728 MW-22	Total/NA	Water	PrecSep-21	
400-124796-28	AW17992 MW-18	Total/NA	Water	PrecSep-21	
400-124796-29	AW17993 MW-18 DUP	Total/NA	Water	PrecSep-21	
MB 160-262399/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-262399/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-262399/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 262400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-124796-21	AW17722 FB-2	Total/NA	Water	PrecSep_0	
400-124796-22	AW17723 MW-12	Total/NA	Water	PrecSep_0	
400-124796-23	AW17724 MW-13	Total/NA	Water	PrecSep_0	
400-124796-24	AW17725 FB-3	Total/NA	Water	PrecSep_0	
400-124796-25	AW17726 MW-5	Total/NA	Water	PrecSep_0	
400-124796-26	AW17727 MW-5 DUP	Total/NA	Water	PrecSep_0	
400-124796-27	AW17728 MW-22	Total/NA	Water	PrecSep_0	
400-124796-28	AW17992 MW-18	Total/NA	Water	PrecSep_0	
400-124796-29	AW17993 MW-18 DUP	Total/NA	Water	PrecSep_0	
MB 160-262400/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-262400/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-262400/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-262394/1-A
Matrix: Water
Analysis Batch: 265417

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 262394

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.06792	U	0.105	0.105	1.00	0.180	pCi/L	07/27/16 17:03	08/18/16 05:01	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					07/27/16 17:03	08/18/16 05:01	1

Lab Sample ID: LCS 160-262394/2-A
Matrix: Water
Analysis Batch: 265417

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 262394

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	14.9	18.72		1.92	1.00	0.257	pCi/L	126	68 - 137
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	93.4		40 - 110						

Lab Sample ID: 400-124796-19 DU
Matrix: Water
Analysis Batch: 265409

Client Sample ID: AW17720 MW-10
Prep Type: Total/NA
Prep Batch: 262394

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.113	U	0.1077	U	0.106	1.00	0.166	pCi/L	0.02	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	94.0		40 - 110							

Lab Sample ID: MB 160-262399/1-A
Matrix: Water
Analysis Batch: 265409

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 262399

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.01193	U	0.0443	0.0443	1.00	0.0984	pCi/L	07/27/16 18:19	08/18/16 06:50	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		40 - 110					07/27/16 18:19	08/18/16 06:50	1

Lab Sample ID: LCS 160-262399/2-A
Matrix: Water
Analysis Batch: 265409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 262399

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	11.2	14.32		1.43	1.00	0.149	pCi/L	128	68 - 137

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

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

Lab Sample ID: LCS 160-262399/2-A
Matrix: Water
Analysis Batch: 265409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 262399

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	91.7		40 - 110

Lab Sample ID: LCSD 160-262399/3-A
Matrix: Water
Analysis Batch: 265409

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 262399

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	11.2	14.58		1.45	1.00	0.116	pCi/L	131	68 - 137	0.09	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	92.9		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-262398/1-A
Matrix: Water
Analysis Batch: 265057

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 262398

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.01644	U	0.307	0.307	1.00	0.544	pCi/L	07/27/16 18:13	08/16/16 13:41	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110	07/27/16 18:13	08/16/16 13:41	1
Y Carrier	86.0		40 - 110	07/27/16 18:13	08/16/16 13:41	1

Lab Sample ID: LCS 160-262398/2-A
Matrix: Water
Analysis Batch: 265057

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 262398

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	19.6	20.47		2.17	1.00	0.528	pCi/L	104	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	93.4		40 - 110
Y Carrier	89.0		40 - 110

Lab Sample ID: 400-124796-19 DU
Matrix: Water
Analysis Batch: 265059

Client Sample ID: AW17720 MW-10
Prep Type: Total/NA
Prep Batch: 262398

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.234	U	0.3854	U	0.286	1.00	0.443	pCi/L	0.25	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

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

Lab Sample ID: 400-124796-19 DU
Matrix: Water
Analysis Batch: 265059

Client Sample ID: AW17720 MW-10
Prep Type: Total/NA
Prep Batch: 262398

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	94.0		40 - 110
Y Carrier	90.1		40 - 110

Lab Sample ID: MB 160-262400/1-A
Matrix: Water
Analysis Batch: 264774

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 262400

Analyte	MB MB		Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	0.09691	U	0.251	0.251	1.00	0.438	pCi/L	07/27/16 18:45	08/15/16 12:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		40 - 110					07/27/16 18:45	08/15/16 12:25	1
Y Carrier	83.7		40 - 110					07/27/16 18:45	08/15/16 12:25	1

Lab Sample ID: LCS 160-262400/2-A
Matrix: Water
Analysis Batch: 264774

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 262400

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	
Radium-228	19.6	22.88		2.42	1.00	0.593	pCi/L	117	56 - 140	
Carrier	%Yield	Qualifier	Limits							
Ba Carrier	91.7		40 - 110							
Y Carrier	80.7		40 - 110							

Lab Sample ID: LCSD 160-262400/3-A
Matrix: Water
Analysis Batch: 264774

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 262400

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		RER	Limit
Radium-228	19.6	22.51		2.36	1.00	0.430	pCi/L	115	56 - 140	0.08	1	
Carrier	%Yield	Qualifier	Limits									
Ba Carrier	92.9		40 - 110									
Y Carrier	84.1		40 - 110									

QC Sample Results

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

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

Lab Sample ID: 400-124796-19 DU
 Matrix: Water
 Analysis Batch: 265525

Client Sample ID: AW17720 MW-10
 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	0.347	U	0.4931		0.305	5.00	0.443	pCi/L	0.23	

- 1
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- 3
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Client Information		Sampler: Nick Pitts / Jason Rouss		Lab P/N: Whitmire, Cheyenne R		Carrier Tracking No(s): 400-56525-24537.1	
Client Contact: Sarah Copeland		Phone:		E-Mail: cheyenne.whitmire@testamericainc.com		Page: 1 of 3	
Company: Alabama Power General Test Laboratory		Address: 744 County Rd 87 GSC #8		City: Callera		Job #: 400-124796	
State, Zip: AL, 35040		Phone: 205-664-6121(Tel)		Email: sgcopela@southernco.com		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 X - EDTA L - EDA Z - other (specify) Other:	
Project Name: CCR		Project #: 40007143		PO #: 9315_Ra226, 9320_Ra228, Ra226Ra228_GPPC		Total Number of Containers: X	
Site: Gaston Ash Pond (3)		SSOW#: 40007143		TAT Requested (days): Routine		Special Instructions/Note: MW-14 MW-15R MW-3 MW-3 Dup (Sample Duplicate) MW-4 MW-2 MW-1 MW-8 MW-9 MW-20 MW-7	
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater)	Field Filtered Sample (Yes or No)	Perform MS(MSD) (Yes or No)	Special Instructions/Note:
AW17246	7/11/16	1507	G	Water	X	X	
AW17247	7/11/16	1637	G	Water	X	X	
AW17471	7/11/16	1400	G	Water	X	X	
AW17472	7/11/16	1400	G	Water	X	X	
AW17473	7/11/16	1525	G	Water	X	X	
AW17474	7/11/16	1658	G	Water	X	X	
AW17475	7/12/16	1008	G	Water	X	X	
AW17476	7/12/16	1155	G	Water	X	X	
AW17477	7/12/16	1325	G	Water	X	X	
AW17709	7/13/16	1140	G	Water	X	X	
AW17712	7/13/16	1447	G	Water	X	X	
Possible Hazard Identification <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							
Empty Kit Relinquished by: Sarah Copeland Relinquished by: Sarah Copeland Relinquished by: Relinquished by:							
Date/Time: 07/20/2016: 1335		Date:		Date/Time: 7/21/16 1515		Date/Time:	
Company: APC		Company: APC		Company: APC		Company: APC	
Date/Time:		Date/Time:		Date/Time:		Date/Time:	
Date/Time:		Date/Time:		Date/Time:		Date/Time:	
Custody Seal No.: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Custody Seal No.:		Custody Seal No.:	
Cooler Temperature(s) °C and Other Remarks:							



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: sgcopela@southernco.com
 Project #: 40007143
 CCR
 Site: Gaston Ash Pond (3)

Sampler: Nick Pitts / Jason Rouss
Lab PIV: Whitmire, Cheyenne R
Carrier Tracking No(s):
 COC No: 400-56525-24537.1
 Page: Page 2 of 3
 Job #:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=other)	Field Filtered Sample (Yes or No)	Form MS/MSD (Yes or No)	Analysis Requested	Total Number of Containers	Special Instructions/Note:
AW17713	7/13/16	1555	G	Water	X	X	9316_Ra229, 9320_Ra228, Ra226Ra228_GPPC		MW-6
AW17714	7/13/16	1640	G	Water	X	X			MW-21
AW17715	7/13/16	1730	G	Water	X	X			FB-1 (Field Blank)
AW17716	7/14/16	1000	G	Water	X	X			MW-16
AW17717	7/14/16	1115	G	Water	X	X			MW-17
AW17718	7/14/16	1145	G	Water	X	X			EB-1 (Equipment Blank)
AW17719	7/13/16	1212	G	Water	X	X			MW-19
AW17720	7/13/16	1347	G	Water	X	X			MW-10
AW17721	7/13/16	1517	G	Water	X	X			MW-11
AW17722	7/13/16	1528	G	Water	X	X			FB-2 (Field Blank)
AW17723	7/13/16	1710	G	Water	X	X			MW-12

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by: Sarah Copeland
 Date/Time: 07/20/2016; 1335
 Company: APC

Relinquished by:
 Date/Time:
 Company:

Relinquished by:
 Date/Time:
 Company:

Custody Seals Intact: A Yes Δ No
 Custody Seal No.:

Special Instructions/OC Requirements:
 Return To Client Disposal By Lab Archive For _____ Months

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

Received by: [Signature] Date/Time: 7/21/16 15:55 Company: [Signature]
Received by: _____ Date/Time: _____ Company: _____
Received by: _____ Date/Time: _____ Company: _____

Method of Shipment:

Cooler Temperature(s) °C and Other Remarks:



Chain of Custody Record

Client Information

Company: Alabama Power General Test Laboratory
 Address: 744 County Rd 87 GSC #8
 City: Calera
 State, Zip: AL, 35040
 Phone: 205-664-6121(Tel)
 Email: sgcopela@southernco.com
 Project Name: 40007143
 CCR:
 Site: Gaston Ash Pond (3)

Sampler: Nick Pitts / Jason Rouss
Phone:

Lab PIV: Whitmire, Cheyenne R
E-Mail: cheyenne.whitmire@testamericainc.com

Carrier Tracking No(s):
 COC No: 400-56525-24537.1
 Page: Page 3 of 3
 Job #:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (We=water, S=solid, O=waste/soil, BT=Tissue, A=Air)	Analysis Requested	Total Number of Containers	Special Instructions/Note:
AW17724	7/14/16	1030	G	Water	9316_Ra226, 9320_Ra228, Ra226Ra228_GFP	X	MW-13
AW17725	7/14/16	1048	G	Water			FB-3 (Field Blank)
AW17726	7/14/16	1215	G	Water			MW-5
AW17727	7/14/16	1215	G	Water			MW-5 Dup (Sample Duplicate)
AW17728	7/14/16	1340	G	Water			MW-22
AW17992	7/18/16	1055	G	Water			MW-18
AW17993	7/18/16	1055	G	Water			MW-18 Dup (Sample Duplicate)

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

Empty Kit Relinquished by:
 Relinquished by: Sarah Copeland
 Relinquished by:
 Relinquished by:

Custody Seal No.:
 Yes No

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

Method of Shipment:
 Date/Time: 07/20/2016, 1335
 Date/Time:
 Date/Time:

Time:
 Date: 7/21/16 1515
 Company: TA
 Date/Time:
 Company:
 Date/Time:
 Company:

Received by:
 Received by:
 Received by:
 Received by:

Cooler Temperature(s) °C and Other Remarks:



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-124796-1
SDG Number: Gaston Ash Pond (3)

Login Number: 124796

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	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	N/A	
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	



Certification Summary

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

TestAmerica Job ID: 400-124796-1
 SDG: Gaston Ash Pond (3)

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16 *
Kansas	NELAP	7	E-10253	10-31-16
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16 *
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	08-31-16

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	MO00054	06-30-17
California	State Program	9	2886	03-31-18
Connecticut	State Program	1	PH-0241	03-31-17
Florida	NELAP	4	E87689	06-30-17
Illinois	NELAP	5	003757	11-30-16
Iowa	State Program	7	373	12-01-16
Kansas	NELAP	7	E-10236	07-31-16 *
Kentucky (DW)	State Program	4	90125	12-31-16
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-17
Louisiana (DW)	NELAP	6	LA160008	12-31-16
Maryland	State Program	3	310	09-30-17
Missouri	State Program	7	780	06-30-17
Nevada	State Program	9	MO000542016-1	07-31-17
New Jersey	NELAP	2	MO002	06-30-17
New York	NELAP	2	11616	03-31-17
North Dakota	State Program	8	R207	06-30-17
NRC	NRC		24-24817-01	12-31-22

* Certification renewal pending - certification considered valid.

Certification Summary

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

TestAmerica Job ID: 400-124796-1
SDG: Gaston Ash Pond (3)

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Oklahoma	State Program	6	9997	08-31-16 *
Pennsylvania	NELAP	3	68-00540	02-28-17 *
South Carolina	State Program	4	85002001	06-30-16 *
Texas	NELAP	6	T104704193-15-9	07-31-17
USDA	Federal		P330-07-00122	01-09-17
Utah	NELAP	8	MO000542015-7	07-31-16 *
Virginia	NELAP	3	460230	06-14-17
Washington	State Program	10	C592	08-30-16 *
West Virginia DEP	State Program	3	381	08-31-16 *

* Certification renewal pending - certification considered valid.

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

 Alabama Power



Sample Group : WMWGASAP_36

Project/Site : Gaston Ash Pond
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:

Supervision:



Anions

Gaston Ash Pond

WMWGASAP_36

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. All samples were received intact and properly preserved.
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>Chloride Batch ID</u>	<u>Fluoride Batch ID</u>	<u>Sulfate Batch ID</u>	<u>Project ID</u>
AW21225	573658	573659	573660	WMWGASAP_36
AW21226	573658	573659	573660	WMWGASAP_36
AW21227	573658	573659	573660	WMWGASAP_36
AW21228	573658	573659	573660	WMWGASAP_36
AW21229	573658	573659	573660	WMWGASAP_36
AW21230	573658	573659	573660	WMWGASAP_36

4. All of the above samples were analyzed and prepared by EPA 300.0.
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 instrument performance check (IPC) was analyzed and all criteria were met.
- All laboratory reagent blanks were less than the method detection limits for the requested anions.
- All laboratory fortified blanks were within acceptance criteria for the anions requested.
- 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 laboratory fortified matrix (LFM) sample was analyzed with each batch. All acceptance criteria for accuracy were met.



- A sample duplicate and/or laboratory fortified matrix duplicate were analyzed with each batch. All acceptance criteria for precision were met. It is noted that separate and distinct criteria for duplicate precision calculations, based on sample and duplicate anion concentrations, are used to assess precision compliance. These are as follow: if the sample and duplicate are both greater than 5x anion Reporting Limit (RL) concentration, the precision is calculated and reported as relative percent difference (RPD), with an acceptance range of 0 - 20%; if either the sample or duplicate are less than 5x anion RL, the precision is calculated and reported as the absolute value of the difference between the two concentrations, with an acceptance range of less than or equal to the anion RL value.
7. Samples AW21225, AW21226 and AW21227 were re-analyzed at a 10x dilution for chloride and sulfate, and sample AW21228 was re-analyzed at a 10x dilution for sulfate, due to the undiluted results exceeding the calibrated range of the detector. The dilution results for chloride and sulfate for these samples should be used; reporting limit (RL) values are adjusted upward to reflect the dilution factor applied.

<u>Sample ID</u>		<u>Analyte</u>		<u>Dilution Factor</u>
AW21225		Chloride, Sulfate		10X
AW21226		Chloride, Sulfate		10X
AW21227		Chloride, Sulfate		10X
AW21228		Sulfate		10X

8. The raw data results are shown with dilution factors included, when dilutions are manually performed by the analyst.
 The raw data results are shown without dilution factor corrections, when dilutions are run automatically by the instrument.



Metals ICP

Gaston Ash Pond

WMWGASAP_36

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. All samples were received intact and properly preserved.
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>
AW21225	20160907C_20160908	WMWGASAP_36
AW21226	20160907C_20160908	WMWGASAP_36
AW21227	20160907C_20160908	WMWGASAP_36
AW21228	20160907C_20160908	WMWGASAP_36
AW21229	20160907D_20160908A	WMWGASAP_36
AW21230	20160907D_20160908A	WMWGASAP_36

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

General Quality Control Procedures:

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



Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met.
 - A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.
7. All samples were analyzed without a dilution with the following exceptions: The following samples were diluted due to sample concentrations from the undiluted analysis were over the high standard of the calibration curve.

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AW21225	Calcium	10.15X
AW21226	Calcium	10.15X
AW21227	Calcium	10.15X
AW21228MS	Calcium	10.15X
AW21228MSD	Calcium	10.15X

8. The raw data results include both results corrected for dilution and results not corrected for dilution.



Metals ICPMS

Gaston Ash Pond

WMWGASAP_36

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. All samples were received intact and properly preserved.
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>
AW21225	574567	WMWGASAP_36
AW21226	574567	WMWGASAP_36
AW21227	574567	WMWGASAP_36
AW21228	574567	WMWGASAP_36
AW21229	574567	WMWGASAP_36
AW21230	574567	WMWGASAP_36

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.
7. The Cadmium MDL increased from 0.0001mg/L to 0.0002 mg/L.

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.
-
8. All samples were analyzed at a dilution of 1 to 5 to compensate for any matrix effects.
 9. The raw data results are shown with dilution factors included.



Mercury

Gaston Ash Pond

WMWGASAP_36

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. All samples were received intact and properly preserved.
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>
AW21225	574284	WMWGASAP_36
AW21226	574284	WMWGASAP_36
AW21227	574284	WMWGASAP_36
AW21228	574284	WMWGASAP_36
AW21229	574284	WMWGASAP_36
AW21230	574284	WMWGASAP_36

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, with the exception of the method blank. There was a drop in response signal, but the highest point was still below the limit of quantitation for the requested analyte.



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 Ash Pond

WMWGASAP_36

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. All samples were received intact and properly preserved.
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>
AW21225	573641	WMWGASAP_36
AW21226	573641	WMWGASAP_36
AW21227	573641	WMWGASAP_36
AW21228	573641	WMWGASAP_36
AW21229	573641	WMWGASAP_36
AW21230	573641	WMWGASAP_36

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.
7. The reporting limit for TDS was incorrectly listed as 2.5mg/L. It has now been corrected based on filter volume and project limits.

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 0.5 mg 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 2.5 mg and 200 mg residue with the exception of AW21229 and AW21230 which were <2.5mg.

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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 22-Aug-16
 Customer ID:
 Delivery Date: 23-Aug-16

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AW21225

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/2/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	TAS	9/6/2016	EPA 200.8		5.075	0.001	0.005	J 0.00169	mg/L
* Barium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	0.0662	mg/L
* Beryllium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/7/2016	EPA 200.7		1.015	0.02	0.1	1.66	mg/L
* Calcium, Total	HRG	9/8/2016	EPA 200.7		10.15	1.0	5.0	71.3	mg/L
* Cadmium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/31/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	0.0436	mg/L
* Lead, Total	TAS	9/6/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	8/24/2016	SM 2540C		1		50	426	mg/L
* Chloride, Total	SES	8/25/2016	EPA 300.0		10	0.40	2.50	37.6	mg/L
* Fluoride, Total	SES	8/24/2016	EPA 300.0		1	0.01	0.3	J 0.088	mg/L
* Sulfate, Total	SES	8/25/2016	EPA 300.0		10	3.0	10	170	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: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected.
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 22-Aug-16
 Customer ID:
 Delivery Date: 23-Aug-16

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AW21225

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW21387 Thallium, Total	mg/L	-0.00000898	0.00044	0.10	0.1000	0.101	0.0989	0.085 to 0.115	100	70 to 130	0.589	20	
AW21387 Arsenic, Total	mg/L	-0.00000367	0.0022	0.10	0.0930	0.0940	0.0979	0.085 to 0.115	93.0	70 to 130	1.02	20	
AW21387 Barium, Total	mg/L	-0.00000142	0.0044	0.10	0.104	0.104	0.0970	0.085 to 0.115	95.4	70 to 130	0.0014520		
AW21387 Cobalt, Total	mg/L	-0.00000268	0.0044	0.10	0.0932	0.0933	0.0967	0.085 to 0.115	93.2	70 to 130	0.119	20	
AW21387 Antimony, Total	mg/L	0.0000353	0.00132	0.10	0.0931	0.0947	0.0985	0.085 to 0.115	93.1	70 to 130	1.75	20	
AW21387 Chromium, Total	mg/L	-0.00000174	0.0044	0.10	0.0987	0.0990	0.0969	0.085 to 0.115	98.7	70 to 130	0.342	20	
AW21385 Mercury, Total by CVAA	mg/L	0.000131	0.0005	0.004	0.00403	0.00402	0.00398	0.0034 to 0.0046	101	70 to 130	0.261	20	
AW21387 Molybdenum, Total	mg/L	-0.00000325	0.0044	0.10	0.0944	0.0952	0.0981	0.085 to 0.115	94.4	70 to 130	0.808	20	
AW21228 Lithium, Total	mg/L	0.000439	0.022	0.20	0.221	0.224	0.206	0.17 to 0.23	102	70 to 130	1.35	20	
AW21387 Cadmium, Total	mg/L	-0.000000493	0.00044	0.10	0.0991	0.0994	0.103	0.085 to 0.115	99.1	70 to 130	0.323	20	
AW21228 Calcium, Total	mg/L	-0.0155	0.22	5.00	41.9	42.2	4.89	4.25 to 5.75	92.0	70 to 130	0.713	20	
AW21387 Selenium, Total	mg/L	0.0000158	0.0044	0.10	0.0957	0.0944	0.101	0.085 to 0.115	95.7	70 to 130	1.34	20	
AW21228 Boron, Total	mg/L	0.00338	0.044	1.00	1.80	1.81	0.946	0.85 to 1.15	96.5	70 to 130	0.554	20	
AW21387 Beryllium, Total	mg/L	0.0000972	0.00132	0.10	0.120	0.121	0.114	0.085 to 0.115	120	70 to 130	0.0559	20	
AW21387 Lead, Total	mg/L	0.00000521	0.0022	0.10	0.0988	0.0986	0.101	0.085 to 0.115	98.8	70 to 130	0.150	20	

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 22-Aug-16
 Customer ID:
 Delivery Date: 23-Aug-16

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AW21225

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW21387	Sulfate, Total	mg/L	0.295	1.0	20.00	23.9		4.21	19.7	18 to 22	98.4	80 to 120	0.474	20
AW21228	Solids, Dissolved	mg/L	-3.0	25				349	47	40 to 60			0.00	5
AW21387	Chloride, Total	mg/L	0.000	0.25	10.00	13.4		3.47	9.90	9 to 11	99.3	80 to 120	0.00	20
AW21387	Fluoride, Total	mg/L	0.000	0.3	2.00	1.99		0.044	2.01	1.8 to 2.2	97.2	80 to 120	2.25	20

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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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

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 22-Aug-16
 Customer ID:
 Delivery Date: 23-Aug-16

Description: Gaston Ash Pond - MW-22 Dup

Laboratory ID Number: AW21226

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/2/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	TAS	9/6/2016	EPA 200.8		5.075	0.001	0.005	J 0.00174	mg/L
* Barium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	0.0658	mg/L
* Beryllium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/7/2016	EPA 200.7		1.015	0.02	0.1	1.67	mg/L
* Calcium, Total	HRG	9/8/2016	EPA 200.7		10.15	1.0	5.0	70.5	mg/L
* Cadmium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/31/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	0.0445	mg/L
* Lead, Total	TAS	9/6/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	8/24/2016	SM 2540C		1		50	428	mg/L
* Chloride, Total	SES	8/25/2016	EPA 300.0		10	0.40	2.50	37.6	mg/L
* Fluoride, Total	SES	8/24/2016	EPA 300.0		1	0.01	0.3	J 0.087	mg/L
* Sulfate, Total	SES	8/25/2016	EPA 300.0		10	3.0	10	171	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, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected.
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 22-Aug-16
 Customer ID:
 Delivery Date: 23-Aug-16

Description: Gaston Ash Pond - MW-22 Dup

Laboratory ID Number: AW21226

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	Spike				Limit	Rec	Limit	Prec			
AW21387 Thallium, Total	mg/L	-0.00000898	0.00044	0.10	0.1000	0.101	0.0989	0.085 to 0.115		100	70 to 130		0.589	20
AW21387 Antimony, Total	mg/L	0.0000353	0.00132	0.10	0.0931	0.0947	0.0985	0.085 to 0.115		93.1	70 to 130		1.75	20
AW21387 Chromium, Total	mg/L	-0.00000174	0.0044	0.10	0.0987	0.0990	0.0969	0.085 to 0.115		98.7	70 to 130		0.342	20
AW21228 Boron, Total	mg/L	0.00338	0.044	1.00	1.80	1.81	0.946	0.85 to 1.15		96.5	70 to 130		0.554	20
AW21387 Beryllium, Total	mg/L	0.0000972	0.00132	0.10	0.120	0.121	0.114	0.085 to 0.115		120	70 to 130		0.0559	20
AW21387 Lead, Total	mg/L	0.00000521	0.0022	0.10	0.0988	0.0986	0.101	0.085 to 0.115		98.8	70 to 130		0.150	20
AW21387 Arsenic, Total	mg/L	-0.00000367	0.0022	0.10	0.0930	0.0940	0.0979	0.085 to 0.115		93.0	70 to 130		1.02	20
AW21387 Barium, Total	mg/L	-0.00000142	0.0044	0.10	0.104	0.104	0.0970	0.085 to 0.115		95.4	70 to 130		0.0014520	
AW21387 Cobalt, Total	mg/L	-0.00000268	0.0044	0.10	0.0932	0.0933	0.0967	0.085 to 0.115		93.2	70 to 130		0.119	20
AW21228 Lithium, Total	mg/L	0.000439	0.022	0.20	0.221	0.224	0.206	0.17 to 0.23		102	70 to 130		1.35	20
AW21387 Cadmium, Total	mg/L	-0.000000493	0.00044	0.10	0.0991	0.0994	0.103	0.085 to 0.115		99.1	70 to 130		0.323	20
AW21385 Mercury, Total by CVAA	mg/L	0.000131	0.0005	0.004	0.00403	0.00402	0.00398	0.0034 to 0.0046		101	70 to 130		0.261	20
AW21387 Molybdenum, Total	mg/L	-0.00000325	0.0044	0.10	0.0944	0.0952	0.0981	0.085 to 0.115		94.4	70 to 130		0.808	20
AW21228 Calcium, Total	mg/L	-0.0155	0.22	5.00	41.9	42.2	4.89	4.25 to 5.75		92.0	70 to 130		0.713	20
AW21387 Selenium, Total	mg/L	0.0000158	0.0044	0.10	0.0957	0.0944	0.101	0.085 to 0.115		95.7	70 to 130		1.34	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected.
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 22-Aug-16
 Customer ID:
 Delivery Date: 23-Aug-16

Description: Gaston Ash Pond - MW-22 Dup

Laboratory ID Number: AW21226

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW21387	Sulfate, Total	mg/L	0.295	1.0	20.00	23.9	4.21	19.7	18 to 22	98.4	80 to 120	0.474	20
AW21228	Solids, Dissolved	mg/L	-3.0	25			349	47	40 to 60			0.00	5
AW21387	Chloride, Total	mg/L	0.000	0.25	10.00	13.4	3.47	9.90	9 to 11	99.3	80 to 120	0.00	20
AW21387	Fluoride, Total	mg/L	0.000	0.3	2.00	1.99	0.044	2.01	1.8 to 2.2	97.2	80 to 120	2.25	20

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Expiration: June 30, 2018

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CC:

Reported: 7/10/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 22-Aug-16
 Customer ID:
 Delivery Date: 23-Aug-16

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AW21227

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/2/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	TAS	9/6/2016	EPA 200.8		5.075	0.001	0.005	0.00880	mg/L
* Barium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	0.0214	mg/L
* Beryllium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/7/2016	EPA 200.7		1.015	0.02	0.1	1.32	mg/L
* Calcium, Total	HRG	9/8/2016	EPA 200.7		10.15	1.0	5.0	52.8	mg/L
* Cadmium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/31/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	J 0.00256	mg/L
* Lead, Total	TAS	9/6/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	8/24/2016	SM 2540C		1		25	393	mg/L
* Chloride, Total	SES	8/24/2016	EPA 300.0		1	0.04	0.25	25.1	mg/L
* Fluoride, Total	SES	8/24/2016	EPA 300.0		1	0.01	0.3	J 0.117	mg/L
* Sulfate, Total	SES	8/25/2016	EPA 300.0		10	3.0	10	107	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 22-Aug-16
 Customer ID:
 Delivery Date: 23-Aug-16

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AW21227

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW21387 Thallium, Total	mg/L	-0.00000898	0.00044	0.10	0.1000	0.101	0.0989	0.085 to 0.115	100	70 to 130	0.589	20	
AW21385 Mercury, Total by CVAA	mg/L	0.000131	0.0005	0.004	0.00403	0.00402	0.00398	0.0034 to 0.0046	101	70 to 130	0.261	20	
AW21387 Molybdenum, Total	mg/L	-0.00000325	0.0044	0.10	0.0944	0.0952	0.0981	0.085 to 0.115	94.4	70 to 130	0.808	20	
AW21387 Antimony, Total	mg/L	0.0000353	0.00132	0.10	0.0931	0.0947	0.0985	0.085 to 0.115	93.1	70 to 130	1.75	20	
AW21387 Chromium, Total	mg/L	-0.00000174	0.0044	0.10	0.0987	0.0990	0.0969	0.085 to 0.115	98.7	70 to 130	0.342	20	
AW21228 Calcium, Total	mg/L	-0.0155	0.22	5.00	41.9	42.2	4.89	4.25 to 5.75	92.0	70 to 130	0.713	20	
AW21387 Selenium, Total	mg/L	0.0000158	0.0044	0.10	0.0957	0.0944	0.101	0.085 to 0.115	95.7	70 to 130	1.34	20	
AW21387 Arsenic, Total	mg/L	-0.00000367	0.0022	0.10	0.0930	0.0940	0.0979	0.085 to 0.115	93.0	70 to 130	1.02	20	
AW21387 Barium, Total	mg/L	-0.00000142	0.0044	0.10	0.104	0.104	0.0970	0.085 to 0.115	95.4	70 to 130	0.0014520	20	
AW21387 Cobalt, Total	mg/L	-0.00000268	0.0044	0.10	0.0932	0.0933	0.0967	0.085 to 0.115	93.2	70 to 130	0.119	20	
AW21228 Boron, Total	mg/L	0.00338	0.044	1.00	1.80	1.81	0.946	0.85 to 1.15	96.5	70 to 130	0.554	20	
AW21387 Beryllium, Total	mg/L	0.0000972	0.00132	0.10	0.120	0.121	0.114	0.085 to 0.115	120	70 to 130	0.0559	20	
AW21387 Lead, Total	mg/L	0.00000521	0.0022	0.10	0.0988	0.0986	0.101	0.085 to 0.115	98.8	70 to 130	0.150	20	
AW21228 Lithium, Total	mg/L	0.000439	0.022	0.20	0.221	0.224	0.206	0.17 to 0.23	102	70 to 130	1.35	20	
AW21387 Cadmium, Total	mg/L	-0.000000493	0.00044	0.10	0.0991	0.0994	0.103	0.085 to 0.115	99.1	70 to 130	0.323	20	

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 22-Aug-16
 Customer ID:
 Delivery Date: 23-Aug-16

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AW21227

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW21387	Sulfate, Total	mg/L	0.295	1.0	20.00	23.9	4.21	19.7	18 to 22	98.4	80 to 120	0.474	20
AW21228	Solids, Dissolved	mg/L	-3.0	25			349	47	40 to 60			0.00	5
AW21387	Chloride, Total	mg/L	0.000	0.25	10.00	13.4	3.47	9.90	9 to 11	99.3	80 to 120	0.00	20
AW21387	Fluoride, Total	mg/L	0.000	0.3	2.00	1.99	0.044	2.01	1.8 to 2.2	97.2	80 to 120	2.25	20

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CC:

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

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 22-Aug-16
 Customer ID:
 Delivery Date: 23-Aug-16

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AW21228

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/2/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	TAS	9/6/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	0.0267	mg/L
* Beryllium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/7/2016	EPA 200.7		1.015	0.02	0.1	0.835	mg/L
* Calcium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.1	0.5	37.3	mg/L
* Cadmium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/31/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.01	0.05	J 0.0167	mg/L
* Molybdenum, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	0.0577	mg/L
* Lead, Total	TAS	9/6/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	8/24/2016	SM 2540C		1		25	349	mg/L
* Chloride, Total	SES	8/24/2016	EPA 300.0		1	0.04	0.25	23.3	mg/L
* Fluoride, Total	SES	8/24/2016	EPA 300.0		1	0.01	0.3	J 0.067	mg/L
* Sulfate, Total	SES	8/25/2016	EPA 300.0		10	3.0	10	134	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 22-Aug-16
 Customer ID:
 Delivery Date: 23-Aug-16

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AW21228

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW21387 Thallium, Total	mg/L	-0.00000898	0.00044	0.10	0.1000	0.101	0.0989	0.085 to 0.115	100	70 to 130	0.589	20	
AW21228 Lithium, Total	mg/L	0.000439	0.022	0.20	0.221	0.224	0.206	0.17 to 0.23	102	70 to 130	1.35	20	
AW21387 Cadmium, Total	mg/L	-0.000000493	0.00044	0.10	0.0991	0.0994	0.103	0.085 to 0.115	99.1	70 to 130	0.323	20	
AW21387 Arsenic, Total	mg/L	-0.00000367	0.0022	0.10	0.0930	0.0940	0.0979	0.085 to 0.115	93.0	70 to 130	1.02	20	
AW21387 Barium, Total	mg/L	-0.00000142	0.0044	0.10	0.104	0.104	0.0970	0.085 to 0.115	95.4	70 to 130	0.0014520		
AW21387 Cobalt, Total	mg/L	-0.00000268	0.0044	0.10	0.0932	0.0933	0.0967	0.085 to 0.115	93.2	70 to 130	0.119	20	
AW21228 Boron, Total	mg/L	0.00338	0.044	1.00	1.80	1.81	0.946	0.85 to 1.15	96.5	70 to 130	0.554	20	
AW21387 Beryllium, Total	mg/L	0.0000972	0.00132	0.10	0.120	0.121	0.114	0.085 to 0.115	120	70 to 130	0.0559	20	
AW21387 Lead, Total	mg/L	0.00000521	0.0022	0.10	0.0988	0.0986	0.101	0.085 to 0.115	98.8	70 to 130	0.150	20	
AW21385 Mercury, Total by CVAA	mg/L	0.000131	0.0005	0.004	0.00403	0.00402	0.00398	0.0034 to 0.0046	101	70 to 130	0.261	20	
AW21387 Molybdenum, Total	mg/L	-0.00000325	0.0044	0.10	0.0944	0.0952	0.0981	0.085 to 0.115	94.4	70 to 130	0.808	20	
AW21228 Calcium, Total	mg/L	-0.0155	0.22	5.00	41.9	42.2	4.89	4.25 to 5.75	92.0	70 to 130	0.713	20	
AW21387 Selenium, Total	mg/L	0.0000158	0.0044	0.10	0.0957	0.0944	0.101	0.085 to 0.115	95.7	70 to 130	1.34	20	
AW21387 Antimony, Total	mg/L	0.0000353	0.00132	0.10	0.0931	0.0947	0.0985	0.085 to 0.115	93.1	70 to 130	1.75	20	
AW21387 Chromium, Total	mg/L	-0.00000174	0.0044	0.10	0.0987	0.0990	0.0969	0.085 to 0.115	98.7	70 to 130	0.342	20	

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 22-Aug-16
 Customer ID:
 Delivery Date: 23-Aug-16

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AW21228

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW21387	Sulfate, Total	mg/L	0.295	1.0	20.00	23.9	4.21	19.7	18 to 22	98.4	80 to 120	0.474	20
AW21228	Solids, Dissolved	mg/L	-3.0	25			349	47	40 to 60			0.00	5
AW21387	Chloride, Total	mg/L	0.000	0.25	10.00	13.4	3.47	9.90	9 to 11	99.3	80 to 120	0.00	20
AW21387	Fluoride, Total	mg/L	0.000	0.3	2.00	1.99	0.044	2.01	1.8 to 2.2	97.2	80 to 120	2.25	20

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Issued By: State of Florida, Department of Health

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

CC:

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

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 22-Aug-16
 Customer ID:
 Delivery Date: 23-Aug-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW21229

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/2/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	TAS	9/6/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/7/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/31/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	TAS	9/6/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	8/24/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	8/24/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	8/24/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	8/24/2016	EPA 300.0		1	0.3	1	J 0.302	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, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected.
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 22-Aug-16
 Customer ID:
 Delivery Date: 23-Aug-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW21229

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW21387 Selenium, Total	mg/L	0.0000158	0.0044	0.10	0.0957	0.0944	0.101	0.085 to 0.115		95.7	70 to 130	1.34	20
AW21387 Cadmium, Total	mg/L	-0.000000493	0.00044	0.10	0.0991	0.0994	0.103	0.085 to 0.115		99.1	70 to 130	0.323	20
AW21387 Thallium, Total	mg/L	-0.00000898	0.00044	0.10	0.1000	0.101	0.0989	0.085 to 0.115		100	70 to 130	0.589	20
AW21505 Boron, Total	mg/L	0.00445	0.044	1.00	1.78	1.78	0.944	0.85 to 1.15		98.1	70 to 130	0.00	20
AW21505 Lithium, Total	mg/L	0.000162	0.022	0.20	0.577	0.574	0.205	0.17 to 0.23		108	70 to 130	0.521	20
AW21387 Arsenic, Total	mg/L	-0.00000367	0.0022	0.10	0.0930	0.0940	0.0979	0.085 to 0.115		93.0	70 to 130	1.02	20
AW21387 Barium, Total	mg/L	-0.00000142	0.0044	0.10	0.104	0.104	0.0970	0.085 to 0.115		95.4	70 to 130	0.0014520	
AW21387 Cobalt, Total	mg/L	-0.00000268	0.0044	0.10	0.0932	0.0933	0.0967	0.085 to 0.115		93.2	70 to 130	0.119	20
AW21387 Beryllium, Total	mg/L	0.0000972	0.00132	0.10	0.120	0.121	0.114	0.085 to 0.115		120	70 to 130	0.0559	20
AW21387 Lead, Total	mg/L	0.00000521	0.0022	0.10	0.0988	0.0986	0.101	0.085 to 0.115		98.8	70 to 130	0.150	20
AW21387 Antimony, Total	mg/L	0.0000353	0.00132	0.10	0.0931	0.0947	0.0985	0.085 to 0.115		93.1	70 to 130	1.75	20
AW21387 Chromium, Total	mg/L	-0.00000174	0.0044	0.10	0.0987	0.0990	0.0969	0.085 to 0.115		98.7	70 to 130	0.342	20
AW21505 Calcium, Total	mg/L	-0.0150	0.22	5.00	550	546	4.96	4.25 to 5.75		220	70 to 130	0.730	20
AW21385 Mercury, Total by CVAA	mg/L	0.000131	0.0005	0.004	0.00403	0.00402	0.00398	0.0034 to 0.0046		101	70 to 130	0.261	20
AW21387 Molybdenum, Total	mg/L	-0.00000325	0.0044	0.10	0.0944	0.0952	0.0981	0.085 to 0.115		94.4	70 to 130	0.808	20

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 22-Aug-16
 Customer ID:
 Delivery Date: 23-Aug-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW21229

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW21387	Sulfate, Total	mg/L	0.295	1.0	20.00	23.9	4.21	19.7	18 to 22	98.4	80 to 120	0.474	20
AW21228	Solids, Dissolved	mg/L	-3.0	25			349	47	40 to 60			0.00	5
AW21387	Chloride, Total	mg/L	0.000	0.25	10.00	13.4	3.47	9.90	9 to 11	99.3	80 to 120	0.00	20
AW21387	Fluoride, Total	mg/L	0.000	0.3	2.00	1.99	0.044	2.01	1.8 to 2.2	97.2	80 to 120	2.25	20

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CC:

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

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPEB
 Sample Date: 22-Aug-16
 Customer ID:
 Delivery Date: 23-Aug-16

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AW21230

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/2/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	TAS	9/6/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/7/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/31/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	TAS	9/6/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	TAS	9/6/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	8/24/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	8/24/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	8/24/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	8/24/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPEB
 Sample Date: 22-Aug-16
 Customer ID:
 Delivery Date: 23-Aug-16

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AW21230

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW21387 Cadmium, Total	mg/L	-0.000000493	0.00044	0.10	0.0991	0.0994	0.103	0.085 to 0.115	99.1	70 to 130	0.323	20	
AW21387 Selenium, Total	mg/L	0.0000158	0.0044	0.10	0.0957	0.0944	0.101	0.085 to 0.115	95.7	70 to 130	1.34	20	
AW21387 Thallium, Total	mg/L	-0.00000898	0.00044	0.10	0.1000	0.101	0.0989	0.085 to 0.115	100	70 to 130	0.589	20	
AW21505 Boron, Total	mg/L	0.00445	0.044	1.00	1.78	1.78	0.944	0.85 to 1.15	98.1	70 to 130	0.00	20	
AW21505 Lithium, Total	mg/L	0.000162	0.022	0.20	0.577	0.574	0.205	0.17 to 0.23	108	70 to 130	0.521	20	
AW21387 Antimony, Total	mg/L	0.0000353	0.00132	0.10	0.0931	0.0947	0.0985	0.085 to 0.115	93.1	70 to 130	1.75	20	
AW21387 Chromium, Total	mg/L	-0.00000174	0.0044	0.10	0.0987	0.0990	0.0969	0.085 to 0.115	98.7	70 to 130	0.342	20	
AW21505 Calcium, Total	mg/L	-0.0150	0.22	5.00	550	546	4.96	4.25 to 5.75	220	70 to 130	0.730	20	
AW21387 Arsenic, Total	mg/L	-0.00000367	0.0022	0.10	0.0930	0.0940	0.0979	0.085 to 0.115	93.0	70 to 130	1.02	20	
AW21387 Barium, Total	mg/L	-0.00000142	0.0044	0.10	0.104	0.104	0.0970	0.085 to 0.115	95.4	70 to 130	0.0014520	20	
AW21387 Cobalt, Total	mg/L	-0.00000268	0.0044	0.10	0.0932	0.0933	0.0967	0.085 to 0.115	93.2	70 to 130	0.119	20	
AW21385 Mercury, Total by CVAA	mg/L	0.000131	0.0005	0.004	0.00403	0.00402	0.00398	0.0034 to 0.0046	101	70 to 130	0.261	20	
AW21387 Molybdenum, Total	mg/L	-0.00000325	0.0044	0.10	0.0944	0.0952	0.0981	0.085 to 0.115	94.4	70 to 130	0.808	20	
AW21387 Beryllium, Total	mg/L	0.0000972	0.00132	0.10	0.120	0.121	0.114	0.085 to 0.115	120	70 to 130	0.0559	20	
AW21387 Lead, Total	mg/L	0.00000521	0.0022	0.10	0.0988	0.0986	0.101	0.085 to 0.115	98.8	70 to 130	0.150	20	

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPEB
 Sample Date: 22-Aug-16
 Customer ID:
 Delivery Date: 23-Aug-16

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AW21230

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec Rec	Rec Limit	Prec	Prec Limit
AW21228	Solids, Dissolved	mg/L	-3.0	25			349	47	40 to 60			0.00	5
AW21387	Sulfate, Total	mg/L	0.295	1.0	20.00	23.9	4.21	19.7	18 to 22	98.4	80 to 120	0.474	20
AW21387	Chloride, Total	mg/L	0.000	0.25	10.00	13.4	3.47	9.90	9 to 11	99.3	80 to 120	0.00	20
AW21387	Fluoride, Total	mg/L	0.000	0.3	2.00	1.99	0.044	2.01	1.8 to 2.2	97.2	80 to 120	2.25	20

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

CC:

Definitions



Abbreviation	Description
DF	Dilution Factor
LFB	Lab Fortified Blank
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 08/23/2016 07:45

 Requested Complete Date Routine
 Site Representative Byron Corina
 Collector Jason Rouss

 Results To Dustin Brooks, John Pugh, Greg Dyer
 Requested By Greg Dyer
 Location Gaston Ash Pond

 Analysis Requested Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle
 Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-22	08/22/2016	11:28	3	Groundwater		AW21225
MW-22 Dup	08/22/2016	11:28	3	Sample Duplicate		AW21226
MW-21	08/22/2016	12:38	4	Groundwater		AW21227
MW-15R	08/22/2016	14:45	3	Groundwater		AW21228
FB-1	08/22/2016	15:07	3	Field Blank		AW21229
EB-1	08/22/2016	15:30	3	Equipment Blank		AW21230

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: 2016.08.23 09:52:05 -05'00'</small>	08/23/2016 09:52

 SmarTroll ID 4696-23441-1-1
 Turbidity ID 4677-23342-4-1

 All metals and radiological bottles have pH < 2
 Cooler Temp 0.7 degrees C
 Thermometer ID 5408-27568-2-2
 pH Strip ID 4831-24392-20-19

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: 400-126444-1

TestAmerica Sample Delivery Group: Gaston Ash Pond (1)

Client Project/Site: CCR Plant Gaston

For:

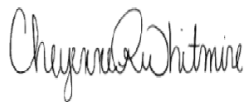
Alabama Power General Test Laboratory

744 County Rd 87

GSC #8

Calera, Alabama 35040

Attn: Sarah Copeland



Authorized for release by:

10/4/2016 11:20:21 AM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

LINKS

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results through

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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: 400-126444-1
SDG: Gaston Ash Pond (1)

Job ID: 400-126444-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-126444-1

RAD

Method(s) PrecSep_0: Radium-228 preparation batch 160-268966: The following samples were run at a reduced aliquot due to limited sample available: AW21225 MW-22 (400-126444-1), AW21226 MW-22 DUP (400-126444-2), AW21227 MW-21 (400-126444-3), AW21227 MW-21 (400-126444-3[DUJ]), AW21228 MW-15R (400-126444-4), AW21229 FB-1 (400-126444-5) and AW21230 EB-1 (400-126444-6).

Method(s) PrecSep-21: Radium-226 preparation batch 160-268963: The following samples were run at a reduced aliquot due to limited sample available: AW21225 MW-22 (400-126444-1), AW21226 MW-22 DUP (400-126444-2), AW21227 MW-21 (400-126444-3), AW21227 MW-21 (400-126444-3[DUJ]), AW21228 MW-15R (400-126444-4), AW21229 FB-1 (400-126444-5) and AW21230 EB-1 (400-126444-6).



Method Summary

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

TestAmerica Job ID: 400-126444-1
SDG: Gaston Ash Pond (1)

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: 400-126444-1
SDG: Gaston Ash Pond (1)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-126444-1	AW21225 MW-22	Water	08/22/16 11:28	08/30/16 16:08
400-126444-2	AW21226 MW-22 DUP	Water	08/22/16 11:28	08/30/16 16:08
400-126444-3	AW21227 MW-21	Water	08/22/16 12:38	08/30/16 16:08
400-126444-4	AW21228 MW-15R	Water	08/22/16 14:45	08/30/16 16:08
400-126444-5	AW21229 FB-1	Water	08/22/16 15:07	08/30/16 16:08
400-126444-6	AW21230 EB-1	Water	08/22/16 15:30	08/30/16 16:08

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

Client Sample Results

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

TestAmerica Job ID: 400-126444-1
 SDG: Gaston Ash Pond (1)

Client Sample ID: AW21225 MW-22

Lab Sample ID: 400-126444-1

Date Collected: 08/22/16 11:28

Matrix: Water

Date Received: 08/30/16 16:08

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.362		0.117	0.122	1.00	0.136	pCi/L	09/09/16 20:10	10/01/16 22:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.5		40 - 110					09/09/16 20:10	10/01/16 22:23	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.253	U	0.366	0.367	1.00	0.612	pCi/L	09/09/16 20:58	09/22/16 13:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.5		40 - 110					09/09/16 20:58	09/22/16 13:37	1
Y Carrier	80.4		40 - 110					09/09/16 20:58	09/22/16 13:37	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	0.615		0.384	0.386	5.00	0.612	pCi/L		10/04/16 10:00	1

Client Sample Results

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

TestAmerica Job ID: 400-126444-1
 SDG: Gaston Ash Pond (1)

Client Sample ID: AW21226 MW-22 DUP

Lab Sample ID: 400-126444-2

Date Collected: 08/22/16 11:28

Matrix: Water

Date Received: 08/30/16 16:08

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.302		0.0932	0.0970	1.00	0.0862	pCi/L	09/09/16 20:10	10/01/16 22:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.7		40 - 110					09/09/16 20:10	10/01/16 22:23	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.428	U	0.341	0.343	1.00	0.543	pCi/L	09/09/16 20:58	09/22/16 13:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.7		40 - 110					09/09/16 20:58	09/22/16 13:37	1
Y Carrier	83.7		40 - 110					09/09/16 20:58	09/22/16 13:37	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	0.730		0.353	0.357	5.00	0.543	pCi/L		10/04/16 10:00	1

Client Sample Results

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

TestAmerica Job ID: 400-126444-1
 SDG: Gaston Ash Pond (1)

Client Sample ID: AW21227 MW-21

Lab Sample ID: 400-126444-3

Date Collected: 08/22/16 12:38

Matrix: Water

Date Received: 08/30/16 16:08

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.138		0.0741	0.0751	1.00	0.0964	pCi/L	09/09/16 20:10	10/01/16 22:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.5		40 - 110					09/09/16 20:10	10/01/16 22:23	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.678		0.317	0.323	1.00	0.457	pCi/L	09/09/16 20:58	09/22/16 13:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.5		40 - 110					09/09/16 20:58	09/22/16 13:37	1
Y Carrier	87.9		40 - 110					09/09/16 20:58	09/22/16 13:37	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	0.816		0.326	0.332	5.00	0.457	pCi/L		10/04/16 10:00	1

Client Sample Results

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

TestAmerica Job ID: 400-126444-1
 SDG: Gaston Ash Pond (1)

Client Sample ID: AW21228 MW-15R

Lab Sample ID: 400-126444-4

Date Collected: 08/22/16 14:45

Matrix: Water

Date Received: 08/30/16 16:08

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.213		0.0820	0.0842	1.00	0.0888	pCi/L	09/09/16 20:10	10/01/16 22:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		40 - 110					09/09/16 20:10	10/01/16 22:24	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.401	U	0.278	0.281	1.00	0.429	pCi/L	09/09/16 20:58	09/22/16 13:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		40 - 110					09/09/16 20:58	09/22/16 13:37	1
Y Carrier	87.5		40 - 110					09/09/16 20:58	09/22/16 13:37	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	0.613		0.290	0.293	5.00	0.429	pCi/L		10/04/16 10:00	1

Client Sample Results

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

TestAmerica Job ID: 400-126444-1
 SDG: Gaston Ash Pond (1)

Client Sample ID: AW21229 FB-1

Lab Sample ID: 400-126444-5

Date Collected: 08/22/16 15:07

Matrix: Water

Date Received: 08/30/16 16:08

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.00339	U	0.0511	0.0511	1.00	0.102	pCi/L	09/09/16 20:10	10/01/16 22:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					09/09/16 20:10	10/01/16 22:31	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.554		0.304	0.308	1.00	0.451	pCi/L	09/09/16 20:58	09/22/16 13:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					09/09/16 20:58	09/22/16 13:38	1
Y Carrier	87.1		40 - 110					09/09/16 20:58	09/22/16 13:38	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	0.551		0.308	0.312	5.00	0.451	pCi/L		10/04/16 10:00	1

Client Sample Results

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

TestAmerica Job ID: 400-126444-1
 SDG: Gaston Ash Pond (1)

Client Sample ID: AW21230 EB-1

Lab Sample ID: 400-126444-6

Date Collected: 08/22/16 15:30

Matrix: Water

Date Received: 08/30/16 16:08

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0124	U	0.0589	0.0589	1.00	0.110	pCi/L	09/09/16 20:10	10/01/16 22:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					09/09/16 20:10	10/01/16 22:31	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	0.290	0.291	1.00	0.490	pCi/L	09/09/16 20:58	09/22/16 13:42	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					09/09/16 20:58	09/22/16 13:42	1
Y Carrier	89.0		40 - 110					09/09/16 20:58	09/22/16 13:42	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	0.189	U	0.296	0.297	5.00	0.490	pCi/L		10/04/16 10:00	1

Definitions/Glossary

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

TestAmerica Job ID: 400-126444-1
SDG: Gaston Ash Pond (1)

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 400-126444-1
SDG: Gaston Ash Pond (1)

Client Sample ID: AW21225 MW-22

Lab Sample ID: 400-126444-1

Date Collected: 08/22/16 11:28

Matrix: Water

Date Received: 08/30/16 16:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			268963	09/09/16 20:10	MCJ	TAL SL
Total/NA	Analysis	9315		1	272615	10/01/16 22:23	ALS	TAL SL
Total/NA	Prep	PrecSep_0			268966	09/09/16 20:58	MCJ	TAL SL
Total/NA	Analysis	9320		1	271206	09/22/16 13:37	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273072	10/04/16 10:00	CAH	TAL SL

Client Sample ID: AW21226 MW-22 DUP

Lab Sample ID: 400-126444-2

Date Collected: 08/22/16 11:28

Matrix: Water

Date Received: 08/30/16 16:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			268963	09/09/16 20:10	MCJ	TAL SL
Total/NA	Analysis	9315		1	272615	10/01/16 22:23	ALS	TAL SL
Total/NA	Prep	PrecSep_0			268966	09/09/16 20:58	MCJ	TAL SL
Total/NA	Analysis	9320		1	271206	09/22/16 13:37	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273072	10/04/16 10:00	CAH	TAL SL

Client Sample ID: AW21227 MW-21

Lab Sample ID: 400-126444-3

Date Collected: 08/22/16 12:38

Matrix: Water

Date Received: 08/30/16 16:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			268963	09/09/16 20:10	MCJ	TAL SL
Total/NA	Analysis	9315		1	272615	10/01/16 22:23	ALS	TAL SL
Total/NA	Prep	PrecSep_0			268966	09/09/16 20:58	MCJ	TAL SL
Total/NA	Analysis	9320		1	271206	09/22/16 13:37	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273072	10/04/16 10:00	CAH	TAL SL

Client Sample ID: AW21228 MW-15R

Lab Sample ID: 400-126444-4

Date Collected: 08/22/16 14:45

Matrix: Water

Date Received: 08/30/16 16:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			268963	09/09/16 20:10	MCJ	TAL SL
Total/NA	Analysis	9315		1	272615	10/01/16 22:24	ALS	TAL SL
Total/NA	Prep	PrecSep_0			268966	09/09/16 20:58	MCJ	TAL SL
Total/NA	Analysis	9320		1	271206	09/22/16 13:37	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273072	10/04/16 10:00	CAH	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-126444-1
SDG: Gaston Ash Pond (1)

Client Sample ID: AW21229 FB-1

Lab Sample ID: 400-126444-5

Date Collected: 08/22/16 15:07

Matrix: Water

Date Received: 08/30/16 16:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			268963	09/09/16 20:10	MCJ	TAL SL
Total/NA	Analysis	9315		1	272614	10/01/16 22:31	ALS	TAL SL
Total/NA	Prep	PrecSep_0			268966	09/09/16 20:58	MCJ	TAL SL
Total/NA	Analysis	9320		1	271206	09/22/16 13:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273072	10/04/16 10:00	CAH	TAL SL

Client Sample ID: AW21230 EB-1

Lab Sample ID: 400-126444-6

Date Collected: 08/22/16 15:30

Matrix: Water

Date Received: 08/30/16 16:08

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			268963	09/09/16 20:10	MCJ	TAL SL
Total/NA	Analysis	9315		1	272614	10/01/16 22:31	ALS	TAL SL
Total/NA	Prep	PrecSep_0			268966	09/09/16 20:58	MCJ	TAL SL
Total/NA	Analysis	9320		1	271155	09/22/16 13:42	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273072	10/04/16 10:00	CAH	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: 400-126444-1
SDG: Gaston Ash Pond (1)

Rad

Prep Batch: 268963

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126444-1	AW21225 MW-22	Total/NA	Water	PrecSep-21	
400-126444-2	AW21226 MW-22 DUP	Total/NA	Water	PrecSep-21	
400-126444-3	AW21227 MW-21	Total/NA	Water	PrecSep-21	
400-126444-4	AW21228 MW-15R	Total/NA	Water	PrecSep-21	
400-126444-5	AW21229 FB-1	Total/NA	Water	PrecSep-21	
400-126444-6	AW21230 EB-1	Total/NA	Water	PrecSep-21	
MB 160-268963/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-268963/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-126444-3 DU	AW21227 MW-21	Total/NA	Water	PrecSep-21	

Prep Batch: 268966

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126444-1	AW21225 MW-22	Total/NA	Water	PrecSep_0	
400-126444-2	AW21226 MW-22 DUP	Total/NA	Water	PrecSep_0	
400-126444-3	AW21227 MW-21	Total/NA	Water	PrecSep_0	
400-126444-4	AW21228 MW-15R	Total/NA	Water	PrecSep_0	
400-126444-5	AW21229 FB-1	Total/NA	Water	PrecSep_0	
400-126444-6	AW21230 EB-1	Total/NA	Water	PrecSep_0	
MB 160-268966/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-268966/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-126444-3 DU	AW21227 MW-21	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-126444-1
 SDG: Gaston Ash Pond (1)

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-268963/1-A
Matrix: Water
Analysis Batch: 272615

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 268963

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.04519	U	0.0872	0.0873	1.00	0.152	pCi/L	09/09/16 20:10	10/01/16 22:22	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	67.5		40 - 110					09/09/16 20:10	10/01/16 22:22	1

Lab Sample ID: LCS 160-268963/2-A
Matrix: Water
Analysis Batch: 272615

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268963

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	14.8	17.21		1.70	1.00	0.145	pCi/L	116	68 - 137
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	66.4		40 - 110						

Lab Sample ID: 400-126444-3 DU
Matrix: Water
Analysis Batch: 272615

Client Sample ID: AW21227 MW-21
Prep Type: Total/NA
Prep Batch: 268963

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.138		0.1888		0.0781	1.00	0.0845	pCi/L	0.33	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	93.7		40 - 110							

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-268966/1-A
Matrix: Water
Analysis Batch: 271151

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 268966

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1034	U	0.396	0.396	1.00	0.692	pCi/L	09/09/16 20:58	09/22/16 13:39	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	67.5		40 - 110					09/09/16 20:58	09/22/16 13:39	1
Y Carrier	81.1		40 - 110					09/09/16 20:58	09/22/16 13:39	1

QC Sample Results

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

TestAmerica Job ID: 400-126444-1
 SDG: Gaston Ash Pond (1)

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

Lab Sample ID: LCS 160-268966/2-A
Matrix: Water
Analysis Batch: 271151

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 268966

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	19.4	22.00		2.42	1.00	0.582	pCi/L	114	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	66.4		40 - 110
Y Carrier	86.4		40 - 110

Lab Sample ID: 400-126444-3 DU
Matrix: Water
Analysis Batch: 271206

Client Sample ID: AW21227 MW-21
Prep Type: Total/NA
Prep Batch: 268966

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.678		0.2241	U	0.258	1.00	0.423	pCi/L	0.78	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	93.7		40 - 110
Y Carrier	85.2		40 - 110

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

Lab Sample ID: 400-126444-3 DU
Matrix: Water
Analysis Batch: 273072

Client Sample ID: AW21227 MW-21
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	0.816		0.4129	U	0.269	5.00	0.423	pCi/L	0.67	

Chain of Custody Record

Client Information		Sampler: Jason Rouss		Lab P/N: Whitmire, Cheyenne R		Carrier Tracking No(s): 400-56525-24537.1		COC No: 400-56525-24537.1	
Client Contact: Sarah Copeland		Phone:		E-Mail: cheyenne.whitmire@testamericainc.com		Page: 1 of 1		Job #: 400-126444	
Company: Alabama Power General Test Laboratory		Due Date Requested:		Analysis Requested		Preservation Codes:		Special Instructions/Note:	
Address: 744 County Rd 87 GSC #8		TAT Requested (days): Routine		Perform MS/MSD (Yes or No) 935, Ra226, 9320, Ra228, Ra228a, Ra228b, Ra228c, Ra228d, Ra228e, Ra228f, Ra228g, Ra228h, Ra228i, Ra228j, Ra228k, Ra228l, Ra228m, Ra228n, Ra228o, Ra228p, Ra228q, Ra228r, Ra228s, Ra228t, Ra228u, Ra228v, Ra228w, Ra228x, Ra228y, Ra228z, Ra228aa, Ra228ab, Ra228ac, Ra228ad, Ra228ae, Ra228af, Ra228ag, Ra228ah, Ra228ai, Ra228aj, Ra228ak, Ra228al, Ra228am, Ra228an, Ra228ao, Ra228ap, Ra228aq, Ra228ar, Ra228as, Ra228at, Ra228au, Ra228av, Ra228aw, Ra228ax, Ra228ay, Ra228az, Ra228ba, Ra228bb, Ra228bc, Ra228bd, Ra228be, Ra228bf, Ra228bg, Ra228bh, Ra228bi, Ra228bj, Ra228bk, Ra228bl, Ra228bm, Ra228bn, Ra228bo, Ra228bp, Ra228bq, Ra228br, Ra228bs, Ra228bt, Ra228bu, Ra228bv, Ra228bw, Ra228bx, Ra228by, Ra228bz, Ra228ca, Ra228cb, Ra228cc, Ra228cd, Ra228ce, Ra228cf, Ra228cg, Ra228ch, Ra228ci, Ra228cj, Ra228ck, Ra228cl, Ra228cm, Ra228cn, Ra228co, Ra228cp, Ra228cq, Ra228cr, Ra228cs, Ra228ct, Ra228cu, Ra228cv, Ra228cw, Ra228cx, Ra228cy, Ra228cz, Ra228da, Ra228db, Ra228dc, Ra228dd, Ra228de, Ra228df, Ra228dg, Ra228dh, Ra228di, Ra228dj, Ra228dk, Ra228dl, Ra228dm, Ra228dn, Ra228do, Ra228dp, Ra228dq, Ra228dr, Ra228ds, Ra228dt, Ra228du, Ra228dv, Ra228dw, Ra228dx, Ra228dy, Ra228dz, Ra228ea, Ra228eb, Ra228ec, Ra228ed, Ra228ee, Ra228ef, Ra228eg, Ra228eh, Ra228ei, Ra228ej, Ra228ek, Ra228el, Ra228em, Ra228en, Ra228eo, Ra228ep, Ra228eq, Ra228er, Ra228es, Ra228et, Ra228eu, Ra228ev, Ra228ew, Ra228ex, Ra228ey, Ra228ez, Ra228fa, Ra228fb, Ra228fc, Ra228fd, Ra228fe, Ra228ff, Ra228fg, Ra228fh, Ra228fi, Ra228fj, Ra228fk, Ra228fl, Ra228fm, Ra228fn, Ra228fo, Ra228fp, Ra228fq, Ra228fr, Ra228fs, Ra228ft, Ra228fu, Ra228fv, Ra228fw, Ra228fx, Ra228fy, Ra228fz, Ra228ga, Ra228gb, Ra228gc, Ra228gd, Ra228ge, Ra228gf, Ra228gg, Ra228gh, Ra228gi, Ra228gj, Ra228gk, Ra228gl, Ra228gm, Ra228gn, Ra228go, Ra228gp, Ra228gq, Ra228gr, Ra228gs, Ra228gt, Ra228gu, Ra228gv, Ra228gw, Ra228gx, Ra228gy, Ra228gz, Ra228ha, Ra228hb, Ra228hc, Ra228hd, 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AW21225	8/22/16	1128	G	Water	X	MW-22			
AW21226	8/22/16	1128	G	Water	X	MW-22 Dup (Sample Duplicate)			
AW21227	8/22/16	1238	G	Water	Y	MW-21			
AW21228	8/22/16	1445	G	Water	X	MW-15R			
AW21229	8/22/16	1507	G	Water	X	FB-1 (Field Blank)			
AW21230	8/22/16	1530	G	Water	X	EB-1 (Equipment)			400-126444 COC

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by: Sarah Copeland
 Date/Time: 08/29/2016; 1040

Relinquished by: Sarah Copeland
 Date/Time:

Relinquished by:
 Date/Time:

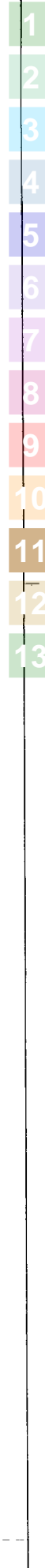
Custody Seals Intact:
 Yes No

Custody Seal No.: 27.6°C IR6

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:

Received by: [Signature] Date/Time: 8/30/16 Company: APC
 Received by: [Signature] Date/Time: 16.08 Company: IA
 Received by: [Signature] Date/Time: Company:



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-126444-1
SDG Number: Gaston Ash Pond (1)

Login Number: 126444

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.	False	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	27.6°C IR-6
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	



Certification Summary

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

TestAmerica Job ID: 400-126444-1
 SDG: Gaston Ash Pond (1)

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	07-31-16 *
Kansas	NELAP	7	E-10253	10-31-16
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16 *
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	MO00054	06-30-17
California	State Program	9	2886	03-31-18
Connecticut	State Program	1	PH-0241	03-31-17
Florida	NELAP	4	E87689	06-30-17
Illinois	NELAP	5	003757	11-30-16 *
Iowa	State Program	7	373	12-01-16 *
Kansas	NELAP	7	E-10236	10-31-16 *
Kentucky (DW)	State Program	4	90125	12-31-16
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-17
Louisiana (DW)	NELAP	6	LA160008	12-31-16
Maryland	State Program	3	310	09-30-17
Missouri	State Program	7	780	06-30-17
Nevada	State Program	9	MO000542016-1	07-31-17
New Jersey	NELAP	2	MO002	06-30-17
New York	NELAP	2	11616	03-31-17
North Dakota	State Program	8	R207	06-30-17
NRC	NRC		24-24817-01	12-31-22

* Certification renewal pending - certification considered valid.

Certification Summary

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

TestAmerica Job ID: 400-126444-1
SDG: Gaston Ash Pond (1)

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Oklahoma	State Program	6	9997	08-31-17
Pennsylvania	NELAP	3	68-00540	02-28-17 *
South Carolina	State Program	4	85002001	06-30-16 *
Texas	NELAP	6	T104704193-16-10	07-31-17
USDA	Federal		P330-14-0016	01-09-17
Utah	NELAP	8	MO000542016-8	07-31-17
Virginia	NELAP	3	460230	06-14-17
Washington	State Program	10	C592	08-30-17
West Virginia DEP	State Program	3	381	08-31-16 *

* Certification renewal pending - certification considered valid.

TestAmerica Pensacola

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

 Alabama Power



Sample Group : WMWGASAP_42

Project/Site : Gaston Ash Pond
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:

Supervision:



Anions

Gaston Ash Pond

WMWGASAP_42

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. All samples were received intact and properly preserved.
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>Chloride Batch ID</u>	<u>Fluoride Batch ID</u>	<u>Sulfate Batch ID</u>	<u>Project ID</u>
AW23391	576351	576352	576353	WMWGASAP_42
AW23392	576351	576352	576353	WMWGASAP_42
AW23393	576351	576352	576353	WMWGASAP_42
AW23394	576351	576352	576353	WMWGASAP_42
AW23395	576351	576352	576353	WMWGASAP_42
AW23396	576351	576352	576353	WMWGASAP_42
AW23397	576351	576352	576353	WMWGASAP_42
AW23398	576351	576352	576353	WMWGASAP_42
AW23399	576351	576352	576353	WMWGASAP_42
AW23400	576351	576352	576353	WMWGASAP_42
AW23401	576469	576472	576475	WMWGASAP_42
AW23402	576469	576472	576475	WMWGASAP_42
AW23403	576469	576472	576475	WMWGASAP_42
AW23404	576469	576472	576475	WMWGASAP_42
AW23405	576469	576472	576475	WMWGASAP_42
AW23406	576469	576472	576475	WMWGASAP_42
AW23407	576469	576472	576475	WMWGASAP_42
AW23408	576469	576472	576475	WMWGASAP_42
AW23409	576469	576472	576475	WMWGASAP_42
AW23410	576469	576472	576475	WMWGASAP_42
AW23411	576470	576473	576476	WMWGASAP_42
AW23412	576470	576473	576476	WMWGASAP_42
AW23413	576470	576473	576476	WMWGASAP_42
AW23414	576470	576473	576476	WMWGASAP_42
AW23415	576470	576473	576476	WMWGASAP_42
AW23416	576470	576473	576476	WMWGASAP_42
AW23417	576470	576473	576476	WMWGASAP_42
AW23418	576470	576473	576476	WMWGASAP_42
AW23419	576470	576473	576476	WMWGASAP_42



4. All of the above samples were analyzed and prepared by EPA 300.0.
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 instrument performance check (IPC) was analyzed and all criteria were met.
- All laboratory reagent blanks were less than the method detection limits for the requested anions, with the following exceptions:
 1. The blank for anion sulfate in batch 576353 presented a negative concentration above the MDL value of 0.3 mg/L, at -0.302 mg/L. Sulfate concentration in associated batch sample AW23393 was above the MDL but below 10X the absolute blank concentration, and should be considered as quantitatively estimated with indication of potential low bias.
 2. The blank for sulfate in batch 576476 presented a negative concentration (-0.300 mg/L) at the MDL value; since all sulfate concentrations for associated batch samples were greater than 10x the absolute blank value, no qualifications were necessary.
- All laboratory fortified blanks were within acceptance criteria for the anions requested.
- 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 laboratory fortified matrix (LFM) sample was analyzed with each batch. All acceptance criteria for accuracy were met. It is noted that the dilution LFM for chloride and sulfate in batches 576469 and 576475, respectively, was diluted prior to spiking, and the diluted LFM sample was spiked at 10x normal concentration, with acceptable recoveries. It is also noted that the undiluted sample concentration for the LFM parent sample for sulfate exceeded 4x the spike-added concentration, and was not applicable for assessment.
- A sample duplicate and/or laboratory fortified matrix duplicate were analyzed with each batch. All acceptance criteria for precision were met. It is noted that separate and distinct criteria for duplicate precision calculations, based on sample and duplicate anion concentrations, are used to assess precision compliance. These are as follow: if the sample and duplicate are both greater than 5x anion Reporting Limit (RL) concentration, the precision is calculated and reported as relative percent difference (RPD), with an acceptance range of 0 - 20%; if either the sample or duplicate are less than 5x anion RL, the precision is calculated and reported as the absolute value of the difference between the two concentrations, with an acceptance range of less than or equal to the anion RL value.



7. Samples AW23408, AW23409, AW23410 and AW23411 were re-analyzed at a 10x dilution for chloride and sulfate, samples AW23397, AW23412, AW23414, AW23415, AW23416 and AW23417 were re-analyzed at a 10x dilution for sulfate, and samples AW23418 and AW23419 were re-analyzed at a 5x dilution for chloride, due to the undiluted result exceeding the calibrated range of the detector. The dilution result for sulfate for this sample should be used; reporting limit (RL) values are adjusted upward to reflect the dilution factor applied.

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AW23397	Sulfate	10X
AW23408	Chloride, Sulfate	10X
AW23409	Chloride, Sulfate	10X
AW23410	Chloride, Sulfate	10X
AW23411	Chloride, Sulfate	10X
AW23412	Sulfate	10X
AW23414	Sulfate	10X
AW23415	Sulfate	10X
AW23416	Sulfate	10X
AW23417	Sulfate	10X
AW23418	Chloride	5X
AW23419	Chloride	5X

8. The raw data results are shown with dilution factors included, when dilutions are manually performed by the analyst.
 The raw data results are shown without dilution factor corrections, when dilutions are run automatically by the instrument.



Metals ICP

Gaston Ash Pond

WMWGASAP_42

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. All samples were received intact and properly preserved.
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>
AW23391	20161005A_20161005AD_20161213CCR1_20161213CCR1X	WMWGASAP_42
AW23392	20161005A_20161005AD_20161213CCR1_20161213CCR1X	WMWGASAP_42
AW23393	20161005A_20161005AD_20161213CCR1_20161213CCR1X	WMWGASAP_42
AW23394	20161005A_20161005AD_20161213CCR1_20161213CCR1X	WMWGASAP_42
AW23395	20161005A_20161005AD_20161213CCR1_20161213CCR1X	WMWGASAP_42
AW23396	20161005A_20161005AD_20161213CCR1_20161213CCR1X	WMWGASAP_42
AW23397	20161005A_20161005AD_20161213CCR1_20161213CCR1X	WMWGASAP_42
AW23398	20161005A_20161005AD_20161213CCR1_20161213CCR1X	WMWGASAP_42
AW23399	20161005A_20161005AD_20161213CCR1_20161213CCR1X	WMWGASAP_42
AW23400	20161005A_20161005AD_20161213CCR1_20161213CCR1X	WMWGASAP_42
AW23401	20161005B	WMWGASAP_42
AW23402	20161005B	WMWGASAP_42
AW23403	20161005B	WMWGASAP_42
AW23404	20161005B	WMWGASAP_42
AW23405	20161005B	WMWGASAP_42
AW23406	20161005B	WMWGASAP_42
AW23407	20161005B	WMWGASAP_42
AW23408	20161005B	WMWGASAP_42
AW23409	20161005B	WMWGASAP_42
AW23410	20161005B	WMWGASAP_42
AW23411	20161005C_20161005CD_20161213CCR2	WMWGASAP_42
AW23412	20161005C_20161005CD_20161213CCR2	WMWGASAP_42
AW23413	20161005C_20161005CD_20161213CCR2	WMWGASAP_42
AW23414	20161005C_20161005CD_20161213CCR2	WMWGASAP_42
AW23415	20161005C_20161005CD_20161213CCR2	WMWGASAP_42
AW23416	20161005C_20161005CD_20161213CCR2	WMWGASAP_42
AW23417	20161005C_20161005CD_20161213CCR2	WMWGASAP_42
AW23418	20161005C_20161005CD_20161213CCR2	WMWGASAP_42
AW23419	20161005C_20161005CD_20161213CCR2	WMWGASAP_42



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

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met, with the exception of batch 20161005A for Calcium. Samples were re-digested, analyzed and reported in batch 20161213CCR1 with passing criteria.
- The method blank associated with each digestion batch passed all acceptance criteria for all requested analytes.
- The spectral interference check associated with EPA 200.7 was analyzed and all acceptance criteria were met.
- All sample internal standard criteria were met.
- The high standard readbacks associated with EPA 200.7 were within acceptance criteria.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

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

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

<u>Analyte</u>	<u>Sample ID</u>
Calcium	AW23400
Calcium	AW23410

The concentrations of these analytes in the matrix spikes, added before digestion, were less than 30 percent of the concentration of the sample causing inaccurate spike recovery information. The laboratory control sample indicates that the digestion and analysis were in control.



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

<u>Analyte</u>	<u>Sample ID</u>
Lithium	AW23419

The reanalysis of the sample, MS and MSD were performed at a dilution in batch 20161213CCR2 for confirmation. The result of the confirmation was acceptable, indicating a lack of significant matrix effect on the sample. All results are reported from the original batch 20161005C.

7. All samples were analyzed without a dilution except for the following: The following samples were diluted due to sample concentrations from the undiluted analysis were over the high standard of the calibration curve.

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AW23392	Calcium	10x
AW23395	Calcium	10x
AW23396	Calcium	10x
AW23398	Calcium	10x
AW23399	Calcium	10x
AW23406	Calcium	10x
AW23407	Calcium	10x
AW23408	Calcium	10x
AW23409	Calcium	10x
AW23410	Calcium	10x
AW23410MS	Calcium	10x
AW23410MSD	Calcium	10x
AW23411	Calcium	10x
AW23412	Calcium	10x
AW23413	Calcium	10x
AW23414	Calcium	10x
AW23415	Calcium	10x
AW23416	Calcium	10x
AW23417	Calcium	10x
AW23418	Calcium	10x
AW23419	Calcium, Lithium for MS/MSD confirmation	10x
AW23419MS	Calcium, Lithium for MS/MSD confirmation	10x
AW23419MSD	Calcium, Lithium for MS/MSD confirmation	10x

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Case Narrative



8. The raw data results include both results corrected for dilution and results not corrected for dilution.



Metals ICPMS

Gaston Ash Pond

WMWGASAP_42

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. All samples were received intact and properly preserved.
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>
AW23391	577518	WMWGASAP_42
AW23392	577518	WMWGASAP_42
AW23393	577518	WMWGASAP_42
AW23394	577518	WMWGASAP_42
AW23395	577518	WMWGASAP_42
AW23396	577518	WMWGASAP_42
AW23397	577518	WMWGASAP_42
AW23398	577518	WMWGASAP_42
AW23399	577518	WMWGASAP_42
AW23400	577518	WMWGASAP_42
AW23401	577519	WMWGASAP_42
AW23402	577519	WMWGASAP_42
AW23403	577519	WMWGASAP_42
AW23404	577519	WMWGASAP_42
AW23405	577519	WMWGASAP_42
AW23406	577519	WMWGASAP_42
AW23407	577519	WMWGASAP_42
AW23408	577519	WMWGASAP_42
AW23409	577519	WMWGASAP_42
AW23410	577519	WMWGASAP_42
AW23411	577520	WMWGASAP_42
AW23412	577520	WMWGASAP_42
AW23413	577520	WMWGASAP_42
AW23414	577520	WMWGASAP_42
AW23415	577520	WMWGASAP_42
AW23416	577520	WMWGASAP_42
AW23417	577520	WMWGASAP_42
AW23418	577520	WMWGASAP_42
AW23419	577520	WMWGASAP_42



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 Ash Pond

WMWGASAP_42

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. All samples were received intact and properly preserved.
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>
AW23391	575874	WMWGASAP_42
AW23392	575874	WMWGASAP_42
AW23393	575874	WMWGASAP_42
AW23394	575874	WMWGASAP_42
AW23395	575875	WMWGASAP_42
AW23396	575875	WMWGASAP_42
AW23397	575875	WMWGASAP_42
AW23398	575875	WMWGASAP_42
AW23399	575875	WMWGASAP_42
AW23400	575875	WMWGASAP_42
AW23401	575875	WMWGASAP_42
AW23402	575875	WMWGASAP_42
AW23403	575875	WMWGASAP_42
AW23404	575875	WMWGASAP_42
AW23405	575876	WMWGASAP_42
AW23406	575876	WMWGASAP_42
AW23407	575876	WMWGASAP_42
AW23408	575876	WMWGASAP_42
AW23409	575876	WMWGASAP_42
AW23410	575876	WMWGASAP_42
AW23411	575876	WMWGASAP_42
AW23412	575876	WMWGASAP_42
AW23413	575876	WMWGASAP_42
AW23414	575876	WMWGASAP_42
AW23415	576792	WMWGASAP_42
AW23416	576792	WMWGASAP_42
AW23417	576792	WMWGASAP_42
AW23418	576792	WMWGASAP_42
AW23419	576792	WMWGASAP_42



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 Ash Pond

WMWGASAP_42

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. All samples were received intact and properly preserved.
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>
AW23391	575877	WMWGASAP_42
AW23392	575877	WMWGASAP_42
AW23393	575877	WMWGASAP_42
AW23394	575877	WMWGASAP_42
AW23395	575877	WMWGASAP_42
AW23396	575877	WMWGASAP_42
AW23397	575877	WMWGASAP_42
AW23398	575878	WMWGASAP_42
AW23399	575878	WMWGASAP_42
AW23400	575878	WMWGASAP_42
AW23401	575878	WMWGASAP_42
AW23402	575878	WMWGASAP_42
AW23403	575878	WMWGASAP_42
AW23404	575878	WMWGASAP_42
AW23405	575878	WMWGASAP_42
AW23406	575878	WMWGASAP_42
AW23407	575878	WMWGASAP_42
AW23408	575918	WMWGASAP_42
AW23409	575918	WMWGASAP_42
AW23410	575918	WMWGASAP_42
AW23411	575918	WMWGASAP_42
AW23412	575918	WMWGASAP_42
AW23413	575918	WMWGASAP_42
AW23414	575918	WMWGASAP_42
AW23415	575918	WMWGASAP_42
AW23416	575918	WMWGASAP_42
AW23417	575919	WMWGASAP_42
AW23418	575919	WMWGASAP_42
AW23419	575919	WMWGASAP_42



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 0.5 mg of the previous weight, with the exception of:

<u>Sample ID</u>	<u>Milligram Difference</u>
AW23409	1.1
AW23412	1.3

Samples with a milligram difference of 1.0 mg and above will be qualified. Samples with a milligram difference of less than 1.0 mg will remain unqualified, as this amount does not significantly affect reported results.

- 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 2.5 mg and 200 mg residue with the exception of AW23391, AW23401, AW23402, and AW23405 which were <2.5mg.

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
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 12-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW23391

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	J 0.000634	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	12/13/2016	EPA 200.7		1	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/19/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	9/21/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	9/21/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	9/21/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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

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

* Test results for these accredited parameters 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:

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
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 12-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW23391

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23400 Calcium, Total	mg/L	-0.0377	0.22	5.00	34.2	35.7	4.36	4.25 to 5.75	60.0	70 to 130	4.29	20	
AW23400 Antimony, Total	mg/L	0.000103	0.00132	0.10	0.0972	0.0997	0.0953	0.085 to 0.115	97.2	70 to 130	2.53	20	
AW23394 Mercury, Total by CVAA	mg/L	0.000113	0.0005	0.004	0.00394	0.00392	0.00389	0.0034 to 0.0046	98.5	70 to 130	0.488	20	
AW23400 Boron, Total	mg/L	-0.00634	0.044	1.00	0.989	0.946	0.958	0.85 to 1.15	98.9	70 to 130	4.44	20	
AW23400 Cobalt, Total	mg/L	-0.00000294	0.0044	0.10	0.0986	0.101	0.103	0.085 to 0.115	98.6	70 to 130	1.97	20	
AW23400 Chromium, Total	mg/L	0.0000112	0.0044	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.526	20	
AW23400 Lead, Total	mg/L	0.00000858	0.0022	0.10	0.101	0.101	0.103	0.085 to 0.115	101	70 to 130	0.0941	20	
AW23400 Arsenic, Total	mg/L	0.0000132	0.0022	0.10	0.0987	0.0987	0.0998	0.085 to 0.115	97.0	70 to 130	0.0798	20	
AW23400 Barium, Total	mg/L	0.00000197	0.0044	0.10	0.165	0.167	0.0943	0.085 to 0.115	86.0	70 to 130	1.25	20	
AW23400 Beryllium, Total	mg/L	0.00000730	0.00132	0.10	0.106	0.105	0.109	0.085 to 0.115	106	70 to 130	0.433	20	
AW23400 Lithium, Total	mg/L	0.000114	0.022	0.200	0.218	0.196	0.180	0.17 to 0.23	109	70 to 130	10.6	20	
AW23400 Molybdenum, Total	mg/L	0.00000891	0.0044	0.10	0.104	0.106	0.101	0.085 to 0.115	104	70 to 130	2.04	20	
AW23400 Cadmium, Total	mg/L	-0.000000562	0.00044	0.10	0.0958	0.0970	0.101	0.085 to 0.115	95.8	70 to 130	1.21	20	
AW23400 Selenium, Total	mg/L	0.0000658	0.0044	0.10	0.0745	0.0752	0.108	0.085 to 0.115	74.5	70 to 130	0.936	20	
AW23400 Thallium, Total	mg/L	0.00000877	0.00044	0.10	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.134	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

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Comments:

Alabama Power General Test Laboratory
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 Calera, AL 35040
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 12-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW23391

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW23400	Fluoride, Total	mg/L	0.000	0.3	2.00	1.92	0.075	1.86	1.8 to 2.2	92.2	80 to 120	0.00	20
AW23400	Sulfate, Total	mg/L	-0.302	1.0	20.00	19.6	0.103	18.6	18 to 22	98.0	80 to 120	0	20
AW23397	Solids, Dissolved	mg/L	-6.0	25			348	43.0	40 to 60			1.16	5
AW23400	Chloride, Total	mg/L	0.000	0.25	10.00	15.8	5.87	9.93	9 to 11	99.2	80 to 120	0.170	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

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CC:

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 12-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AW23392

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	J 0.00456	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0720	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	0.302	mg/L
* Calcium, Total	HRG	12/15/2016	EPA 200.7		10	1.0	5.0	60.1	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/19/2016	SM 2540C		1		25	346	mg/L
* Chloride, Total	SES	9/21/2016	EPA 300.0		1	0.04	0.25	19.7	mg/L
* Fluoride, Total	SES	9/21/2016	EPA 300.0		1	0.01	0.3	J 0.023	mg/L
* Sulfate, Total	SES	9/21/2016	EPA 300.0		1	0.3	1	91.8	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

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Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 12-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AW23392

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23400 Calcium, Total	mg/L	-0.0377	0.22	5.00	34.2	35.7	4.36	4.25 to 5.75	60.0	70 to 130	4.29	20	
AW23400 Antimony, Total	mg/L	0.000103	0.00132	0.10	0.0972	0.0997	0.0953	0.085 to 0.115	97.2	70 to 130	2.53	20	
AW23400 Chromium, Total	mg/L	0.0000112	0.0044	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.526	20	
AW23400 Lead, Total	mg/L	0.00000858	0.0022	0.10	0.101	0.101	0.103	0.085 to 0.115	101	70 to 130	0.0941	20	
AW23400 Lithium, Total	mg/L	0.000114	0.022	0.200	0.218	0.196	0.180	0.17 to 0.23	109	70 to 130	10.6	20	
AW23400 Molybdenum, Total	mg/L	0.00000891	0.0044	0.10	0.104	0.106	0.101	0.085 to 0.115	104	70 to 130	2.04	20	
AW23400 Arsenic, Total	mg/L	0.0000132	0.0022	0.10	0.0987	0.0987	0.0998	0.085 to 0.115	97.0	70 to 130	0.0798	20	
AW23400 Barium, Total	mg/L	0.00000197	0.0044	0.10	0.165	0.167	0.0943	0.085 to 0.115	86.0	70 to 130	1.25	20	
AW23400 Beryllium, Total	mg/L	0.00000730	0.00132	0.10	0.106	0.105	0.109	0.085 to 0.115	106	70 to 130	0.433	20	
AW23400 Cadmium, Total	mg/L	-0.000000562	0.00044	0.10	0.0958	0.0970	0.101	0.085 to 0.115	95.8	70 to 130	1.21	20	
AW23400 Selenium, Total	mg/L	0.0000658	0.0044	0.10	0.0745	0.0752	0.108	0.085 to 0.115	74.5	70 to 130	0.936	20	
AW23400 Thallium, Total	mg/L	0.00000877	0.00044	0.10	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.134	20	
AW23394 Mercury, Total by CVAA	mg/L	0.000113	0.0005	0.004	0.00394	0.00392	0.00389	0.0034 to 0.0046	98.5	70 to 130	0.488	20	
AW23400 Boron, Total	mg/L	-0.00634	0.044	1.00	0.989	0.946	0.958	0.85 to 1.15	98.9	70 to 130	4.44	20	
AW23400 Cobalt, Total	mg/L	-0.00000294	0.0044	0.10	0.0986	0.101	0.103	0.085 to 0.115	98.6	70 to 130	1.97	20	

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

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



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 12-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AW23392

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
			Limit	Limit			Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW23397	Solids, Dissolved	mg/L	-6.0	25			348	43.0	40 to 60			1.16	5
AW23400	Chloride, Total	mg/L	0.000	0.25	10.00	15.8	5.87	9.93	9 to 11	99.2	80 to 120	0.170	20
AW23400	Fluoride, Total	mg/L	0.000	0.3	2.00	1.92	0.075	1.86	1.8 to 2.2	92.2	80 to 120	0.00	20
AW23400	Sulfate, Total	mg/L	-0.302	1.0	20.00	19.6	0.103	18.6	18 to 22	98.0	80 to 120	0	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AW23393

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0121	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	12/13/2016	EPA 200.7		1	0.1	0.5	38.1	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/19/2016	SM 2540C		1		25	168	mg/L
* Chloride, Total	SES	9/21/2016	EPA 300.0		1	0.04	0.25	2.91	mg/L
* Fluoride, Total	SES	9/21/2016	EPA 300.0		1	0.01	0.3	J 0.019	mg/L
* Sulfate, Total	SES	9/21/2016	EPA 300.0		1	0.3	1	2.86	mg/L

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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
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AW23393

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23400 Antimony, Total	mg/L	0.000103	0.00132	0.10	0.0972	0.0997	0.0953	0.085 to 0.115	97.2	70 to 130	2.53	20	
AW23400 Calcium, Total	mg/L	-0.0377	0.22	5.00	34.2	35.7	4.36	4.25 to 5.75	60.0	70 to 130	4.29	20	
AW23400 Chromium, Total	mg/L	0.0000112	0.0044	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.526	20	
AW23400 Lead, Total	mg/L	0.00000858	0.0022	0.10	0.101	0.101	0.103	0.085 to 0.115	101	70 to 130	0.0941	20	
AW23400 Arsenic, Total	mg/L	0.0000132	0.0022	0.10	0.0987	0.0987	0.0998	0.085 to 0.115	97.0	70 to 130	0.0798	20	
AW23400 Barium, Total	mg/L	0.00000197	0.0044	0.10	0.165	0.167	0.0943	0.085 to 0.115	86.0	70 to 130	1.25	20	
AW23400 Beryllium, Total	mg/L	0.00000730	0.00132	0.10	0.106	0.105	0.109	0.085 to 0.115	106	70 to 130	0.433	20	
AW23400 Cadmium, Total	mg/L	-0.000000562	0.00044	0.10	0.0958	0.0970	0.101	0.085 to 0.115	95.8	70 to 130	1.21	20	
AW23400 Selenium, Total	mg/L	0.0000658	0.0044	0.10	0.0745	0.0752	0.108	0.085 to 0.115	74.5	70 to 130	0.936	20	
AW23400 Thallium, Total	mg/L	0.00000877	0.00044	0.10	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.134	20	
AW23394 Mercury, Total by CVAA	mg/L	0.000113	0.0005	0.004	0.00394	0.00392	0.00389	0.0034 to 0.0046	98.5	70 to 130	0.488	20	
AW23400 Boron, Total	mg/L	-0.00634	0.044	1.00	0.989	0.946	0.958	0.85 to 1.15	98.9	70 to 130	4.44	20	
AW23400 Cobalt, Total	mg/L	-0.00000294	0.0044	0.10	0.0986	0.101	0.103	0.085 to 0.115	98.6	70 to 130	1.97	20	
AW23400 Lithium, Total	mg/L	0.000114	0.022	0.200	0.218	0.196	0.180	0.17 to 0.23	109	70 to 130	10.6	20	
AW23400 Molybdenum, Total	mg/L	0.00000891	0.0044	0.10	0.104	0.106	0.101	0.085 to 0.115	104	70 to 130	2.04	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AW23393

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
			Limit	Limit			Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW23397	Solids, Dissolved	mg/L	-6.0	25			348	43.0	40 to 60			1.16	5
AW23400	Chloride, Total	mg/L	0.000	0.25	10.00	15.8	5.87	9.93	9 to 11	99.2	80 to 120	0.170	20
AW23400	Fluoride, Total	mg/L	0.000	0.3	2.00	1.92	0.075	1.86	1.8 to 2.2	92.2	80 to 120	0.00	20
AW23400	Sulfate, Total	mg/L	-0.302	1.0	20.00	19.6	0.103	18.6	18 to 22	98.0	80 to 120	0	20

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Laboratory certification ID: E571114

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AW23394

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0100	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	0.108	mg/L
* Calcium, Total	HRG	12/13/2016	EPA 200.7		1	0.1	0.5	35.6	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/19/2016	SM 2540C		1		25	187	mg/L
* Chloride, Total	SES	9/21/2016	EPA 300.0		1	0.04	0.25	5.92	mg/L
* Fluoride, Total	SES	9/21/2016	EPA 300.0		1	0.01	0.3	J 0.018	mg/L
* Sulfate, Total	SES	9/21/2016	EPA 300.0		1	0.3	1	30.9	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

Alabama Power General Test Laboratory
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 Calera, AL 35040
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AW23394

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23400 Calcium, Total	mg/L	-0.0377	0.22	5.00	34.2	35.7	4.36	4.25 to 5.75	60.0	70 to 130	4.29	20	
AW23400 Antimony, Total	mg/L	0.000103	0.00132	0.10	0.0972	0.0997	0.0953	0.085 to 0.115	97.2	70 to 130	2.53	20	
AW23400 Lithium, Total	mg/L	0.000114	0.022	0.200	0.218	0.196	0.180	0.17 to 0.23	109	70 to 130	10.6	20	
AW23400 Molybdenum, Total	mg/L	0.00000891	0.0044	0.10	0.104	0.106	0.101	0.085 to 0.115	104	70 to 130	2.04	20	
AW23394 Mercury, Total by CVAA	mg/L	0.000113	0.0005	0.004	0.00394	0.00392	0.00389	0.0034 to 0.0046	98.5	70 to 130	0.488	20	
AW23400 Boron, Total	mg/L	-0.00634	0.044	1.00	0.989	0.946	0.958	0.85 to 1.15	98.9	70 to 130	4.44	20	
AW23400 Cobalt, Total	mg/L	-0.00000294	0.0044	0.10	0.0986	0.101	0.103	0.085 to 0.115	98.6	70 to 130	1.97	20	
AW23400 Cadmium, Total	mg/L	-0.000000562	0.00044	0.10	0.0958	0.0970	0.101	0.085 to 0.115	95.8	70 to 130	1.21	20	
AW23400 Selenium, Total	mg/L	0.0000658	0.0044	0.10	0.0745	0.0752	0.108	0.085 to 0.115	74.5	70 to 130	0.936	20	
AW23400 Thallium, Total	mg/L	0.00000877	0.00044	0.10	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.134	20	
AW23400 Chromium, Total	mg/L	0.0000112	0.0044	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.526	20	
AW23400 Lead, Total	mg/L	0.00000858	0.0022	0.10	0.101	0.101	0.103	0.085 to 0.115	101	70 to 130	0.0941	20	
AW23400 Arsenic, Total	mg/L	0.0000132	0.0022	0.10	0.0987	0.0987	0.0998	0.085 to 0.115	97.0	70 to 130	0.0798	20	
AW23400 Barium, Total	mg/L	0.00000197	0.0044	0.10	0.165	0.167	0.0943	0.085 to 0.115	86.0	70 to 130	1.25	20	
AW23400 Beryllium, Total	mg/L	0.00000730	0.00132	0.10	0.106	0.105	0.109	0.085 to 0.115	106	70 to 130	0.433	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AW23394

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
			Limit	Limit			Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW23397	Solids, Dissolved	mg/L	-6.0	25			348	43.0	40 to 60			1.16	5
AW23400	Chloride, Total	mg/L	0.000	0.25	10.00	15.8	5.87	9.93	9 to 11	99.2	80 to 120	0.170	20
AW23400	Fluoride, Total	mg/L	0.000	0.3	2.00	1.92	0.075	1.86	1.8 to 2.2	92.2	80 to 120	0.00	20
AW23400	Sulfate, Total	mg/L	-0.302	1.0	20.00	19.6	0.103	18.6	18 to 22	98.0	80 to 120	0	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

CC:

Alabama Power General Test Laboratory
 744 County Road 87, GSC#8
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 FAX (205) 257-1654

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AW23395

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0493	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	12/15/2016	EPA 200.7		10	1.0	5.0	80.3	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/19/2016	SM 2540C		1		50	354	mg/L
* Chloride, Total	SES	9/21/2016	EPA 300.0		1	0.04	0.25	2.34	mg/L
* Fluoride, Total	SES	9/21/2016	EPA 300.0		1	0.01	0.3	J 0.061	mg/L
* Sulfate, Total	SES	9/21/2016	EPA 300.0		1	0.3	1	82.8	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AW23395

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23400 Antimony, Total	mg/L	0.000103	0.00132	0.10	0.0972	0.0997	0.0953	0.085 to 0.115	97.2	70 to 130	2.53	20	
AW23400 Calcium, Total	mg/L	-0.0377	0.22	5.00	34.2	35.7	4.36	4.25 to 5.75	60.0	70 to 130	4.29	20	
AW23400 Lithium, Total	mg/L	0.000114	0.022	0.200	0.218	0.196	0.180	0.17 to 0.23	109	70 to 130	10.6	20	
AW23400 Molybdenum, Total	mg/L	0.00000891	0.0044	0.10	0.104	0.106	0.101	0.085 to 0.115	104	70 to 130	2.04	20	
AW23400 Chromium, Total	mg/L	0.0000112	0.0044	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.526	20	
AW23400 Lead, Total	mg/L	0.00000858	0.0022	0.10	0.101	0.101	0.103	0.085 to 0.115	101	70 to 130	0.0941	20	
AW23400 Cadmium, Total	mg/L	-0.000000562	0.00044	0.10	0.0958	0.0970	0.101	0.085 to 0.115	95.8	70 to 130	1.21	20	
AW23400 Selenium, Total	mg/L	0.0000658	0.0044	0.10	0.0745	0.0752	0.108	0.085 to 0.115	74.5	70 to 130	0.936	20	
AW23400 Thallium, Total	mg/L	0.00000877	0.00044	0.10	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.134	20	
AW23404 Mercury, Total by CVAA	mg/L	0.000112	0.0005	0.004	0.00398	0.00392	0.00398	0.0034 to 0.0046	99.5	70 to 130	1.58	20	
AW23400 Arsenic, Total	mg/L	0.0000132	0.0022	0.10	0.0987	0.0987	0.0998	0.085 to 0.115	97.0	70 to 130	0.0798	20	
AW23400 Barium, Total	mg/L	0.00000197	0.0044	0.10	0.165	0.167	0.0943	0.085 to 0.115	86.0	70 to 130	1.25	20	
AW23400 Beryllium, Total	mg/L	0.00000730	0.00132	0.10	0.106	0.105	0.109	0.085 to 0.115	106	70 to 130	0.433	20	
AW23400 Boron, Total	mg/L	-0.00634	0.044	1.00	0.989	0.946	0.958	0.85 to 1.15	98.9	70 to 130	4.44	20	
AW23400 Cobalt, Total	mg/L	-0.00000294	0.0044	0.10	0.0986	0.101	0.103	0.085 to 0.115	98.6	70 to 130	1.97	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

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Comments:

Alabama Power General Test Laboratory
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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AW23395

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23400	Fluoride, Total	mg/L	0.000	0.3	2.00	1.92	0.075	1.86	1.8 to 2.2	92.2	80 to 120	0.00	20
AW23400	Sulfate, Total	mg/L	-0.302	1.0	20.00	19.6	0.103	18.6	18 to 22	98.0	80 to 120	0	20
AW23397	Solids, Dissolved	mg/L	-6.0	25			348	43.0	40 to 60			1.16	5
AW23400	Chloride, Total	mg/L	0.000	0.25	10.00	15.8	5.87	9.93	9 to 11	99.2	80 to 120	0.170	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

CC:

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



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AW23396

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	J 0.00488	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0421	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	12/15/2016	EPA 200.7		10	1.0	5.0	44.1	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0127	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/19/2016	SM 2540C		1		25	212	mg/L
* Chloride, Total	SES	9/21/2016	EPA 300.0		1	0.04	0.25	9.68	mg/L
* Fluoride, Total	SES	9/21/2016	EPA 300.0		1	0.01	0.3	J 0.030	mg/L
* Sulfate, Total	SES	9/21/2016	EPA 300.0		1	0.3	1	16.8	mg/L

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AW23396

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23400 Antimony, Total	mg/L	0.000103	0.00132	0.10	0.0972	0.0997	0.0953	0.085 to 0.115	97.2	70 to 130	2.53	20	
AW23400 Calcium, Total	mg/L	-0.0377	0.22	5.00	34.2	35.7	4.36	4.25 to 5.75	60.0	70 to 130	4.29	20	
AW23400 Lithium, Total	mg/L	0.000114	0.022	0.200	0.218	0.196	0.180	0.17 to 0.23	109	70 to 130	10.6	20	
AW23400 Molybdenum, Total	mg/L	0.00000891	0.0044	0.10	0.104	0.106	0.101	0.085 to 0.115	104	70 to 130	2.04	20	
AW23400 Arsenic, Total	mg/L	0.0000132	0.0022	0.10	0.0987	0.0987	0.0998	0.085 to 0.115	97.0	70 to 130	0.0798	20	
AW23400 Barium, Total	mg/L	0.00000197	0.0044	0.10	0.165	0.167	0.0943	0.085 to 0.115	86.0	70 to 130	1.25	20	
AW23400 Beryllium, Total	mg/L	0.00000730	0.00132	0.10	0.106	0.105	0.109	0.085 to 0.115	106	70 to 130	0.433	20	
AW23400 Boron, Total	mg/L	-0.00634	0.044	1.00	0.989	0.946	0.958	0.85 to 1.15	98.9	70 to 130	4.44	20	
AW23400 Cobalt, Total	mg/L	-0.00000294	0.0044	0.10	0.0986	0.101	0.103	0.085 to 0.115	98.6	70 to 130	1.97	20	
AW23400 Cadmium, Total	mg/L	-0.000000562	0.00044	0.10	0.0958	0.0970	0.101	0.085 to 0.115	95.8	70 to 130	1.21	20	
AW23400 Selenium, Total	mg/L	0.0000658	0.0044	0.10	0.0745	0.0752	0.108	0.085 to 0.115	74.5	70 to 130	0.936	20	
AW23400 Thallium, Total	mg/L	0.00000877	0.00044	0.10	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.134	20	
AW23404 Mercury, Total by CVAA	mg/L	0.000112	0.0005	0.004	0.00398	0.00392	0.00398	0.0034 to 0.0046	99.5	70 to 130	1.58	20	
AW23400 Chromium, Total	mg/L	0.0000112	0.0044	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.526	20	
AW23400 Lead, Total	mg/L	0.00000858	0.0022	0.10	0.101	0.101	0.103	0.085 to 0.115	101	70 to 130	0.0941	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AW23396

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW23400	Fluoride, Total	mg/L	0.000	0.3	2.00	1.92	0.075	1.86	1.8 to 2.2	92.2	80 to 120	0.00	20
AW23400	Sulfate, Total	mg/L	-0.302	1.0	20.00	19.6	0.103	18.6	18 to 22	98.0	80 to 120	0	20
AW23397	Solids, Dissolved	mg/L	-6.0	25			348	43.0	40 to 60			1.16	5
AW23400	Chloride, Total	mg/L	0.000	0.25	10.00	15.8	5.87	9.93	9 to 11	99.2	80 to 120	0.170	20

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



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AW23397

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0247	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	0.838	mg/L
* Calcium, Total	HRG	12/13/2016	EPA 200.7		1	0.1	0.5	36.5	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	J 0.0190	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0627	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/19/2016	SM 2540C		1		25	340	mg/L
* Chloride, Total	SES	9/21/2016	EPA 300.0		1	0.04	0.25	23.6	mg/L
* Fluoride, Total	SES	9/21/2016	EPA 300.0		1	0.01	0.3	J 0.036	mg/L
* Sulfate, Total	SES	9/22/2016	EPA 300.0		10	3.0	10	130	mg/L

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AW23397

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23400 Antimony, Total	mg/L	0.000103	0.00132	0.10	0.0972	0.0997	0.0953	0.085 to 0.115	97.2	70 to 130	2.53	20	
AW23400 Calcium, Total	mg/L	-0.0377	0.22	5.00	34.2	35.7	4.36	4.25 to 5.75	60.0	70 to 130	4.29	20	
AW23400 Boron, Total	mg/L	-0.00634	0.044	1.00	0.989	0.946	0.958	0.85 to 1.15	98.9	70 to 130	4.44	20	
AW23400 Cobalt, Total	mg/L	-0.00000294	0.0044	0.10	0.0986	0.101	0.103	0.085 to 0.115	98.6	70 to 130	1.97	20	
AW23400 Chromium, Total	mg/L	0.0000112	0.0044	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.526	20	
AW23400 Lead, Total	mg/L	0.00000858	0.0022	0.10	0.101	0.101	0.103	0.085 to 0.115	101	70 to 130	0.0941	20	
AW23400 Lithium, Total	mg/L	0.000114	0.022	0.200	0.218	0.196	0.180	0.17 to 0.23	109	70 to 130	10.6	20	
AW23400 Molybdenum, Total	mg/L	0.00000891	0.0044	0.10	0.104	0.106	0.101	0.085 to 0.115	104	70 to 130	2.04	20	
AW23400 Cadmium, Total	mg/L	-0.000000562	0.00044	0.10	0.0958	0.0970	0.101	0.085 to 0.115	95.8	70 to 130	1.21	20	
AW23400 Selenium, Total	mg/L	0.0000658	0.0044	0.10	0.0745	0.0752	0.108	0.085 to 0.115	74.5	70 to 130	0.936	20	
AW23400 Thallium, Total	mg/L	0.00000877	0.00044	0.10	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.134	20	
AW23404 Mercury, Total by CVAA	mg/L	0.000112	0.0005	0.004	0.00398	0.00392	0.00398	0.0034 to 0.0046	99.5	70 to 130	1.58	20	
AW23400 Arsenic, Total	mg/L	0.0000132	0.0022	0.10	0.0987	0.0987	0.0998	0.085 to 0.115	97.0	70 to 130	0.0798	20	
AW23400 Barium, Total	mg/L	0.00000197	0.0044	0.10	0.165	0.167	0.0943	0.085 to 0.115	86.0	70 to 130	1.25	20	
AW23400 Beryllium, Total	mg/L	0.00000730	0.00132	0.10	0.106	0.105	0.109	0.085 to 0.115	106	70 to 130	0.433	20	

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Laboratory certification ID: E571114

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Comments:

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AW23397

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW23400	Fluoride, Total	mg/L	0.000	0.3		2.00	1.92	0.075	1.86	1.8 to 2.2	92.2	80 to 120	0.00	20
AW23400	Sulfate, Total	mg/L	-0.302	1.0		20.00	19.6	0.103	18.6	18 to 22	98.0	80 to 120	0	20
AW23397	Solids, Dissolved	mg/L	-6.0	25				348	43.0	40 to 60			1.16	5
AW23400	Chloride, Total	mg/L	0.000	0.25		10.00	15.8	5.87	9.93	9 to 11	99.2	80 to 120	0.170	20

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AW23398

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	0.00531	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0176	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	12/15/2016	EPA 200.7		10	1.0	5.0	53.5	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	J 0.00720	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/19/2016	SM 2540C		1		25	275	mg/L
* Chloride, Total	SES	9/21/2016	EPA 300.0		1	0.04	0.25	2.91	mg/L
* Fluoride, Total	SES	9/21/2016	EPA 300.0		1	0.01	0.3	J 0.045	mg/L
* Sulfate, Total	SES	9/21/2016	EPA 300.0		1	0.3	1	11.6	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:

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AW23398

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23400 Antimony, Total	mg/L	0.000103	0.00132	0.10	0.0972	0.0997	0.0953	0.085 to 0.115	97.2	70 to 130	2.53	20	
AW23400 Calcium, Total	mg/L	-0.0377	0.22	5.00	34.2	35.7	4.36	4.25 to 5.75	60.0	70 to 130	4.29	20	
AW23400 Cadmium, Total	mg/L	-0.000000562	0.00044	0.10	0.0958	0.0970	0.101	0.085 to 0.115	95.8	70 to 130	1.21	20	
AW23400 Selenium, Total	mg/L	0.0000658	0.0044	0.10	0.0745	0.0752	0.108	0.085 to 0.115	74.5	70 to 130	0.936	20	
AW23400 Thallium, Total	mg/L	0.00000877	0.00044	0.10	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.134	20	
AW23404 Mercury, Total by CVAA	mg/L	0.000112	0.0005	0.004	0.00398	0.00392	0.00398	0.0034 to 0.0046	99.5	70 to 130	1.58	20	
AW23400 Boron, Total	mg/L	-0.00634	0.044	1.00	0.989	0.946	0.958	0.85 to 1.15	98.9	70 to 130	4.44	20	
AW23400 Cobalt, Total	mg/L	-0.00000294	0.0044	0.10	0.0986	0.101	0.103	0.085 to 0.115	98.6	70 to 130	1.97	20	
AW23400 Chromium, Total	mg/L	0.0000112	0.0044	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.526	20	
AW23400 Lead, Total	mg/L	0.00000858	0.0022	0.10	0.101	0.101	0.103	0.085 to 0.115	101	70 to 130	0.0941	20	
AW23400 Arsenic, Total	mg/L	0.0000132	0.0022	0.10	0.0987	0.0987	0.0998	0.085 to 0.115	97.0	70 to 130	0.0798	20	
AW23400 Barium, Total	mg/L	0.00000197	0.0044	0.10	0.165	0.167	0.0943	0.085 to 0.115	86.0	70 to 130	1.25	20	
AW23400 Beryllium, Total	mg/L	0.00000730	0.00132	0.10	0.106	0.105	0.109	0.085 to 0.115	106	70 to 130	0.433	20	
AW23400 Lithium, Total	mg/L	0.000114	0.022	0.200	0.218	0.196	0.180	0.17 to 0.23	109	70 to 130	10.6	20	
AW23400 Molybdenum, Total	mg/L	0.00000891	0.0044	0.10	0.104	0.106	0.101	0.085 to 0.115	104	70 to 130	2.04	20	

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Laboratory certification ID: E571114

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 Calera, AL 35040
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AW23398

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	LFB	Rec	Prec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Rec	Limit	Limit	
AW23400	Chloride, Total	mg/L	0.000	0.25	10.00	15.8	5.87	9.93	9 to 11	99.2	80 to 120	0.170	20
AW23407	Solids, Dissolved	mg/L	-6.0	25			204	43.0	40 to 60			0.244	5
AW23400	Fluoride, Total	mg/L	0.000	0.3	2.00	1.92	0.075	1.86	1.8 to 2.2	92.2	80 to 120	0.00	20
AW23400	Sulfate, Total	mg/L	-0.302	1.0	20.00	19.6	0.103	18.6	18 to 22	98.0	80 to 120	0	20

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AW23399

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	J 0.00179	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0189	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	0.114	mg/L
* Calcium, Total	HRG	12/15/2016	EPA 200.7		10	1.0	5.0	53.0	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/19/2016	SM 2540C		1		25	276	mg/L
* Chloride, Total	SES	9/21/2016	EPA 300.0		1	0.04	0.25	3.98	mg/L
* Fluoride, Total	SES	9/21/2016	EPA 300.0		1	0.01	0.3	J 0.057	mg/L
* Sulfate, Total	SES	9/21/2016	EPA 300.0		1	0.3	1	17.8	mg/L

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Laboratory certification ID: E571114

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Comments:

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AW23399

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23400 Calcium, Total	mg/L	-0.0377	0.22	5.00	34.2	35.7	4.36	4.25 to 5.75	60.0	70 to 130	4.29	20	
AW23400 Antimony, Total	mg/L	0.000103	0.00132	0.10	0.0972	0.0997	0.0953	0.085 to 0.115	97.2	70 to 130	2.53	20	
AW23400 Chromium, Total	mg/L	0.0000112	0.0044	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.526	20	
AW23400 Lead, Total	mg/L	0.00000858	0.0022	0.10	0.101	0.101	0.103	0.085 to 0.115	101	70 to 130	0.0941	20	
AW23400 Lithium, Total	mg/L	0.000114	0.022	0.200	0.218	0.196	0.180	0.17 to 0.23	109	70 to 130	10.6	20	
AW23400 Molybdenum, Total	mg/L	0.00000891	0.0044	0.10	0.104	0.106	0.101	0.085 to 0.115	104	70 to 130	2.04	20	
AW23400 Arsenic, Total	mg/L	0.0000132	0.0022	0.10	0.0987	0.0987	0.0998	0.085 to 0.115	97.0	70 to 130	0.0798	20	
AW23400 Barium, Total	mg/L	0.00000197	0.0044	0.10	0.165	0.167	0.0943	0.085 to 0.115	86.0	70 to 130	1.25	20	
AW23400 Beryllium, Total	mg/L	0.00000730	0.00132	0.10	0.106	0.105	0.109	0.085 to 0.115	106	70 to 130	0.433	20	
AW23400 Boron, Total	mg/L	-0.00634	0.044	1.00	0.989	0.946	0.958	0.85 to 1.15	98.9	70 to 130	4.44	20	
AW23400 Cobalt, Total	mg/L	-0.00000294	0.0044	0.10	0.0986	0.101	0.103	0.085 to 0.115	98.6	70 to 130	1.97	20	
AW23400 Cadmium, Total	mg/L	-0.000000562	0.00044	0.10	0.0958	0.0970	0.101	0.085 to 0.115	95.8	70 to 130	1.21	20	
AW23400 Selenium, Total	mg/L	0.0000658	0.0044	0.10	0.0745	0.0752	0.108	0.085 to 0.115	74.5	70 to 130	0.936	20	
AW23400 Thallium, Total	mg/L	0.00000877	0.00044	0.10	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.134	20	
AW23404 Mercury, Total by CVAA	mg/L	0.000112	0.0005	0.004	0.00398	0.00392	0.00398	0.0034 to 0.0046	99.5	70 to 130	1.58	20	

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AW23399

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23400	Chloride, Total	mg/L	0.000	0.25	10.00	15.8	5.87	9.93	9 to 11	99.2	80 to 120	0.170	20
AW23407	Solids, Dissolved	mg/L	-6.0	25			204	43.0	40 to 60			0.244	5
AW23400	Fluoride, Total	mg/L	0.000	0.3	2.00	1.92	0.075	1.86	1.8 to 2.2	92.2	80 to 120	0.00	20
AW23400	Sulfate, Total	mg/L	-0.302	1.0	20.00	19.6	0.103	18.6	18 to 22	98.0	80 to 120	0	20

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AW23400

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	J 0.00168	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0793	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	12/13/2016	EPA 200.7		1	0.1	0.5	31.2	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/19/2016	SM 2540C		1		25	170	mg/L
* Chloride, Total	SES	9/21/2016	EPA 300.0		1	0.04	0.25	5.88	mg/L
* Fluoride, Total	SES	9/21/2016	EPA 300.0		1	0.01	0.3	J 0.075	mg/L
* Sulfate, Total	SES	9/21/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Recovery for Ca is out of range.
 Spike amount is less than 30% sample amount,
 therefore will not be qualified. SGC 12/27/16

Alabama Power General Test Laboratory
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AW23400

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23400 Calcium, Total	mg/L	-0.0377	0.22	5.00	34.2	35.7	4.36	4.25 to 5.75	60.0	70 to 130	4.29	20	
AW23400 Antimony, Total	mg/L	0.000103	0.00132	0.10	0.0972	0.0997	0.0953	0.085 to 0.115	97.2	70 to 130	2.53	20	
AW23400 Arsenic, Total	mg/L	0.0000132	0.0022	0.10	0.0987	0.0987	0.0998	0.085 to 0.115	97.0	70 to 130	0.0798	20	
AW23400 Barium, Total	mg/L	0.00000197	0.0044	0.10	0.165	0.167	0.0943	0.085 to 0.115	86.0	70 to 130	1.25	20	
AW23400 Beryllium, Total	mg/L	0.00000730	0.00132	0.10	0.106	0.105	0.109	0.085 to 0.115	106	70 to 130	0.433	20	
AW23400 Chromium, Total	mg/L	0.0000112	0.0044	0.10	0.101	0.101	0.102	0.085 to 0.115	101	70 to 130	0.526	20	
AW23400 Lead, Total	mg/L	0.00000858	0.0022	0.10	0.101	0.101	0.103	0.085 to 0.115	101	70 to 130	0.0941	20	
AW23400 Cadmium, Total	mg/L	-0.000000562	0.00044	0.10	0.0958	0.0970	0.101	0.085 to 0.115	95.8	70 to 130	1.21	20	
AW23400 Selenium, Total	mg/L	0.0000658	0.0044	0.10	0.0745	0.0752	0.108	0.085 to 0.115	74.5	70 to 130	0.936	20	
AW23400 Thallium, Total	mg/L	0.00000877	0.00044	0.10	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.134	20	
AW23404 Mercury, Total by CVAA	mg/L	0.000112	0.0005	0.004	0.00398	0.00392	0.00398	0.0034 to 0.0046	99.5	70 to 130	1.58	20	
AW23400 Lithium, Total	mg/L	0.000114	0.022	0.200	0.218	0.196	0.180	0.17 to 0.23	109	70 to 130	10.6	20	
AW23400 Molybdenum, Total	mg/L	0.00000891	0.0044	0.10	0.104	0.106	0.101	0.085 to 0.115	104	70 to 130	2.04	20	
AW23400 Boron, Total	mg/L	-0.00634	0.044	1.00	0.989	0.946	0.958	0.85 to 1.15	98.9	70 to 130	4.44	20	
AW23400 Cobalt, Total	mg/L	-0.00000294	0.0044	0.10	0.0986	0.101	0.103	0.085 to 0.115	98.6	70 to 130	1.97	20	

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Recovery for Ca is out of range.
 Spike amount is less than 30% sample amount,
 therefore will not be qualified. SGC 12/27/16

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AW23400

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW23400	Chloride, Total	mg/L	0.000	0.25	10.00	15.8	5.87	9.93	9 to 11	99.2	80 to 120	0.170	20
AW23407	Solids, Dissolved	mg/L	-6.0	25			204	43.0	40 to 60			0.244	5
AW23400	Fluoride, Total	mg/L	0.000	0.3	2.00	1.92	0.075	1.86	1.8 to 2.2	92.2	80 to 120	0.00	20
AW23400	Sulfate, Total	mg/L	-0.302	1.0	20.00	19.6	0.103	18.6	18 to 22	98.0	80 to 120	0	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Recovery for Ca is out of range.
 Spike amount is less than 30% sample amount,
 therefore will not be qualified. SGC 12/27/16

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
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW23401

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	10/5/2016	EPA 200.7		1	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/19/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	9/21/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	9/21/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	9/21/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW23401

Sample Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec Limit
		MB	Limit					Limit	Rec	Limit		
AW23410 Cadmium, Total	mg/L	-0.000000562	0.00044	0.10	0.0968	0.0984	0.101	0.085 to 0.115	96.8	70 to 130	1.73	20
AW23410 Antimony, Total	mg/L	0.000103	0.00132	0.10	0.101	0.102	0.0953	0.085 to 0.115	101	70 to 130	0.658	20
AW23410 Lithium, Total	mg/L	0.000112	0.022	0.20	0.205	0.168	0.210	0.17 to 0.23	102	70 to 130	19.8	20
AW23410 Cobalt, Total	mg/L	-0.00000294	0.0044	0.10	0.102	0.103	0.103	0.085 to 0.115	102	70 to 130	0.798	20
AW23410 Barium, Total	mg/L	0.00000197	0.0044	0.10	0.155	0.157	0.0943	0.085 to 0.115	90.5	70 to 130	1.33	20
AW23410 Calcium, Total	mg/L	-0.0448	0.22	5.00	70.5	72.6	5.02	4.25 to 5.75	4.31	70 to 130	2.94	20
AW23410 Molybdenum, Total	mg/L	0.00000891	0.0044	0.10	0.174	0.177	0.101	0.085 to 0.115	105	70 to 130	1.31	20
AW23410 Beryllium, Total	mg/L	0.00000730	0.00132	0.10	0.102	0.100	0.109	0.085 to 0.115	102	70 to 130	1.82	20
AW23410 Lead, Total	mg/L	0.00000858	0.0022	0.10	0.101	0.1000	0.103	0.085 to 0.115	101	70 to 130	0.865	20
AW23410 Selenium, Total	mg/L	0.0000658	0.0044	0.10	0.0964	0.0970	0.108	0.085 to 0.115	96.4	70 to 130	0.567	20
AW23404 Mercury, Total by CVAA	mg/L	0.000112	0.0005	0.004	0.00398	0.00392	0.00398	0.0034 to 0.0046	99.5	70 to 130	1.58	20
AW23410 Arsenic, Total	mg/L	0.0000132	0.0022	0.10	0.1000	0.0998	0.0998	0.085 to 0.115	97.9	70 to 130	0.167	20
AW23410 Boron, Total	mg/L	-0.00417	0.044	1.00	2.77	2.83	0.965	0.85 to 1.15	92.3	70 to 130	2.14	20
AW23410 Chromium, Total	mg/L	0.0000112	0.0044	0.10	0.0998	0.100	0.102	0.085 to 0.115	99.8	70 to 130	0.500	20
AW23410 Thallium, Total	mg/L	0.00000877	0.00044	0.10	0.103	0.102	0.101	0.085 to 0.115	103	70 to 130	1.42	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW23401

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23410	Chloride, Total	mg/L	0.00	0.25	100.00	133	29.9	9.92	9 to 11	103	80 to 120	0.334	20
AW23407	Solids, Dissolved	mg/L	-6.0	25			204	43.0	40 to 60			0.244	5
AW23410	Fluoride, Total	mg/L	0.00	0.3	2.00	1.89	0.054	1.85	1.8 to 2.2	91.8	80 to 120	0.00	20
AW23410	Sulfate, Total	mg/L	-0.297	1.0	200	385	171	18.6	18 to 22	107	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

CC:

Alabama Power General Test Laboratory
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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPEB
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AW23402

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiochemical									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	10/5/2016	EPA 200.7		1	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/19/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	9/21/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	9/21/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	9/21/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPEB
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AW23402

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23410 Antimony, Total	mg/L	0.000103	0.00132	0.10	0.101	0.102	0.0953	0.085 to 0.115	101	70 to 130	0.658	20	
AW23410 Lithium, Total	mg/L	0.000112	0.022	0.20	0.205	0.168	0.210	0.17 to 0.23	102	70 to 130	19.8	20	
AW23410 Cadmium, Total	mg/L	-0.000000562	0.00044	0.10	0.0968	0.0984	0.101	0.085 to 0.115	96.8	70 to 130	1.73	20	
AW23410 Cobalt, Total	mg/L	-0.00000294	0.0044	0.10	0.102	0.103	0.103	0.085 to 0.115	102	70 to 130	0.798	20	
AW23410 Barium, Total	mg/L	0.00000197	0.0044	0.10	0.155	0.157	0.0943	0.085 to 0.115	90.5	70 to 130	1.33	20	
AW23410 Calcium, Total	mg/L	-0.0448	0.22	5.00	70.5	72.6	5.02	4.25 to 5.75	4.31	70 to 130	2.94	20	
AW23410 Molybdenum, Total	mg/L	0.00000891	0.0044	0.10	0.174	0.177	0.101	0.085 to 0.115	105	70 to 130	1.31	20	
AW23410 Beryllium, Total	mg/L	0.00000730	0.00132	0.10	0.102	0.100	0.109	0.085 to 0.115	102	70 to 130	1.82	20	
AW23410 Lead, Total	mg/L	0.00000858	0.0022	0.10	0.101	0.1000	0.103	0.085 to 0.115	101	70 to 130	0.865	20	
AW23410 Selenium, Total	mg/L	0.0000658	0.0044	0.10	0.0964	0.0970	0.108	0.085 to 0.115	96.4	70 to 130	0.567	20	
AW23404 Mercury, Total by CVAA	mg/L	0.000112	0.0005	0.004	0.00398	0.00392	0.00398	0.0034 to 0.0046	99.5	70 to 130	1.58	20	
AW23410 Arsenic, Total	mg/L	0.0000132	0.0022	0.10	0.1000	0.0998	0.0998	0.085 to 0.115	97.9	70 to 130	0.167	20	
AW23410 Boron, Total	mg/L	-0.00417	0.044	1.00	2.77	2.83	0.965	0.85 to 1.15	92.3	70 to 130	2.14	20	
AW23410 Chromium, Total	mg/L	0.0000112	0.0044	0.10	0.0998	0.100	0.102	0.085 to 0.115	99.8	70 to 130	0.500	20	
AW23410 Thallium, Total	mg/L	0.00000877	0.00044	0.10	0.103	0.102	0.101	0.085 to 0.115	103	70 to 130	1.42	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAPEB
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AW23402

Sample	Analysis	Units MB	MB			Sample		LFB	Rec			Prec
			Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW23410	Sulfate, Total	mg/L -0.297	1.0	200	385	171	18.6	18 to 22	107	80 to 120	0.00	20
AW23410	Chloride, Total	mg/L 0.00	0.25	100.00	133	29.9	9.92	9 to 11	103	80 to 120	0.334	20
AW23407	Solids, Dissolved	mg/L -6.0	25			204	43.0	40 to 60			0.244	5
AW23410	Fluoride, Total	mg/L 0.00	0.3	2.00	1.89	0.054	1.85	1.8 to 2.2	91.8	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

CC:

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 744 County Road 87, GSC#8
 Calera, AL 35040
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 FAX (205) 257-1654

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AW23403

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	J 0.00964	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	10/5/2016	EPA 200.7		1	0.1	0.5	32.1	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/19/2016	SM 2540C		1		25	166	mg/L
* Chloride, Total	SES	9/21/2016	EPA 300.0		1	0.04	0.25	2.24	mg/L
* Fluoride, Total	SES	9/21/2016	EPA 300.0		1	0.01	0.3	J 0.016	mg/L
* Sulfate, Total	SES	9/21/2016	EPA 300.0		1	0.3	1	4.94	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AW23403

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23410 Antimony, Total	mg/L	0.000103	0.00132	0.10	0.101	0.102	0.0953	0.085 to 0.115	101	70 to 130	0.658	20	
AW23410 Lithium, Total	mg/L	0.000112	0.022	0.20	0.205	0.168	0.210	0.17 to 0.23	102	70 to 130	19.8	20	
AW23410 Cadmium, Total	mg/L	-0.000000562	0.00044	0.10	0.0968	0.0984	0.101	0.085 to 0.115	96.8	70 to 130	1.73	20	
AW23410 Cobalt, Total	mg/L	-0.00000294	0.0044	0.10	0.102	0.103	0.103	0.085 to 0.115	102	70 to 130	0.798	20	
AW23410 Beryllium, Total	mg/L	0.00000730	0.00132	0.10	0.102	0.100	0.109	0.085 to 0.115	102	70 to 130	1.82	20	
AW23410 Lead, Total	mg/L	0.00000858	0.0022	0.10	0.101	0.1000	0.103	0.085 to 0.115	101	70 to 130	0.865	20	
AW23410 Selenium, Total	mg/L	0.0000658	0.0044	0.10	0.0964	0.0970	0.108	0.085 to 0.115	96.4	70 to 130	0.567	20	
AW23404 Mercury, Total by CVAA	mg/L	0.000112	0.0005	0.004	0.00398	0.00392	0.00398	0.0034 to 0.0046	99.5	70 to 130	1.58	20	
AW23410 Arsenic, Total	mg/L	0.0000132	0.0022	0.10	0.1000	0.0998	0.0998	0.085 to 0.115	97.9	70 to 130	0.167	20	
AW23410 Boron, Total	mg/L	-0.00417	0.044	1.00	2.77	2.83	0.965	0.85 to 1.15	92.3	70 to 130	2.14	20	
AW23410 Chromium, Total	mg/L	0.0000112	0.0044	0.10	0.0998	0.100	0.102	0.085 to 0.115	99.8	70 to 130	0.500	20	
AW23410 Thallium, Total	mg/L	0.00000877	0.00044	0.10	0.103	0.102	0.101	0.085 to 0.115	103	70 to 130	1.42	20	
AW23410 Barium, Total	mg/L	0.00000197	0.0044	0.10	0.155	0.157	0.0943	0.085 to 0.115	90.5	70 to 130	1.33	20	
AW23410 Calcium, Total	mg/L	-0.0448	0.22	5.00	70.5	72.6	5.02	4.25 to 5.75	4.31	70 to 130	2.94	20	
AW23410 Molybdenum, Total	mg/L	0.00000891	0.0044	0.10	0.174	0.177	0.101	0.085 to 0.115	105	70 to 130	1.31	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:

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AW23403

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW23410	Fluoride, Total	mg/L	0.00	0.3	2.00	1.89	0.054	1.85	1.8 to 2.2	91.8	80 to 120	0.00	20
AW23410	Chloride, Total	mg/L	0.00	0.25	100.00	133	29.9	9.92	9 to 11	103	80 to 120	0.334	20
AW23410	Sulfate, Total	mg/L	-0.297	1.0	200	385	171	18.6	18 to 22	107	80 to 120	0.00	20
AW23407	Solids, Dissolved	mg/L	-6.0	25			204	43.0	40 to 60			0.244	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.

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AW23404

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	J 0.00864	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	10/5/2016	EPA 200.7		1	0.1	0.5	30.6	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	J 0.00740	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/19/2016	SM 2540C		1		25	141	mg/L
* Chloride, Total	SES	9/21/2016	EPA 300.0		1	0.04	0.25	1.77	mg/L
* Fluoride, Total	SES	9/21/2016	EPA 300.0		1	0.01	0.3	J 0.017	mg/L
* Sulfate, Total	SES	9/21/2016	EPA 300.0		1	0.3	1	3.19	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AW23404

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23410 Antimony, Total	mg/L	0.000103	0.00132	0.10	0.101	0.102	0.0953	0.085 to 0.115	101	70 to 130	0.658	20	
AW23410 Lithium, Total	mg/L	0.000112	0.022	0.20	0.205	0.168	0.210	0.17 to 0.23	102	70 to 130	19.8	20	
AW23410 Cadmium, Total	mg/L	-0.000000562	0.00044	0.10	0.0968	0.0984	0.101	0.085 to 0.115	96.8	70 to 130	1.73	20	
AW23410 Cobalt, Total	mg/L	-0.00000294	0.0044	0.10	0.102	0.103	0.103	0.085 to 0.115	102	70 to 130	0.798	20	
AW23410 Barium, Total	mg/L	0.00000197	0.0044	0.10	0.155	0.157	0.0943	0.085 to 0.115	90.5	70 to 130	1.33	20	
AW23410 Calcium, Total	mg/L	-0.0448	0.22	5.00	70.5	72.6	5.02	4.25 to 5.75	4.31	70 to 130	2.94	20	
AW23410 Molybdenum, Total	mg/L	0.00000891	0.0044	0.10	0.174	0.177	0.101	0.085 to 0.115	105	70 to 130	1.31	20	
AW23410 Beryllium, Total	mg/L	0.00000730	0.00132	0.10	0.102	0.100	0.109	0.085 to 0.115	102	70 to 130	1.82	20	
AW23410 Lead, Total	mg/L	0.00000858	0.0022	0.10	0.101	0.1000	0.103	0.085 to 0.115	101	70 to 130	0.865	20	
AW23410 Selenium, Total	mg/L	0.0000658	0.0044	0.10	0.0964	0.0970	0.108	0.085 to 0.115	96.4	70 to 130	0.567	20	
AW23404 Mercury, Total by CVAA	mg/L	0.000112	0.0005	0.004	0.00398	0.00392	0.00398	0.0034 to 0.0046	99.5	70 to 130	1.58	20	
AW23410 Arsenic, Total	mg/L	0.0000132	0.0022	0.10	0.1000	0.0998	0.0998	0.085 to 0.115	97.9	70 to 130	0.167	20	
AW23410 Boron, Total	mg/L	-0.00417	0.044	1.00	2.77	2.83	0.965	0.85 to 1.15	92.3	70 to 130	2.14	20	
AW23410 Chromium, Total	mg/L	0.0000112	0.0044	0.10	0.0998	0.100	0.102	0.085 to 0.115	99.8	70 to 130	0.500	20	
AW23410 Thallium, Total	mg/L	0.00000877	0.00044	0.10	0.103	0.102	0.101	0.085 to 0.115	103	70 to 130	1.42	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AW23404

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW23410	Chloride, Total	mg/L	0.00	0.25	100.00	133		29.9	9.92	9 to 11	103	80 to 120	0.334	20
AW23407	Solids, Dissolved	mg/L	-6.0	25				204	43.0	40 to 60			0.244	5
AW23410	Sulfate, Total	mg/L	-0.297	1.0	200	385		171	18.6	18 to 22	107	80 to 120	0.00	20
AW23410	Fluoride, Total	mg/L	0.00	0.3	2.00	1.89		0.054	1.85	1.8 to 2.2	91.8	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW23405

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	10/5/2016	EPA 200.7		1	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/19/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	9/21/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	9/21/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	9/21/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

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
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW23405

Sample Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec Limit
		MB	Limit					Limit	Rec	Limit		
AW23410 Antimony, Total	mg/L	0.000103	0.00132	0.10	0.101	0.102	0.0953	0.085 to 0.115	101	70 to 130	0.658	20
AW23410 Lithium, Total	mg/L	0.000112	0.022	0.20	0.205	0.168	0.210	0.17 to 0.23	102	70 to 130	19.8	20
AW23410 Cadmium, Total	mg/L	-0.000000562	0.00044	0.10	0.0968	0.0984	0.101	0.085 to 0.115	96.8	70 to 130	1.73	20
AW23410 Cobalt, Total	mg/L	-0.00000294	0.0044	0.10	0.102	0.103	0.103	0.085 to 0.115	102	70 to 130	0.798	20
AW23410 Barium, Total	mg/L	0.00000197	0.0044	0.10	0.155	0.157	0.0943	0.085 to 0.115	90.5	70 to 130	1.33	20
AW23410 Calcium, Total	mg/L	-0.0448	0.22	5.00	70.5	72.6	5.02	4.25 to 5.75	4.31	70 to 130	2.94	20
AW23410 Molybdenum, Total	mg/L	0.00000891	0.0044	0.10	0.174	0.177	0.101	0.085 to 0.115	105	70 to 130	1.31	20
AW23410 Beryllium, Total	mg/L	0.00000730	0.00132	0.10	0.102	0.100	0.109	0.085 to 0.115	102	70 to 130	1.82	20
AW23410 Lead, Total	mg/L	0.00000858	0.0022	0.10	0.101	0.1000	0.103	0.085 to 0.115	101	70 to 130	0.865	20
AW23410 Selenium, Total	mg/L	0.0000658	0.0044	0.10	0.0964	0.0970	0.108	0.085 to 0.115	96.4	70 to 130	0.567	20
AW23410 Arsenic, Total	mg/L	0.0000132	0.0022	0.10	0.1000	0.0998	0.0998	0.085 to 0.115	97.9	70 to 130	0.167	20
AW23410 Boron, Total	mg/L	-0.00417	0.044	1.00	2.77	2.83	0.965	0.85 to 1.15	92.3	70 to 130	2.14	20
AW23410 Chromium, Total	mg/L	0.0000112	0.0044	0.10	0.0998	0.100	0.102	0.085 to 0.115	99.8	70 to 130	0.500	20
AW23410 Thallium, Total	mg/L	0.00000877	0.00044	0.10	0.103	0.102	0.101	0.085 to 0.115	103	70 to 130	1.42	20
AW23414 Mercury, Total by CVAA	mg/L	0.000117	0.0005	0.004	0.00393	0.00383	0.00396	0.0034 to 0.0046	98.2	70 to 130	2.44	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW23405

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW23410	Chloride, Total	mg/L	0.00	0.25	100.00	133	29.9	9.92	9 to 11	103	80 to 120	0.334	20
AW23410	Fluoride, Total	mg/L	0.00	0.3	2.00	1.89	0.054	1.85	1.8 to 2.2	91.8	80 to 120	0.00	20
AW23410	Sulfate, Total	mg/L	-0.297	1.0	200	385	171	18.6	18 to 22	107	80 to 120	0.00	20
AW23407	Solids, Dissolved	mg/L	-6.0	25			204	43.0	40 to 60			0.244	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.

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 12-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AW23406

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0331	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	J 0.0762	mg/L
* Calcium, Total	HRG	10/5/2016	EPA 200.7		10	1.0	5.0	44.1	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/19/2016	SM 2540C		1		25	205	mg/L
* Chloride, Total	SES	9/21/2016	EPA 300.0		1	0.04	0.25	4.40	mg/L
* Fluoride, Total	SES	9/21/2016	EPA 300.0		1	0.01	0.3	J 0.028	mg/L
* Sulfate, Total	SES	9/21/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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

* Test results for these accredited parameters 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:

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 12-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AW23406

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23410 Antimony, Total	mg/L	0.000103	0.00132	0.10	0.101	0.102	0.0953	0.085 to 0.115	101	70 to 130	0.658	20	
AW23410 Lithium, Total	mg/L	0.000112	0.022	0.20	0.205	0.168	0.210	0.17 to 0.23	102	70 to 130	19.8	20	
AW23410 Cadmium, Total	mg/L	-0.000000562	0.00044	0.10	0.0968	0.0984	0.101	0.085 to 0.115	96.8	70 to 130	1.73	20	
AW23410 Cobalt, Total	mg/L	-0.00000294	0.0044	0.10	0.102	0.103	0.103	0.085 to 0.115	102	70 to 130	0.798	20	
AW23410 Barium, Total	mg/L	0.00000197	0.0044	0.10	0.155	0.157	0.0943	0.085 to 0.115	90.5	70 to 130	1.33	20	
AW23410 Calcium, Total	mg/L	-0.0448	0.22	5.00	70.5	72.6	5.02	4.25 to 5.75	4.31	70 to 130	2.94	20	
AW23410 Molybdenum, Total	mg/L	0.00000891	0.0044	0.10	0.174	0.177	0.101	0.085 to 0.115	105	70 to 130	1.31	20	
AW23410 Beryllium, Total	mg/L	0.00000730	0.00132	0.10	0.102	0.100	0.109	0.085 to 0.115	102	70 to 130	1.82	20	
AW23410 Lead, Total	mg/L	0.00000858	0.0022	0.10	0.101	0.1000	0.103	0.085 to 0.115	101	70 to 130	0.865	20	
AW23410 Selenium, Total	mg/L	0.0000658	0.0044	0.10	0.0964	0.0970	0.108	0.085 to 0.115	96.4	70 to 130	0.567	20	
AW23410 Arsenic, Total	mg/L	0.0000132	0.0022	0.10	0.1000	0.0998	0.0998	0.085 to 0.115	97.9	70 to 130	0.167	20	
AW23410 Boron, Total	mg/L	-0.00417	0.044	1.00	2.77	2.83	0.965	0.85 to 1.15	92.3	70 to 130	2.14	20	
AW23410 Chromium, Total	mg/L	0.0000112	0.0044	0.10	0.0998	0.100	0.102	0.085 to 0.115	99.8	70 to 130	0.500	20	
AW23410 Thallium, Total	mg/L	0.00000877	0.00044	0.10	0.103	0.102	0.101	0.085 to 0.115	103	70 to 130	1.42	20	
AW23414 Mercury, Total by CVAA	mg/L	0.000117	0.0005	0.004	0.00393	0.00383	0.00396	0.0034 to 0.0046	98.2	70 to 130	2.44	20	

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Laboratory certification ID: E571114

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 12-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AW23406

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
			Limit				Duplicate	LFB	Limit	Limit			
AW23410	Sulfate, Total	mg/L	-0.297	1.0	200	385	171	18.6	18 to 22	107	80 to 120	0.00	20
AW23410	Chloride, Total	mg/L	0.00	0.25	100.00	133	29.9	9.92	9 to 11	103	80 to 120	0.334	20
AW23407	Solids, Dissolved	mg/L	-6.0	25			204	43.0	40 to 60			0.244	5
AW23410	Fluoride, Total	mg/L	0.00	0.3	2.00	1.89	0.054	1.85	1.8 to 2.2	91.8	80 to 120	0.00	20

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Laboratory certification ID: E571114

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Alabama Power General Test Laboratory
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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 12-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-13 Dup

Laboratory ID Number: AW23407

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0330	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	10/5/2016	EPA 200.7		10	1.0	5.0	43.6	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/19/2016	SM 2540C		1		25	205	mg/L
* Chloride, Total	SES	9/21/2016	EPA 300.0		1	0.04	0.25	4.40	mg/L
* Fluoride, Total	SES	9/21/2016	EPA 300.0		1	0.01	0.3	J 0.028	mg/L
* Sulfate, Total	SES	9/21/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 12-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-13 Dup

Laboratory ID Number: AW23407

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23410 Antimony, Total	mg/L	0.000103	0.00132	0.10	0.101	0.102	0.0953	0.085 to 0.115	101	70 to 130	0.658	20	
AW23410 Lithium, Total	mg/L	0.000112	0.022	0.20	0.205	0.168	0.210	0.17 to 0.23	102	70 to 130	19.8	20	
AW23410 Cadmium, Total	mg/L	-0.000000562	0.00044	0.10	0.0968	0.0984	0.101	0.085 to 0.115	96.8	70 to 130	1.73	20	
AW23410 Cobalt, Total	mg/L	-0.00000294	0.0044	0.10	0.102	0.103	0.103	0.085 to 0.115	102	70 to 130	0.798	20	
AW23410 Barium, Total	mg/L	0.00000197	0.0044	0.10	0.155	0.157	0.0943	0.085 to 0.115	90.5	70 to 130	1.33	20	
AW23410 Calcium, Total	mg/L	-0.0448	0.22	5.00	70.5	72.6	5.02	4.25 to 5.75	4.31	70 to 130	2.94	20	
AW23410 Molybdenum, Total	mg/L	0.00000891	0.0044	0.10	0.174	0.177	0.101	0.085 to 0.115	105	70 to 130	1.31	20	
AW23410 Beryllium, Total	mg/L	0.00000730	0.00132	0.10	0.102	0.100	0.109	0.085 to 0.115	102	70 to 130	1.82	20	
AW23410 Lead, Total	mg/L	0.00000858	0.0022	0.10	0.101	0.1000	0.103	0.085 to 0.115	101	70 to 130	0.865	20	
AW23410 Selenium, Total	mg/L	0.0000658	0.0044	0.10	0.0964	0.0970	0.108	0.085 to 0.115	96.4	70 to 130	0.567	20	
AW23410 Arsenic, Total	mg/L	0.0000132	0.0022	0.10	0.1000	0.0998	0.0998	0.085 to 0.115	97.9	70 to 130	0.167	20	
AW23410 Boron, Total	mg/L	-0.00417	0.044	1.00	2.77	2.83	0.965	0.85 to 1.15	92.3	70 to 130	2.14	20	
AW23410 Chromium, Total	mg/L	0.0000112	0.0044	0.10	0.0998	0.100	0.102	0.085 to 0.115	99.8	70 to 130	0.500	20	
AW23410 Thallium, Total	mg/L	0.00000877	0.00044	0.10	0.103	0.102	0.101	0.085 to 0.115	103	70 to 130	1.42	20	
AW23414 Mercury, Total by CVAA	mg/L	0.000117	0.0005	0.004	0.00393	0.00383	0.00396	0.0034 to 0.0046	98.2	70 to 130	2.44	20	

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 12-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-13 Dup

Laboratory ID Number: AW23407

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW23410	Fluoride, Total	mg/L	0.00	0.3	2.00	1.89	0.054	1.85	1.8 to 2.2	91.8	80 to 120	0.00	20
AW23410	Chloride, Total	mg/L	0.00	0.25	100.00	133	29.9	9.92	9 to 11	103	80 to 120	0.334	20
AW23410	Sulfate, Total	mg/L	-0.297	1.0	200	385	171	18.6	18 to 22	107	80 to 120	0.00	20
AW23407	Solids, Dissolved	mg/L	-6.0	25			204	43.0	40 to 60			0.244	5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AW23408

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0301	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	2.13	mg/L
* Calcium, Total	HRG	10/5/2016	EPA 200.7		10	1.0	5.0	67.8	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	J 0.0438	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.313	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/20/2016	SM 2540C		1		50	426	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		10	0.40	2.50	30.8	mg/L
* Fluoride, Total	SES	9/21/2016	EPA 300.0		1	0.01	0.3	J 0.025	mg/L
* Sulfate, Total	SES	9/22/2016	EPA 300.0		10	3.0	10	173	mg/L

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Laboratory certification ID: E571114

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Comments:

Alabama Power General Test Laboratory
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 Calera, AL 35040
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AW23408

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23410 Cobalt, Total	mg/L	-0.00000294	0.0044	0.10	0.102	0.103	0.103	0.085 to 0.115	102	70 to 130	0.798	20	
AW23410 Lithium, Total	mg/L	0.000112	0.022	0.20	0.205	0.168	0.210	0.17 to 0.23	102	70 to 130	19.8	20	
AW23410 Antimony, Total	mg/L	0.000103	0.00132	0.10	0.101	0.102	0.0953	0.085 to 0.115	101	70 to 130	0.658	20	
AW23410 Cadmium, Total	mg/L	-0.000000562	0.00044	0.10	0.0968	0.0984	0.101	0.085 to 0.115	96.8	70 to 130	1.73	20	
AW23410 Barium, Total	mg/L	0.00000197	0.0044	0.10	0.155	0.157	0.0943	0.085 to 0.115	90.5	70 to 130	1.33	20	
AW23410 Calcium, Total	mg/L	-0.0448	0.22	5.00	70.5	72.6	5.02	4.25 to 5.75	4.31	70 to 130	2.94	20	
AW23410 Molybdenum, Total	mg/L	0.00000891	0.0044	0.10	0.174	0.177	0.101	0.085 to 0.115	105	70 to 130	1.31	20	
AW23410 Arsenic, Total	mg/L	0.0000132	0.0022	0.10	0.1000	0.0998	0.0998	0.085 to 0.115	97.9	70 to 130	0.167	20	
AW23410 Boron, Total	mg/L	-0.00417	0.044	1.00	2.77	2.83	0.965	0.85 to 1.15	92.3	70 to 130	2.14	20	
AW23410 Chromium, Total	mg/L	0.0000112	0.0044	0.10	0.0998	0.100	0.102	0.085 to 0.115	99.8	70 to 130	0.500	20	
AW23410 Thallium, Total	mg/L	0.00000877	0.00044	0.10	0.103	0.102	0.101	0.085 to 0.115	103	70 to 130	1.42	20	
AW23414 Mercury, Total by CVAA	mg/L	0.000117	0.0005	0.004	0.00393	0.00383	0.00396	0.0034 to 0.0046	98.2	70 to 130	2.44	20	
AW23410 Beryllium, Total	mg/L	0.00000730	0.00132	0.10	0.102	0.100	0.109	0.085 to 0.115	102	70 to 130	1.82	20	
AW23410 Lead, Total	mg/L	0.00000858	0.0022	0.10	0.101	0.1000	0.103	0.085 to 0.115	101	70 to 130	0.865	20	
AW23410 Selenium, Total	mg/L	0.0000658	0.0044	0.10	0.0964	0.0970	0.108	0.085 to 0.115	96.4	70 to 130	0.567	20	

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

Comments:

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AW23408

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
								Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW23410	Sulfate, Total	mg/L	-0.297	1.0	200	385	171	18.6	18 to 22	107	80 to 120	0.00	20	
AW23416	Solids, Dissolved	mg/L	2.00	25			526	55.0	40 to 60			1.50	5	
AW23410	Chloride, Total	mg/L	0.00	0.25	100.00	133	29.9	9.92	9 to 11	103	80 to 120	0.334	20	
AW23410	Fluoride, Total	mg/L	0.00	0.3	2.00	1.89	0.054	1.85	1.8 to 2.2	91.8	80 to 120	0.00	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

CC:

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



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-5 Dup

Laboratory ID Number: AW23409

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0293	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	2.14	mg/L
* Calcium, Total	HRG	10/5/2016	EPA 200.7		10	1.0	5.0	66.9	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	J 0.0438	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.320	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/20/2016	SM 2540C		1		50	432	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		10	0.40	2.50	31.0	mg/L
* Fluoride, Total	SES	9/21/2016	EPA 300.0		1	0.01	0.3	J 0.025	mg/L
* Sulfate, Total	SES	9/22/2016	EPA 300.0		10	3.0	10	173	mg/L

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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, 2018

Comments: Difference between the last two consecutive final weights for TDS resulted in 1.1mg, which is above the required 0.5mg limit.

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-5 Dup

Laboratory ID Number: AW23409

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23410 Lithium, Total	mg/L	0.000112	0.022	0.20	0.205	0.168	0.210	0.17 to 0.23	102	70 to 130	19.8	20	
AW23410 Antimony, Total	mg/L	0.000103	0.00132	0.10	0.101	0.102	0.0953	0.085 to 0.115	101	70 to 130	0.658	20	
AW23410 Cadmium, Total	mg/L	-0.000000562	0.00044	0.10	0.0968	0.0984	0.101	0.085 to 0.115	96.8	70 to 130	1.73	20	
AW23410 Cobalt, Total	mg/L	-0.00000294	0.0044	0.10	0.102	0.103	0.103	0.085 to 0.115	102	70 to 130	0.798	20	
AW23410 Beryllium, Total	mg/L	0.00000730	0.00132	0.10	0.102	0.100	0.109	0.085 to 0.115	102	70 to 130	1.82	20	
AW23410 Lead, Total	mg/L	0.00000858	0.0022	0.10	0.101	0.1000	0.103	0.085 to 0.115	101	70 to 130	0.865	20	
AW23410 Selenium, Total	mg/L	0.0000658	0.0044	0.10	0.0964	0.0970	0.108	0.085 to 0.115	96.4	70 to 130	0.567	20	
AW23410 Barium, Total	mg/L	0.00000197	0.0044	0.10	0.155	0.157	0.0943	0.085 to 0.115	90.5	70 to 130	1.33	20	
AW23410 Calcium, Total	mg/L	-0.0448	0.22	5.00	70.5	72.6	5.02	4.25 to 5.75	4.31	70 to 130	2.94	20	
AW23410 Molybdenum, Total	mg/L	0.00000891	0.0044	0.10	0.174	0.177	0.101	0.085 to 0.115	105	70 to 130	1.31	20	
AW23410 Arsenic, Total	mg/L	0.0000132	0.0022	0.10	0.1000	0.0998	0.0998	0.085 to 0.115	97.9	70 to 130	0.167	20	
AW23410 Boron, Total	mg/L	-0.00417	0.044	1.00	2.77	2.83	0.965	0.85 to 1.15	92.3	70 to 130	2.14	20	
AW23410 Chromium, Total	mg/L	0.0000112	0.0044	0.10	0.0998	0.100	0.102	0.085 to 0.115	99.8	70 to 130	0.500	20	
AW23410 Thallium, Total	mg/L	0.00000877	0.00044	0.10	0.103	0.102	0.101	0.085 to 0.115	103	70 to 130	1.42	20	
AW23414 Mercury, Total by CVAA	mg/L	0.000117	0.0005	0.004	0.00393	0.00383	0.00396	0.0034 to 0.0046	98.2	70 to 130	2.44	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Difference between the last two consecutive final weights for TDS resulted in 1.1mg, which is above the required 0.5mg limit.

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-5 Dup

Laboratory ID Number: AW23409

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW23410	Chloride, Total	mg/L	0.00	0.25		100.00	133	29.9	9.92	9 to 11	103	80 to 120	0.334	20
AW23410	Sulfate, Total	mg/L	-0.297	1.0		200	385	171	18.6	18 to 22	107	80 to 120	0.00	20
AW23410	Fluoride, Total	mg/L	0.00	0.3		2.00	1.89	0.054	1.85	1.8 to 2.2	91.8	80 to 120	0.00	20
AW23416	Solids, Dissolved	mg/L	2.00	25				526	55.0	40 to 60			1.50	5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Difference between the last two consecutive final weights for TDS resulted in 1.1mg, which is above the required 0.5mg limit.

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AW23410

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	J 0.00207	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0644	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	1.85	mg/L
* Calcium, Total	HRG	10/5/2016	EPA 200.7		10	1.0	5.0	70.3	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0690	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/20/2016	SM 2540C		1		50	430	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		10	0.40	2.50	30.0	mg/L
* Fluoride, Total	SES	9/21/2016	EPA 300.0		1	0.01	0.3	J 0.054	mg/L
* Sulfate, Total	SES	9/22/2016	EPA 300.0		10	3.0	10	171	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Recovery for Calcium is out of range.
 Spike amount is less than 30% sample amount,
 therefore will not be qualified. SGC 12/6/16

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AW23410

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23410 Cadmium, Total	mg/L	-0.000000562	0.00044	0.10	0.0968	0.0984	0.101	0.085 to 0.115	96.8	70 to 130	1.73	20	
AW23410 Lithium, Total	mg/L	0.000112	0.022	0.20	0.205	0.168	0.210	0.17 to 0.23	102	70 to 130	19.8	20	
AW23410 Cobalt, Total	mg/L	-0.00000294	0.0044	0.10	0.102	0.103	0.103	0.085 to 0.115	102	70 to 130	0.798	20	
AW23410 Antimony, Total	mg/L	0.000103	0.00132	0.10	0.101	0.102	0.0953	0.085 to 0.115	101	70 to 130	0.658	20	
AW23410 Beryllium, Total	mg/L	0.00000730	0.00132	0.10	0.102	0.100	0.109	0.085 to 0.115	102	70 to 130	1.82	20	
AW23410 Lead, Total	mg/L	0.00000858	0.0022	0.10	0.101	0.1000	0.103	0.085 to 0.115	101	70 to 130	0.865	20	
AW23410 Selenium, Total	mg/L	0.0000658	0.0044	0.10	0.0964	0.0970	0.108	0.085 to 0.115	96.4	70 to 130	0.567	20	
AW23410 Barium, Total	mg/L	0.00000197	0.0044	0.10	0.155	0.157	0.0943	0.085 to 0.115	90.5	70 to 130	1.33	20	
AW23410 Calcium, Total	mg/L	-0.0448	0.22	5.00	70.5	72.6	5.02	4.25 to 5.75	4.31	70 to 130	2.94	20	
AW23410 Molybdenum, Total	mg/L	0.00000891	0.0044	0.10	0.174	0.177	0.101	0.085 to 0.115	105	70 to 130	1.31	20	
AW23410 Arsenic, Total	mg/L	0.0000132	0.0022	0.10	0.1000	0.0998	0.0998	0.085 to 0.115	97.9	70 to 130	0.167	20	
AW23410 Boron, Total	mg/L	-0.00417	0.044	1.00	2.77	2.83	0.965	0.85 to 1.15	92.3	70 to 130	2.14	20	
AW23410 Chromium, Total	mg/L	0.0000112	0.0044	0.10	0.0998	0.100	0.102	0.085 to 0.115	99.8	70 to 130	0.500	20	
AW23410 Thallium, Total	mg/L	0.00000877	0.00044	0.10	0.103	0.102	0.101	0.085 to 0.115	103	70 to 130	1.42	20	
AW23414 Mercury, Total by CVAA	mg/L	0.000117	0.0005	0.004	0.00393	0.00383	0.00396	0.0034 to 0.0046	98.2	70 to 130	2.44	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: Recovery for Calcium is out of range.
 Spike amount is less than 30% sample amount,
 therefore will not be qualified. SGC 12/6/16

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AW23410

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample		LFB Limit	Rec		Prec Limit	
							Duplicate	LFB		Rec	Limit		
AW23410	Fluoride, Total	mg/L	0.00	0.3	2.00	1.89	0.054	1.85	1.8 to 2.2	91.8	80 to 120	0.00	20
AW23410	Chloride, Total	mg/L	0.00	0.25	100.00	133	29.9	9.92	9 to 11	103	80 to 120	0.334	20
AW23410	Sulfate, Total	mg/L	-0.297	1.0	200	385	171	18.6	18 to 22	107	80 to 120	0.00	20
AW23416	Solids, Dissolved	mg/L	2.00	25			526	55.0	40 to 60			1.50	5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Recovery for Calcium is out of range.
 Spike amount is less than 30% sample amount,
 therefore will not be qualified. SGC 12/6/16

CC:

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



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AW23411

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	J 0.00489	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0628	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	1.85	mg/L
* Calcium, Total	HRG	10/5/2016	EPA 200.7		10	1.0	5.0	68.0	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	J 0.00628	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/20/2016	SM 2540C		1		50	428	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		10	0.40	2.50	34.1	mg/L
* Fluoride, Total	SES	9/22/2016	EPA 300.0		1	0.01	0.3	J 0.068	mg/L
* Sulfate, Total	SES	9/22/2016	EPA 300.0		10	3.0	10	155	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AW23411

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23922 Beryllium, Total	mg/L	0.00000989	0.00132	0.10	0.103	0.105	0.105	0.085 to 0.115	103	70 to 130	1.89	20	
AW23419 Calcium, Total	mg/L	-0.0466	0.22	5.00	62.8	62.5	5.08	4.25 to 5.75	96.0	70 to 130	0.479	20	
AW23922 Antimony, Total	mg/L	0.000112	0.00132	0.10	0.0972	0.0976	0.0920	0.085 to 0.115	97.2	70 to 130	0.377	20	
AW23922 Thallium, Total	mg/L	0.00000932	0.00044	0.10	0.102	0.103	0.0987	0.085 to 0.115	102	70 to 130	0.396	20	
AW23922 Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0943	0.0935	0.0981	0.085 to 0.115	94.3	70 to 130	0.832	20	
AW23922 Barium, Total	mg/L	-0.00000547	0.0044	0.10	0.103	0.104	0.0915	0.085 to 0.115	90.1	70 to 130	1.30	20	
AW23419 Boron, Total	mg/L	0.0133	0.044	1.00	1.44	1.49	0.986	0.85 to 1.15	95.2	70 to 130	3.41	20	
AW23419 Lithium, Total	mg/L	0.000098	0.022	0.2	0.165	0.202	0.208	0.17 to 0.23	82.5	70 to 130	20.2	20	
AW23922 Cadmium, Total	mg/L	-0.00000148	0.00044	0.10	0.0962	0.0963	0.0990	0.085 to 0.115	96.2	70 to 130	0.114	20	
AW23922 Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.103	0.104	0.0975	0.085 to 0.115	103	70 to 130	0.719	20	
AW23922 Cobalt, Total	mg/L	-0.00000228	0.0044	0.10	0.101	0.101	0.100	0.085 to 0.115	101	70 to 130	0.0105	20	
AW23922 Selenium, Total	mg/L	0.0000635	0.0044	0.10	0.0915	0.0915	0.106	0.085 to 0.115	91.5	70 to 130	0.0038020	20	
AW23414 Mercury, Total by CVAA	mg/L	0.000117	0.0005	0.004	0.00393	0.00383	0.00396	0.0034 to 0.0046	98.2	70 to 130	2.44	20	
AW23922 Chromium, Total	mg/L	0.0000238	0.0044	0.10	0.0993	0.0988	0.100	0.085 to 0.115	99.3	70 to 130	0.548	20	
AW23922 Lead, Total	mg/L	0.00000917	0.0022	0.10	0.0992	0.100	0.0998	0.085 to 0.115	99.2	70 to 130	0.994	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

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Comments:

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 Calera, AL 35040
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AW23411

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23922	Sulfate, Total	mg/L	-0.30	1.0	20.00	20.8	1.44	18.8	18 to 22	96.8	80 to 120	0.00	20
AW23416	Solids, Dissolved	mg/L	2.00	25			526	55.0	40 to 60			1.50	5
AW23922	Chloride, Total	mg/L	0.00	0.25	10.00	13.8	4.13	9.95	9 to 11	96.7	80 to 120	0.00	20
AW23922	Fluoride, Total	mg/L	0.00	0.3	2.00	1.79	0.023	1.89	1.8 to 2.2	88.4	80 to 120	0.00	20

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

* Test results for these accredited parameters 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:

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AW23412

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiochemical									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0170	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	2.06	mg/L
* Calcium, Total	HRG	10/5/2016	EPA 200.7		10	1.0	5.0	48.3	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	J 0.00943	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/20/2016	SM 2540C		1		25	378	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		10	0.40	2.50	21.7	mg/L
* Fluoride, Total	SES	9/22/2016	EPA 300.0		1	0.01	0.3	J 0.026	mg/L
* Sulfate, Total	SES	9/22/2016	EPA 300.0		10	3.0	10	151	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Difference between the last two consecutive final weights for TDS resulted in 1.3mg, which is above the required 0.5mg limit.

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AW23412

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23419 Calcium, Total	mg/L	-0.0466	0.22	5.00	62.8	62.5	5.08	4.25 to 5.75	96.0	70 to 130	0.479	20	
AW23922 Beryllium, Total	mg/L	0.0000989	0.00132	0.10	0.103	0.105	0.105	0.085 to 0.115	103	70 to 130	1.89	20	
AW23922 Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0943	0.0935	0.0981	0.085 to 0.115	94.3	70 to 130	0.832	20	
AW23922 Barium, Total	mg/L	-0.0000547	0.0044	0.10	0.103	0.104	0.0915	0.085 to 0.115	90.1	70 to 130	1.30	20	
AW23414 Mercury, Total by CVAA	mg/L	0.000117	0.0005	0.004	0.00393	0.00383	0.00396	0.0034 to 0.0046	98.2	70 to 130	2.44	20	
AW23922 Chromium, Total	mg/L	0.0000238	0.0044	0.10	0.0993	0.0988	0.100	0.085 to 0.115	99.3	70 to 130	0.548	20	
AW23922 Lead, Total	mg/L	0.0000917	0.0022	0.10	0.0992	0.100	0.0998	0.085 to 0.115	99.2	70 to 130	0.994	20	
AW23922 Cobalt, Total	mg/L	-0.0000228	0.0044	0.10	0.101	0.101	0.100	0.085 to 0.115	101	70 to 130	0.0105	20	
AW23922 Selenium, Total	mg/L	0.0000635	0.0044	0.10	0.0915	0.0915	0.106	0.085 to 0.115	91.5	70 to 130	0.0038020	20	
AW23419 Boron, Total	mg/L	0.0133	0.044	1.00	1.44	1.49	0.986	0.85 to 1.15	95.2	70 to 130	3.41	20	
AW23419 Lithium, Total	mg/L	0.000098	0.022	0.2	0.165	0.202	0.208	0.17 to 0.23	82.5	70 to 130	20.2	20	
AW23922 Cadmium, Total	mg/L	-0.0000148	0.00044	0.10	0.0962	0.0963	0.0990	0.085 to 0.115	96.2	70 to 130	0.114	20	
AW23922 Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.103	0.104	0.0975	0.085 to 0.115	103	70 to 130	0.719	20	
AW23922 Antimony, Total	mg/L	0.000112	0.00132	0.10	0.0972	0.0976	0.0920	0.085 to 0.115	97.2	70 to 130	0.377	20	
AW23922 Thallium, Total	mg/L	0.0000932	0.00044	0.10	0.102	0.103	0.0987	0.085 to 0.115	102	70 to 130	0.396	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: Difference between the last two consecutive final weights for TDS resulted in 1.3mg, which is above the required 0.5mg limit.

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AW23412

Sample	Analysis	Units MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23922	Sulfate, Total	mg/L -0.30	1.0	20.00	20.8	1.44	18.8	18 to 22	96.8	80 to 120	0.00	20
AW23416	Solids, Dissolved	mg/L 2.00	25			526	55.0	40 to 60			1.50	5
AW23922	Chloride, Total	mg/L 0.00	0.25	10.00	13.8	4.13	9.95	9 to 11	96.7	80 to 120	0.00	20
AW23922	Fluoride, Total	mg/L 0.00	0.3	2.00	1.79	0.023	1.89	1.8 to 2.2	88.4	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Difference between the last two consecutive final weights for TDS resulted in 1.3mg, which is above the required 0.5mg limit.

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AW23413

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0153	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	0.674	mg/L
* Calcium, Total	HRG	10/5/2016	EPA 200.7		10	1.0	5.0	58.2	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/20/2016	SM 2540C		1		25	312	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		1	0.04	0.25	8.09	mg/L
* Fluoride, Total	SES	9/22/2016	EPA 300.0		1	0.01	0.3	J 0.021	mg/L
* Sulfate, Total	SES	9/22/2016	EPA 300.0		1	0.3	1	89.8	mg/L

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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
 (205) 664-6032 or 6171
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AW23413

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23419 Calcium, Total	mg/L	-0.0466	0.22	5.00	62.8	62.5	5.08	4.25 to 5.75	96.0	70 to 130	0.479	20	
AW23922 Beryllium, Total	mg/L	0.00000989	0.00132	0.10	0.103	0.105	0.105	0.085 to 0.115	103	70 to 130	1.89	20	
AW23922 Antimony, Total	mg/L	0.000112	0.00132	0.10	0.0972	0.0976	0.0920	0.085 to 0.115	97.2	70 to 130	0.377	20	
AW23922 Thallium, Total	mg/L	0.00000932	0.00044	0.10	0.102	0.103	0.0987	0.085 to 0.115	102	70 to 130	0.396	20	
AW23922 Cobalt, Total	mg/L	-0.00000228	0.0044	0.10	0.101	0.101	0.100	0.085 to 0.115	101	70 to 130	0.0105	20	
AW23922 Selenium, Total	mg/L	0.0000635	0.0044	0.10	0.0915	0.0915	0.106	0.085 to 0.115	91.5	70 to 130	0.0038020	20	
AW23922 Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0943	0.0935	0.0981	0.085 to 0.115	94.3	70 to 130	0.832	20	
AW23922 Barium, Total	mg/L	-0.00000547	0.0044	0.10	0.103	0.104	0.0915	0.085 to 0.115	90.1	70 to 130	1.30	20	
AW23419 Boron, Total	mg/L	0.0133	0.044	1.00	1.44	1.49	0.986	0.85 to 1.15	95.2	70 to 130	3.41	20	
AW23419 Lithium, Total	mg/L	0.000098	0.022	0.2	0.165	0.202	0.208	0.17 to 0.23	82.5	70 to 130	20.2	20	
AW23922 Cadmium, Total	mg/L	-0.00000148	0.00044	0.10	0.0962	0.0963	0.0990	0.085 to 0.115	96.2	70 to 130	0.114	20	
AW23922 Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.103	0.104	0.0975	0.085 to 0.115	103	70 to 130	0.719	20	
AW23414 Mercury, Total by CVAA	mg/L	0.000117	0.0005	0.004	0.00393	0.00383	0.00396	0.0034 to 0.0046	98.2	70 to 130	2.44	20	
AW23922 Chromium, Total	mg/L	0.0000238	0.0044	0.10	0.0993	0.0988	0.100	0.085 to 0.115	99.3	70 to 130	0.548	20	
AW23922 Lead, Total	mg/L	0.00000917	0.0022	0.10	0.0992	0.100	0.0998	0.085 to 0.115	99.2	70 to 130	0.994	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

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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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AW23413

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23922	Sulfate, Total	mg/L	-0.30	1.0	20.00	20.8	1.44	18.8	18 to 22	96.8	80 to 120	0.00	20
AW23416	Solids, Dissolved	mg/L	2.00	25			526	55.0	40 to 60			1.50	5
AW23922	Chloride, Total	mg/L	0.00	0.25	10.00	13.8	4.13	9.95	9 to 11	96.7	80 to 120	0.00	20
AW23922	Fluoride, Total	mg/L	0.00	0.3	2.00	1.79	0.023	1.89	1.8 to 2.2	88.4	80 to 120	0.00	20

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AW23414

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	J 0.00394	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0286	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	1.31	mg/L
* Calcium, Total	HRG	10/5/2016	EPA 200.7		10	1.0	5.0	39.6	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/19/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	0.0748	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.306	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/20/2016	SM 2540C		1		25	264	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		1	0.04	0.25	10.4	mg/L
* Fluoride, Total	SES	9/22/2016	EPA 300.0		1	0.01	0.3	J 0.089	mg/L
* Sulfate, Total	SES	9/22/2016	EPA 300.0		10	3.0	10	129	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

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 Calera, AL 35040
 (205) 664-6032 or 6171
 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AW23414

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AW23922	Beryllium, Total	mg/L	0.0000989	0.00132	0.10	0.103	0.105	0.105	0.085 to 0.115	103	70 to 130	1.89	20
AW23419	Calcium, Total	mg/L	-0.0466	0.22	5.00	62.8	62.5	5.08	4.25 to 5.75	96.0	70 to 130	0.479	20
AW23922	Cobalt, Total	mg/L	-0.0000228	0.0044	0.10	0.101	0.101	0.100	0.085 to 0.115	101	70 to 130	0.0105	20
AW23922	Selenium, Total	mg/L	0.0000635	0.0044	0.10	0.0915	0.0915	0.106	0.085 to 0.115	91.5	70 to 130	0.0038020	20
AW23414	Mercury, Total by CVAA	mg/L	0.000117	0.0005	0.004	0.00393	0.00383	0.00396	0.0034 to 0.0046	98.2	70 to 130	2.44	20
AW23922	Chromium, Total	mg/L	0.0000238	0.0044	0.10	0.0993	0.0988	0.100	0.085 to 0.115	99.3	70 to 130	0.548	20
AW23922	Lead, Total	mg/L	0.0000917	0.0022	0.10	0.0992	0.100	0.0998	0.085 to 0.115	99.2	70 to 130	0.994	20
AW23922	Antimony, Total	mg/L	0.000112	0.00132	0.10	0.0972	0.0976	0.0920	0.085 to 0.115	97.2	70 to 130	0.377	20
AW23922	Thallium, Total	mg/L	0.0000932	0.00044	0.10	0.102	0.103	0.0987	0.085 to 0.115	102	70 to 130	0.396	20
AW23419	Boron, Total	mg/L	0.0133	0.044	1.00	1.44	1.49	0.986	0.85 to 1.15	95.2	70 to 130	3.41	20
AW23419	Lithium, Total	mg/L	0.000098	0.022	0.2	0.165	0.202	0.208	0.17 to 0.23	82.5	70 to 130	20.2	20
AW23922	Cadmium, Total	mg/L	-0.00000148	0.00044	0.10	0.0962	0.0963	0.0990	0.085 to 0.115	96.2	70 to 130	0.114	20
AW23922	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.103	0.104	0.0975	0.085 to 0.115	103	70 to 130	0.719	20
AW23922	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0943	0.0935	0.0981	0.085 to 0.115	94.3	70 to 130	0.832	20
AW23922	Barium, Total	mg/L	-0.00000547	0.0044	0.10	0.103	0.104	0.0915	0.085 to 0.115	90.1	70 to 130	1.30	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AW23414

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec			
			Limit	Limit			Duplicate	LFB	Limit	Limit			
AW23922	Sulfate, Total	mg/L	-0.30	1.0	20.00	20.8	1.44	18.8	18 to 22	96.8	80 to 120	0.00	20
AW23416	Solids, Dissolved	mg/L	2.00	25			526	55.0	40 to 60			1.50	5
AW23922	Chloride, Total	mg/L	0.00	0.25	10.00	13.8	4.13	9.95	9 to 11	96.7	80 to 120	0.00	20
AW23922	Fluoride, Total	mg/L	0.00	0.3	2.00	1.79	0.023	1.89	1.8 to 2.2	88.4	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

CC:

Alabama Power General Test Laboratory
 744 County Road 87, GSC#8
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 (205) 664-6032 or 6171
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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AW23415

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	J 0.000807	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	0.0124	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0811	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	2.94	mg/L
* Calcium, Total	HRG	10/5/2016	EPA 200.7		10	1.0	5.0	70.7	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	J 0.000203	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/28/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	0.592	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	2.30	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/20/2016	SM 2540C		1		25	432	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		1	0.04	0.25	14.1	mg/L
* Fluoride, Total	SES	9/22/2016	EPA 300.0		1	0.01	0.3	J 0.168	mg/L
* Sulfate, Total	SES	9/22/2016	EPA 300.0		10	3.0	10	238	mg/L

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Comments:

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AW23415

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23419 Calcium, Total	mg/L	-0.0466	0.22	5.00	62.8	62.5	5.08	4.25 to 5.75	96.0	70 to 130	0.479	20	
AW23922 Cobalt, Total	mg/L	-0.0000228	0.0044	0.10	0.101	0.101	0.100	0.085 to 0.115	101	70 to 130	0.0105	20	
AW23922 Selenium, Total	mg/L	0.0000635	0.0044	0.10	0.0915	0.0915	0.106	0.085 to 0.115	91.5	70 to 130	0.0038020	20	
AW23922 Chromium, Total	mg/L	0.0000238	0.0044	0.10	0.0993	0.0988	0.100	0.085 to 0.115	99.3	70 to 130	0.548	20	
AW23922 Lead, Total	mg/L	0.0000917	0.0022	0.10	0.0992	0.100	0.0998	0.085 to 0.115	99.2	70 to 130	0.994	20	
AW23922 Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0943	0.0935	0.0981	0.085 to 0.115	94.3	70 to 130	0.832	20	
AW23922 Barium, Total	mg/L	-0.0000547	0.0044	0.10	0.103	0.104	0.0915	0.085 to 0.115	90.1	70 to 130	1.30	20	
AW23419 Boron, Total	mg/L	0.0133	0.044	1.00	1.44	1.49	0.986	0.85 to 1.15	95.2	70 to 130	3.41	20	
AW23419 Lithium, Total	mg/L	0.000098	0.022	0.2	0.165	0.202	0.208	0.17 to 0.23	82.5	70 to 130	20.2	20	
AW23922 Cadmium, Total	mg/L	-0.0000148	0.00044	0.10	0.0962	0.0963	0.0990	0.085 to 0.115	96.2	70 to 130	0.114	20	
AW23922 Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.103	0.104	0.0975	0.085 to 0.115	103	70 to 130	0.719	20	
AW23922 Antimony, Total	mg/L	0.000112	0.00132	0.10	0.0972	0.0976	0.0920	0.085 to 0.115	97.2	70 to 130	0.377	20	
AW23922 Thallium, Total	mg/L	0.0000932	0.00044	0.10	0.102	0.103	0.0987	0.085 to 0.115	102	70 to 130	0.396	20	
AW23922 Beryllium, Total	mg/L	0.0000989	0.00132	0.10	0.103	0.105	0.105	0.085 to 0.115	103	70 to 130	1.89	20	
AW23926 Mercury, Total by CVAA	mg/L	0.0000749	0.0005	0.004	0.00390	0.00390	0.00388	0.0034 to 0.0046	97.5	70 to 130	0.0564	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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 13-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AW23415

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec Rec	Rec Limit	Prec	Prec Limit
AW23416	Solids, Dissolved	mg/L	2.00	25			526	55.0	40 to 60			1.50	5
AW23922	Sulfate, Total	mg/L	-0.30	1.0	20.00	20.8	1.44	18.8	18 to 22	96.8	80 to 120	0.00	20
AW23922	Chloride, Total	mg/L	0.00	0.25	10.00	13.8	4.13	9.95	9 to 11	96.7	80 to 120	0.00	20
AW23922	Fluoride, Total	mg/L	0.00	0.3	2.00	1.79	0.023	1.89	1.8 to 2.2	88.4	80 to 120	0.00	20

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Laboratory certification ID: E571114

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Comments:

CC:

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



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AW23416

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	J 0.00243	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0415	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	1.28	mg/L
* Calcium, Total	HRG	10/5/2016	EPA 200.7		10	1.0	5.0	101	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/28/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	J 0.0371	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0183	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	J 0.000345	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/20/2016	SM 2540C		1		50	542	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		1	0.04	0.25	10.3	mg/L
* Fluoride, Total	SES	9/22/2016	EPA 300.0		1	0.01	0.3	J 0.025	mg/L
* Sulfate, Total	SES	9/22/2016	EPA 300.0		10	3.0	10	143	mg/L

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Laboratory certification ID: E571114

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Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AW23416

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23419 Calcium, Total	mg/L	-0.0466	0.22	5.00	62.8	62.5	5.08	4.25 to 5.75	96.0	70 to 130	0.479	20	
AW23922 Cobalt, Total	mg/L	-0.00000228	0.0044	0.10	0.101	0.101	0.100	0.085 to 0.115	101	70 to 130	0.0105	20	
AW23922 Selenium, Total	mg/L	0.0000635	0.0044	0.10	0.0915	0.0915	0.106	0.085 to 0.115	91.5	70 to 130	0.0038020	20	
AW23419 Boron, Total	mg/L	0.0133	0.044	1.00	1.44	1.49	0.986	0.85 to 1.15	95.2	70 to 130	3.41	20	
AW23419 Lithium, Total	mg/L	0.000098	0.022	0.2	0.165	0.202	0.208	0.17 to 0.23	82.5	70 to 130	20.2	20	
AW23922 Cadmium, Total	mg/L	-0.00000148	0.00044	0.10	0.0962	0.0963	0.0990	0.085 to 0.115	96.2	70 to 130	0.114	20	
AW23922 Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.103	0.104	0.0975	0.085 to 0.115	103	70 to 130	0.719	20	
AW23922 Antimony, Total	mg/L	0.000112	0.00132	0.10	0.0972	0.0976	0.0920	0.085 to 0.115	97.2	70 to 130	0.377	20	
AW23922 Thallium, Total	mg/L	0.00000932	0.00044	0.10	0.102	0.103	0.0987	0.085 to 0.115	102	70 to 130	0.396	20	
AW23922 Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0943	0.0935	0.0981	0.085 to 0.115	94.3	70 to 130	0.832	20	
AW23922 Barium, Total	mg/L	-0.00000547	0.0044	0.10	0.103	0.104	0.0915	0.085 to 0.115	90.1	70 to 130	1.30	20	
AW23922 Beryllium, Total	mg/L	0.00000989	0.00132	0.10	0.103	0.105	0.105	0.085 to 0.115	103	70 to 130	1.89	20	
AW23926 Mercury, Total by CVAA	mg/L	0.0000749	0.0005	0.004	0.00390	0.00390	0.00388	0.0034 to 0.0046	97.5	70 to 130	0.0564	20	
AW23922 Chromium, Total	mg/L	0.0000238	0.0044	0.10	0.0993	0.0988	0.100	0.085 to 0.115	99.3	70 to 130	0.548	20	
AW23922 Lead, Total	mg/L	0.00000917	0.0022	0.10	0.0992	0.100	0.0998	0.085 to 0.115	99.2	70 to 130	0.994	20	

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AW23416

Sample	Analysis	Units MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23922	Sulfate, Total	mg/L -0.30	1.0	20.00	20.8	1.44	18.8	18 to 22	96.8	80 to 120	0.00	20
AW23416	Solids, Dissolved	mg/L 2.00	25			526	55.0	40 to 60			1.50	5
AW23922	Chloride, Total	mg/L 0.00	0.25	10.00	13.8	4.13	9.95	9 to 11	96.7	80 to 120	0.00	20
AW23922	Fluoride, Total	mg/L 0.00	0.3	2.00	1.79	0.023	1.89	1.8 to 2.2	88.4	80 to 120	0.00	20

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AW23417

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	J 0.00411	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0658	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	3.53	mg/L
* Calcium, Total	HRG	10/5/2016	EPA 200.7		10	1.0	5.0	156	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/28/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	0.115	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.725	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/20/2016	SM 2540C		1		50	908	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		1	0.04	0.25	16.2	mg/L
* Fluoride, Total	SES	9/22/2016	EPA 300.0		1	0.01	0.3	J 0.022	mg/L
* Sulfate, Total	SES	9/22/2016	EPA 300.0		10	3.0	10	553	mg/L

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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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AW23417

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23419 Calcium, Total	mg/L	-0.0466	0.22	5.00	62.8	62.5	5.08	4.25 to 5.75	96.0	70 to 130	0.479	20	
AW23419 Boron, Total	mg/L	0.0133	0.044	1.00	1.44	1.49	0.986	0.85 to 1.15	95.2	70 to 130	3.41	20	
AW23419 Lithium, Total	mg/L	0.000098	0.022	0.2	0.165	0.202	0.208	0.17 to 0.23	82.5	70 to 130	20.2	20	
AW23922 Cadmium, Total	mg/L	-0.00000148	0.00044	0.10	0.0962	0.0963	0.0990	0.085 to 0.115	96.2	70 to 130	0.114	20	
AW23922 Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.103	0.104	0.0975	0.085 to 0.115	103	70 to 130	0.719	20	
AW23922 Beryllium, Total	mg/L	0.00000989	0.00132	0.10	0.103	0.105	0.105	0.085 to 0.115	103	70 to 130	1.89	20	
AW23926 Mercury, Total by CVAA	mg/L	0.0000749	0.0005	0.004	0.00390	0.00390	0.00388	0.0034 to 0.0046	97.5	70 to 130	0.0564	20	
AW23922 Antimony, Total	mg/L	0.000112	0.00132	0.10	0.0972	0.0976	0.0920	0.085 to 0.115	97.2	70 to 130	0.377	20	
AW23922 Thallium, Total	mg/L	0.00000932	0.00044	0.10	0.102	0.103	0.0987	0.085 to 0.115	102	70 to 130	0.396	20	
AW23922 Cobalt, Total	mg/L	-0.00000228	0.0044	0.10	0.101	0.101	0.100	0.085 to 0.115	101	70 to 130	0.0105	20	
AW23922 Selenium, Total	mg/L	0.0000635	0.0044	0.10	0.0915	0.0915	0.106	0.085 to 0.115	91.5	70 to 130	0.0038020	20	
AW23922 Chromium, Total	mg/L	0.0000238	0.0044	0.10	0.0993	0.0988	0.100	0.085 to 0.115	99.3	70 to 130	0.548	20	
AW23922 Lead, Total	mg/L	0.00000917	0.0022	0.10	0.0992	0.100	0.0998	0.085 to 0.115	99.2	70 to 130	0.994	20	
AW23922 Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0943	0.0935	0.0981	0.085 to 0.115	94.3	70 to 130	0.832	20	
AW23922 Barium, Total	mg/L	-0.00000547	0.0044	0.10	0.103	0.104	0.0915	0.085 to 0.115	90.1	70 to 130	1.30	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:

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



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AW23417

Sample	Analysis	Units MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23922	Sulfate, Total	mg/L -0.30	1.0	20.00	20.8	1.44	18.8	18 to 22	96.8	80 to 120	0.00	20
AW23419	Solids, Dissolved	mg/L 2.00	25			327	55.0	40 to 60			0.608	5
AW23922	Chloride, Total	mg/L 0.00	0.25	10.00	13.8	4.13	9.95	9 to 11	96.7	80 to 120	0.00	20
AW23922	Fluoride, Total	mg/L 0.00	0.3	2.00	1.79	0.023	1.89	1.8 to 2.2	88.4	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AW23418

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0261	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	0.507	mg/L
* Calcium, Total	HRG	10/5/2016	EPA 200.7		10	1.0	5.0	58.0	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/28/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/20/2016	SM 2540C		1		25	326	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		5	0.20	1.25	27.3	mg/L
* Fluoride, Total	SES	9/22/2016	EPA 300.0		1	0.01	0.3	J 0.014	mg/L
* Sulfate, Total	SES	9/22/2016	EPA 300.0		1	0.3	1	35.5	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AW23418

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW23419 Calcium, Total	mg/L	-0.0466	0.22	5.00	62.8	62.5	5.08	4.25 to 5.75	96.0	70 to 130	0.479	20	
AW23922 Beryllium, Total	mg/L	0.00000989	0.00132	0.10	0.103	0.105	0.105	0.085 to 0.115	103	70 to 130	1.89	20	
AW23926 Mercury, Total by CVAA	mg/L	0.0000749	0.0005	0.004	0.00390	0.00390	0.00388	0.0034 to 0.0046	97.5	70 to 130	0.0564	20	
AW23922 Antimony, Total	mg/L	0.000112	0.00132	0.10	0.0972	0.0976	0.0920	0.085 to 0.115	97.2	70 to 130	0.377	20	
AW23922 Thallium, Total	mg/L	0.00000932	0.00044	0.10	0.102	0.103	0.0987	0.085 to 0.115	102	70 to 130	0.396	20	
AW23922 Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0943	0.0935	0.0981	0.085 to 0.115	94.3	70 to 130	0.832	20	
AW23922 Barium, Total	mg/L	-0.00000547	0.0044	0.10	0.103	0.104	0.0915	0.085 to 0.115	90.1	70 to 130	1.30	20	
AW23922 Cobalt, Total	mg/L	-0.00000228	0.0044	0.10	0.101	0.101	0.100	0.085 to 0.115	101	70 to 130	0.0105	20	
AW23922 Selenium, Total	mg/L	0.0000635	0.0044	0.10	0.0915	0.0915	0.106	0.085 to 0.115	91.5	70 to 130	0.0038020	20	
AW23922 Chromium, Total	mg/L	0.0000238	0.0044	0.10	0.0993	0.0988	0.100	0.085 to 0.115	99.3	70 to 130	0.548	20	
AW23922 Lead, Total	mg/L	0.00000917	0.0022	0.10	0.0992	0.100	0.0998	0.085 to 0.115	99.2	70 to 130	0.994	20	
AW23419 Boron, Total	mg/L	0.0133	0.044	1.00	1.44	1.49	0.986	0.85 to 1.15	95.2	70 to 130	3.41	20	
AW23419 Lithium, Total	mg/L	0.000098	0.022	0.2	0.165	0.202	0.208	0.17 to 0.23	82.5	70 to 130	20.2	20	
AW23922 Cadmium, Total	mg/L	-0.00000148	0.00044	0.10	0.0962	0.0963	0.0990	0.085 to 0.115	96.2	70 to 130	0.114	20	
AW23922 Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.103	0.104	0.0975	0.085 to 0.115	103	70 to 130	0.719	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AW23418

Sample	Analysis	Units MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23922	Sulfate, Total	mg/L -0.30	1.0	20.00	20.8	1.44	18.8	18 to 22	96.8	80 to 120	0.00	20
AW23419	Solids, Dissolved	mg/L 2.00	25			327	55.0	40 to 60			0.608	5
AW23922	Chloride, Total	mg/L 0.00	0.25	10.00	13.8	4.13	9.95	9 to 11	96.7	80 to 120	0.00	20
AW23922	Fluoride, Total	mg/L 0.00	0.3	2.00	1.79	0.023	1.89	1.8 to 2.2	88.4	80 to 120	0.00	20

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 FAX (205) 257-1654

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-4 Dup

Laboratory ID Number: AW23419

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	0.0268	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	10/5/2016	EPA 200.7		1	0.02	0.1	0.488	mg/L
* Calcium, Total	HRG	10/5/2016	EPA 200.7		10	1.0	5.0	58.0	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/28/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	10/5/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/20/2016	SM 2540C		1		25	331	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		5	0.20	1.25	27.3	mg/L
* Fluoride, Total	SES	9/22/2016	EPA 300.0		1	0.01	0.3	J 0.014	mg/L
* Sulfate, Total	SES	9/22/2016	EPA 300.0		1	0.3	1	35.4	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Precision for Lithium was out of spec.
 Re-analysis of spike and spike duplicate were performed at a dilution and passed, indicating matrix effect on the sample was not significant.

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-4 Dup

Laboratory ID Number: AW23419

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AW23419	Calcium, Total	mg/L	-0.0466	0.22	5.00	62.8	62.5	5.08	4.25 to 5.75	96.0	70 to 130	0.479	20
AW23922	Chromium, Total	mg/L	0.0000238	0.0044	0.10	0.0993	0.0988	0.100	0.085 to 0.115	99.3	70 to 130	0.548	20
AW23922	Lead, Total	mg/L	0.00000917	0.0022	0.10	0.0992	0.100	0.0998	0.085 to 0.115	99.2	70 to 130	0.994	20
AW23922	Cobalt, Total	mg/L	-0.00000228	0.0044	0.10	0.101	0.101	0.100	0.085 to 0.115	101	70 to 130	0.0105	20
AW23922	Selenium, Total	mg/L	0.0000635	0.0044	0.10	0.0915	0.0915	0.106	0.085 to 0.115	91.5	70 to 130	0.0038020	20
AW23922	Antimony, Total	mg/L	0.000112	0.00132	0.10	0.0972	0.0976	0.0920	0.085 to 0.115	97.2	70 to 130	0.377	20
AW23922	Thallium, Total	mg/L	0.00000932	0.00044	0.10	0.102	0.103	0.0987	0.085 to 0.115	102	70 to 130	0.396	20
AW23922	Beryllium, Total	mg/L	0.00000989	0.00132	0.10	0.103	0.105	0.105	0.085 to 0.115	103	70 to 130	1.89	20
AW23926	Mercury, Total by CVAA	mg/L	0.0000749	0.0005	0.004	0.00390	0.00390	0.00388	0.0034 to 0.0046	97.5	70 to 130	0.0564	20
AW23922	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0943	0.0935	0.0981	0.085 to 0.115	94.3	70 to 130	0.832	20
AW23922	Barium, Total	mg/L	-0.00000547	0.0044	0.10	0.103	0.104	0.0915	0.085 to 0.115	90.1	70 to 130	1.30	20
AW23419	Boron, Total	mg/L	0.0133	0.044	1.00	1.44	1.49	0.986	0.85 to 1.15	95.2	70 to 130	3.41	20
AW23419	Lithium, Total	mg/L	0.000098	0.022	0.2	0.165	0.202	0.208	0.17 to 0.23	82.5	70 to 130	20.2	20
AW23922	Cadmium, Total	mg/L	-0.00000148	0.00044	0.10	0.0962	0.0963	0.0990	0.085 to 0.115	96.2	70 to 130	0.114	20
AW23922	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.103	0.104	0.0975	0.085 to 0.115	103	70 to 130	0.719	20

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Expiration: June 30, 2018

Comments: Precision for Lithium was out of spec.
 Re-analysis of spike and spike duplicate were performed at a dilution and passed, indicating matrix effect on the sample was not significant.

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Sep-16
 Customer ID:
 Delivery Date: 15-Sep-16

Description: Gaston Ash Pond - MW-4 Dup

Laboratory ID Number: AW23419

Sample	Analysis	Units MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23922	Sulfate, Total	mg/L -0.30	1.0	20.00	20.8	1.44	18.8	18 to 22	96.8	80 to 120	0.00	20
AW23419	Solids, Dissolved	mg/L 2.00	25			327	55.0	40 to 60			0.608	5
AW23922	Chloride, Total	mg/L 0.00	0.25	10.00	13.8	4.13	9.95	9 to 11	96.7	80 to 120	0.00	20
AW23922	Fluoride, Total	mg/L 0.00	0.3	2.00	1.79	0.023	1.89	1.8 to 2.2	88.4	80 to 120	0.00	20

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Precision for Lithium was out of spec.
 Re-analysis of spike and spike duplicate were performed at a dilution and passed, indicating matrix effect on the sample was not significant.

CC:

Definitions



Abbreviation	Description
DF	Dilution Factor
LFB	Lab Fortified Blank
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

Requested Complete Date
 Site Representative
 Collector

Results To
 Requested By
 Location

Analysis Requested
 Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-13	09/12/2016	16:09	3	Groundwater		AW23406
MW-13DUP	09/12/2016	16:09	3	Sample Duplicate		AW23407
MW-5	09/13/2016	08:26	3	Groundwater		AW23408
MW-5DUP	09/13/2016	08:26	3	Sample Duplicate		AW23409
MW-22	09/13/2016	09:35	3	Groundwater		AW23410
MW-21	09/13/2016	10:37	3	Groundwater		AW23411
MW-6	09/13/2016	11:21	3	Groundwater		AW23412
MW-7	09/13/2016	12:13	3	Groundwater		AW23413
MW-16	09/13/2016	14:10	3	Groundwater		AW23414
MW-17	09/13/2016	15:03	3	Groundwater		AW23415
MW-18	09/14/2016	09:08	4	Groundwater		AW23416
MW-20	09/14/2016	10:00	3	Groundwater		AW23417
MW-4	09/14/2016	11:35	3	Groundwater		AW23418
MW-4DUP	09/14/2016	11:35	3	Sample Duplicate		AW23419

Relinquished By	Received By	Date/Time
		09/14/2016 13:00
	Sarah Copeland <small>Digitally signed by Sarah Copeland Date: 2016.09.14 15:58:47 -05'00'</small>	09/14/2016 15:58

SmarTroll ID
 Turbidity ID

All metals and radiological bottles have pH < 2
 Cooler Temp
 Thermometer ID
 pH Strip ID



Chain of Custody

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

 Field Complete

 Lab Complete

 Lab ETA

Requested Complete Date Site Representative Collector	Routine	Results To Requested By Location	Dustin Brooks, John Pugh, Greg Dyer
	Byron Corina		Greg Dyer
	Nick Pitts		Gaston Ash Pond
Analysis Requested		Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle	
Comments		Rad Dup collected on MW-11.	

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
FB-1	09/12/2016	16:50	3	Field Blank		AW23391
MW-12	09/12/2016	17:15	3	Groundwater		AW23392
MW-10	09/13/2016	09:18	3	Groundwater		AW23393
MW-11	09/13/2016	10:33	4	Groundwater		AW23394
MW-14	09/13/2016	11:45	3	Groundwater		AW23395
MW-19	09/13/2016	14:48	3	Groundwater		AW23396
MW-15R	09/14/2016	11:15	3	Groundwater		AW23397

Relinquished By	Received By	Date/Time
		09/14/2016 12:14
	Sarah Copeland Digitally signed by Sarah Copeland Date: 2016.09.14 15:59:46 -05'00'	09/14/2016 15:59

SmarTroll ID
Turbidity ID

All metals and radiological bottles have pH < 2

Cooler Temp
Thermometer ID
pH Strip ID



Chain of Custody
Groundwater
APC General Testing Laboratory
General Service Complex Building 8

Field Complete

Lab Complete

Lab ETA

Requested Complete Date
 Site Representative
 Collector

Results To
 Requested By
 Location

Analysis Requested
 Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-1	09/13/2016	10:45	3	Groundwater		AW23398
MW-8	09/13/2016	12:25	3	Groundwater		AW23399
MW-9	09/13/2016	13:56	3	Groundwater		AW23400
FB-3	09/13/2016	14:45	3	Field Blank		AW23401
EB-1	09/13/2016	15:10	3	Equipment Blank		AW23402
MW-2	09/14/2016	10:30	3	Groundwater		AW23403
MW-3	09/14/2016	12:00	3	Groundwater		AW23404
FB-2	09/14/2016	12:16	3	Field Blank		AW23405

Relinquished By	Received By	Date/Time
	Sarah Copeland <small>Digitally signed by Sarah Copeland Date: 2016.09.14 16:00:30 -05'00'</small>	09/14/2016 16:00

SmarTroll ID
 Turbidity ID

All metals and radiological bottles have pH < 2
 Cooler Temp
 Thermometer ID
 pH Strip ID

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: 400-127445-1

TestAmerica Sample Delivery Group: Gaston Ash Pond (4)

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:

10/23/2016 7:18:06 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: 400-127445-1
SDG: Gaston Ash Pond (4)

Job ID: 400-127445-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-127445-1

RAD

Method(s) 9320: Radium-228 Prep Batch 160-272032: The method blank (MB) has radium-226 activity above detection goal. The following associated samples are non-detect for the contaminant, therefore re-analysis is not required. The data have been qualified and reported. AW23415 MW-17 (400-127445-25), AW23416 MW-18 (400-127445-26), AW23418 MW-4 (400-127445-28), AW23419 MW-4 DUP (400-127445-29), (LCS 160-272032/2-A), (LCSD 160-272032/3-A) and (MB 160-272032/1-A).

Method(s) 9320: Radium-228 Prep Batch 160-274657: The radium-228 detection goal was not met for the following sample due to insufficient sample available for re-analysis (see prep NCM 95369): AW23417 MW-20 (400-127445-27). Analytical results are reported with the detection limit achieved.

Method(s) PrecSep_0: Radium-228 Prep Batch 160-272032: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: AW23415 MW-17 (400-127445-25), AW23416 MW-18 (400-127445-26), AW23417 MW-20 (400-127445-27), AW23418 MW-4 (400-127445-28) and AW23419 MW-4 DUP (400-127445-29). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method(s) PrecSep_0: Radium-228 PRep Batch 160-272044: The following samples were run at a reduced aliquot due to limited sample available: AW23391 FB-1 (400-127445-1), AW23392 MW-12 (400-127445-2), AW23393 MW-10 (400-127445-3), AW23394 MW-11 (400-127445-4), AW23395 MW-14 (400-127445-5), AW23396 MW-19 (400-127445-6), AW23397 MW-15R (400-127445-7), AW23398 MW-1 (400-127445-8), AW23399 MW-8 (400-127445-9), AW23400 MW-9 (400-127445-10), AW23401 FB-3 (400-127445-11), AW23402 EB-1 (400-127445-12), AW23403 MW-2 (400-127445-13), AW23404 MW-3 (400-127445-14), AW23405 FB-2 (400-127445-15), AW23406 MW-13 (400-127445-16), AW23407 MW-13 DUP (400-127445-17), AW23408 MW-5 (400-127445-18), AW23409 MW-5 DUP (400-127445-19), AW23410 MW-22 (400-127445-20) and (400-127445-B-4 DU).

Method(s) PrecSep_0: Radium-228 Prep Batch 160-272026: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: AW23411 MW-21 (400-127445-21), AW23412 MW-6 (400-127445-22), AW23413 MW-7 (400-127445-23) and AW23414 MW-16 (400-127445-24). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision. Samples in lot 400-127445 were also prepared at a reduced aliquot for this reason.

Method(s) PrecSep_0: Radium-228 Prep Batch 160-274657: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: AW23417 MW-20 (400-127445-27). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead. The samples were also prepared at a reduced aliquot due to limited volume from re-analysis (see NCM 160-95349).

Method(s) PrecSep-21: Radium-226 Prep Batch 160-272009: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: AW23415 MW-17 (400-127445-25), AW23416 MW-18 (400-127445-26), AW23417 MW-20 (400-127445-27), AW23418 MW-4 (400-127445-28) and AW23419 MW-4 DUP (400-127445-29). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision. Lot 400-127445 was prepared at a reduced aliquot due to limited volume.

Method(s) PrecSep-21: Radium-226 Prep Batch 160-272034: The following samples were run at a reduced aliquot due to limited sample available: AW23391 FB-1 (400-127445-1), AW23392 MW-12 (400-127445-2), AW23393 MW-10 (400-127445-3), AW23394 MW-11 (400-127445-4), AW23395 MW-14 (400-127445-5), AW23396 MW-19 (400-127445-6), AW23397 MW-15R (400-127445-7), AW23398 MW-1 (400-127445-8), AW23399 MW-8 (400-127445-9), AW23400 MW-9 (400-127445-10), AW23401 FB-3 (400-127445-11), AW23402 EB-1 (400-127445-12), AW23403 MW-2 (400-127445-13), AW23404 MW-3 (400-127445-14), AW23405 FB-2 (400-127445-15), AW23406 MW-13 (400-127445-16), AW23407 MW-13 DUP (400-127445-17), AW23408 MW-5 (400-127445-18), AW23409 MW-5 DUP (400-127445-19), AW23410 MW-22 (400-127445-20) and (400-127445-B-4 DU).

Method(s) PrecSep-21: Radium-226 Prep Batch 160-272008: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: AW23411 MW-21 (400-127445-21), AW23412 MW-6 (400-127445-22), AW23413 MW-7 (400-127445-23) and AW23414 MW-16 (400-127445-24). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision. Samples in lot 400-127445 were also prepared at a reduced aliquot for this reason.

Case Narrative

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

TestAmerica Job ID: 400-127445-1
SDG: Gaston Ash Pond (4)

Job ID: 400-127445-1 (Continued)

Laboratory: TestAmerica Pensacola (Continued)

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Method Summary

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

TestAmerica Job ID: 400-127445-1
SDG: Gaston Ash Pond (4)

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: 400-127445-1
SDG: Gaston Ash Pond (4)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-127445-1	AW23391 FB-1	Water	09/12/16 16:50	09/20/16 15:35
400-127445-2	AW23392 MW-12	Water	09/12/16 17:15	09/20/16 15:35
400-127445-3	AW23393 MW-10	Water	09/13/16 09:18	09/20/16 15:35
400-127445-4	AW23394 MW-11	Water	09/13/16 10:33	09/20/16 15:35
400-127445-5	AW23395 MW-14	Water	09/13/16 11:45	09/20/16 15:35
400-127445-6	AW23396 MW-19	Water	09/13/16 14:48	09/20/16 15:35
400-127445-7	AW23397 MW-15R	Water	09/14/16 11:15	09/20/16 15:35
400-127445-8	AW23398 MW-1	Water	09/13/16 10:45	09/20/16 15:35
400-127445-9	AW23399 MW-8	Water	09/13/16 12:25	09/20/16 15:35
400-127445-10	AW23400 MW-9	Water	09/13/16 13:56	09/20/16 15:35
400-127445-11	AW23401 FB-3	Water	09/13/16 14:45	09/20/16 15:35
400-127445-12	AW23402 EB-1	Water	09/13/16 15:10	09/20/16 15:35
400-127445-13	AW23403 MW-2	Water	09/14/16 10:30	09/20/16 15:35
400-127445-14	AW23404 MW-3	Water	09/14/16 12:00	09/20/16 15:35
400-127445-15	AW23405 FB-2	Water	09/14/16 12:16	09/20/16 15:35
400-127445-16	AW23406 MW-13	Water	09/12/16 16:09	09/20/16 15:35
400-127445-17	AW23407 MW-13 DUP	Water	09/12/16 16:09	09/20/16 15:35
400-127445-18	AW23408 MW-5	Water	09/13/16 08:26	09/20/16 15:35
400-127445-19	AW23409 MW-5 DUP	Water	09/13/16 08:26	09/20/16 15:35
400-127445-20	AW23410 MW-22	Water	09/13/16 09:35	09/20/16 15:35
400-127445-21	AW23411 MW-21	Water	09/13/16 10:37	09/20/16 15:35
400-127445-22	AW23412 MW-6	Water	09/13/16 11:21	09/20/16 15:35
400-127445-23	AW23413 MW-7	Water	09/13/16 12:13	09/20/16 15:35
400-127445-24	AW23414 MW-16	Water	09/13/16 14:10	09/20/16 15:35
400-127445-25	AW23415 MW-17	Water	09/13/16 15:03	09/20/16 15:35
400-127445-26	AW23416 MW-18	Water	09/14/16 09:08	09/20/16 15:35
400-127445-27	AW23417 MW-20	Water	09/14/16 10:00	09/20/16 15:35
400-127445-28	AW23418 MW-4	Water	09/14/16 11:35	09/20/16 15:35
400-127445-29	AW23419 MW-4 DUP	Water	09/14/16 11:35	09/20/16 15:35

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23391 FB-1

Lab Sample ID: 400-127445-1

Date Collected: 09/12/16 16:50

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0428	U	0.0602	0.0603	1.00	0.102	pCi/L	09/27/16 15:39	10/19/16 10:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					09/27/16 15:39	10/19/16 10:55	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.415	U	0.302	0.304	1.00	0.471	pCi/L	09/27/16 18:46	10/13/16 13:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					09/27/16 18:46	10/13/16 13:16	1
Y Carrier	90.8		40 - 110					09/27/16 18:46	10/13/16 13:16	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	0.457	U	0.308	0.310	5.00	0.471	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23392 MW-12

Lab Sample ID: 400-127445-2

Date Collected: 09/12/16 17:15

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.401		0.132	0.137	1.00	0.155	pCi/L	09/27/16 15:39	10/19/16 10:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.3		40 - 110					09/27/16 15:39	10/19/16 10:55	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.639		0.367	0.372	1.00	0.554	pCi/L	09/27/16 18:46	10/13/16 13:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.3		40 - 110					09/27/16 18:46	10/13/16 13:16	1
Y Carrier	87.9		40 - 110					09/27/16 18:46	10/13/16 13:16	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		0.390	0.396	5.00	0.554	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23393 MW-10

Lab Sample ID: 400-127445-3

Date Collected: 09/13/16 09:18

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.139		0.0774	0.0784	1.00	0.101	pCi/L	09/27/16 15:39	10/19/16 10:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					09/27/16 15:39	10/19/16 10:55	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.428	U	0.338	0.340	1.00	0.534	pCi/L	09/27/16 18:46	10/13/16 13:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					09/27/16 18:46	10/13/16 13:16	1
Y Carrier	84.5		40 - 110					09/27/16 18:46	10/13/16 13:16	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	0.567		0.347	0.349	5.00	0.534	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23394 MW-11

Lab Sample ID: 400-127445-4

Date Collected: 09/13/16 10:33

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0875	U	0.0881	0.0885	1.00	0.141	pCi/L	09/27/16 15:39	10/19/16 10:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.6		40 - 110					09/27/16 15:39	10/19/16 10:55	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	0.311	0.311	1.00	0.537	pCi/L	09/27/16 18:46	10/13/16 13:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.6		40 - 110					09/27/16 18:46	10/13/16 13:16	1
Y Carrier	83.7		40 - 110					09/27/16 18:46	10/13/16 13:16	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	0.216	U	0.323	0.323	5.00	0.537	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23395 MW-14

Lab Sample ID: 400-127445-5

Date Collected: 09/13/16 11:45

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.345		0.124	0.128	1.00	0.151	pCi/L	09/27/16 15:39	10/19/16 10:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		40 - 110					09/27/16 15:39	10/19/16 10:55	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0679	U	0.316	0.316	1.00	0.553	pCi/L	09/27/16 18:46	10/13/16 13:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		40 - 110					09/27/16 18:46	10/13/16 13:09	1
Y Carrier	87.9		40 - 110					09/27/16 18:46	10/13/16 13:09	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	0.413	U	0.339	0.341	5.00	0.553	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23396 MW-19

Lab Sample ID: 400-127445-6

Date Collected: 09/13/16 14:48

Matrix: Water

Date Received: 09/20/16 15:35

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		0.123	0.127	1.00	0.154	pCi/L	09/27/16 15:39	10/19/16 10:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		40 - 110					09/27/16 15:39	10/19/16 10:56	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.133	U	0.325	0.325	1.00	0.558	pCi/L	09/27/16 18:46	10/13/16 13:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		40 - 110					09/27/16 18:46	10/13/16 13:09	1
Y Carrier	88.2		40 - 110					09/27/16 18:46	10/13/16 13:09	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	0.460	U	0.348	0.349	5.00	0.558	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23397 MW-15R

Lab Sample ID: 400-127445-7

Date Collected: 09/14/16 11:15

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.234		0.0884	0.0908	1.00	0.0909	pCi/L	09/27/16 15:39	10/19/16 10:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.6		40 - 110					09/27/16 15:39	10/19/16 10:56	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0679	U	0.356	0.356	1.00	0.625	pCi/L	09/27/16 18:46	10/13/16 13:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.6		40 - 110					09/27/16 18:46	10/13/16 13:09	1
Y Carrier	69.9		40 - 110					09/27/16 18:46	10/13/16 13:09	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	0.301	U	0.366	0.367	5.00	0.625	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23398 MW-1

Lab Sample ID: 400-127445-8

Date Collected: 09/13/16 10:45

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.435		0.117	0.124	1.00	0.109	pCi/L	09/27/16 15:39	10/19/16 10:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.0		40 - 110					09/27/16 15:39	10/19/16 10:56	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.512		0.319	0.322	1.00	0.491	pCi/L	09/27/16 18:46	10/13/16 13:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.0		40 - 110					09/27/16 18:46	10/13/16 13:09	1
Y Carrier	92.0		40 - 110					09/27/16 18:46	10/13/16 13:09	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	0.948		0.340	0.345	5.00	0.491	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23399 MW-8

Lab Sample ID: 400-127445-9

Date Collected: 09/13/16 12:25

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0758	U	0.0890	0.0893	1.00	0.146	pCi/L	09/27/16 15:39	10/19/16 11:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.9		40 - 110					09/27/16 15:39	10/19/16 11:04	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0514	U	0.325	0.326	1.00	0.573	pCi/L	09/27/16 18:46	10/13/16 13:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.9		40 - 110					09/27/16 18:46	10/13/16 13:10	1
Y Carrier	92.0		40 - 110					09/27/16 18:46	10/13/16 13:10	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	0.127	U	0.337	0.338	5.00	0.573	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23400 MW-9

Lab Sample ID: 400-127445-10

Date Collected: 09/13/16 13:56

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.160		0.0938	0.0949	1.00	0.134	pCi/L	09/27/16 15:39	10/19/16 11:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					09/27/16 15:39	10/19/16 11:05	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.276	U	0.332	0.333	1.00	0.548	pCi/L	09/27/16 18:46	10/13/16 13:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					09/27/16 18:46	10/13/16 13:10	1
Y Carrier	89.3		40 - 110					09/27/16 18:46	10/13/16 13:10	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	U	0.345	0.346	5.00	0.548	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23401 FB-3

Lab Sample ID: 400-127445-11

Date Collected: 09/13/16 14:45

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0681	U	0.0776	0.0778	1.00	0.127	pCi/L	09/27/16 15:39	10/19/16 11:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					09/27/16 15:39	10/19/16 11:05	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.515		0.323	0.327	1.00	0.495	pCi/L	09/27/16 18:46	10/13/16 13:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					09/27/16 18:46	10/13/16 13:10	1
Y Carrier	89.3		40 - 110					09/27/16 18:46	10/13/16 13:10	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	0.583		0.332	0.336	5.00	0.495	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23402 EB-1

Lab Sample ID: 400-127445-12

Date Collected: 09/13/16 15:10

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0868	U	0.0843	0.0847	1.00	0.134	pCi/L	09/27/16 15:39	10/19/16 11:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					09/27/16 15:39	10/19/16 11:05	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.200	U	0.280	0.281	1.00	0.468	pCi/L	09/27/16 18:46	10/13/16 13:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					09/27/16 18:46	10/13/16 13:10	1
Y Carrier	90.8		40 - 110					09/27/16 18:46	10/13/16 13:10	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	0.287	U	0.292	0.293	5.00	0.468	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23403 MW-2

Lab Sample ID: 400-127445-13

Date Collected: 09/14/16 10:30

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0668	U	0.0849	0.0851	1.00	0.141	pCi/L	09/27/16 15:39	10/19/16 11:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					09/27/16 15:39	10/19/16 11:05	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.139	U	0.262	0.262	1.00	0.447	pCi/L	09/27/16 18:46	10/13/16 13:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					09/27/16 18:46	10/13/16 13:10	1
Y Carrier	90.1		40 - 110					09/27/16 18:46	10/13/16 13:10	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	0.205	U	0.275	0.276	5.00	0.447	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23404 MW-3

Lab Sample ID: 400-127445-14

Date Collected: 09/14/16 12:00

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0662	U	0.0674	0.0677	1.00	0.107	pCi/L	09/27/16 15:39	10/19/16 11:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					09/27/16 15:39	10/19/16 11:05	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.199	U	0.263	0.263	1.00	0.438	pCi/L	09/27/16 18:46	10/13/16 13:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					09/27/16 18:46	10/13/16 13:10	1
Y Carrier	88.6		40 - 110					09/27/16 18:46	10/13/16 13:10	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	0.265	U	0.271	0.272	5.00	0.438	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23405 FB-2

Lab Sample ID: 400-127445-15

Date Collected: 09/14/16 12:16

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0961	U	0.0814	0.0819	1.00	0.126	pCi/L	09/27/16 15:39	10/19/16 11:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.2		40 - 110					09/27/16 15:39	10/19/16 11:05	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0472	U	0.308	0.308	1.00	0.555	pCi/L	09/27/16 18:46	10/13/16 13:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.2		40 - 110					09/27/16 18:46	10/13/16 13:10	1
Y Carrier	87.9		40 - 110					09/27/16 18:46	10/13/16 13:10	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	0.0489	U	0.318	0.319	5.00	0.555	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23406 MW-13

Lab Sample ID: 400-127445-16

Date Collected: 09/12/16 16:09

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.342		0.118	0.122	1.00	0.136	pCi/L	09/27/16 15:39	10/19/16 11:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		40 - 110					09/27/16 15:39	10/19/16 11:05	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0173	U	0.276	0.276	1.00	0.501	pCi/L	09/27/16 18:46	10/13/16 13:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		40 - 110					09/27/16 18:46	10/13/16 13:11	1
Y Carrier	90.5		40 - 110					09/27/16 18:46	10/13/16 13:11	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	0.325	U	0.301	0.302	5.00	0.501	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23407 MW-13 DUP

Lab Sample ID: 400-127445-17

Date Collected: 09/12/16 16:09

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.431		0.118	0.124	1.00	0.104	pCi/L	09/27/16 15:39	10/19/16 11:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.3		40 - 110					09/27/16 15:39	10/19/16 11:05	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.262	U	0.291	0.292	1.00	0.477	pCi/L	09/27/16 18:46	10/13/16 13:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.3		40 - 110					09/27/16 18:46	10/13/16 13:11	1
Y Carrier	90.5		40 - 110					09/27/16 18:46	10/13/16 13:11	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	0.692		0.314	0.317	5.00	0.477	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23408 MW-5

Lab Sample ID: 400-127445-18

Date Collected: 09/13/16 08:26

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.231		0.101	0.103	1.00	0.123	pCi/L	09/27/16 15:39	10/19/16 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.8		40 - 110					09/27/16 15:39	10/19/16 11:06	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.453	U	0.339	0.342	1.00	0.529	pCi/L	09/27/16 18:46	10/13/16 13:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.8		40 - 110					09/27/16 18:46	10/13/16 13:11	1
Y Carrier	82.2		40 - 110					09/27/16 18:46	10/13/16 13:11	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	0.685		0.354	0.357	5.00	0.529	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23409 MW-5 DUP

Lab Sample ID: 400-127445-19

Date Collected: 09/13/16 08:26

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.286		0.127	0.129	1.00	0.167	pCi/L	09/27/16 15:39	10/19/16 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.8		40 - 110					09/27/16 15:39	10/19/16 11:06	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.569		0.366	0.370	1.00	0.560	pCi/L	09/27/16 18:46	10/13/16 13:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.8		40 - 110					09/27/16 18:46	10/13/16 13:11	1
Y Carrier	93.8		40 - 110					09/27/16 18:46	10/13/16 13:11	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	0.855		0.387	0.392	5.00	0.560	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23410 MW-22

Lab Sample ID: 400-127445-20

Date Collected: 09/13/16 09:35

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.414		0.114	0.120	1.00	0.109	pCi/L	09/27/16 15:39	10/19/16 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					09/27/16 15:39	10/19/16 11:06	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.464	U	0.324	0.327	1.00	0.502	pCi/L	09/27/16 18:46	10/13/16 13:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					09/27/16 18:46	10/13/16 13:11	1
Y Carrier	83.7		40 - 110					09/27/16 18:46	10/13/16 13:11	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	0.878		0.343	0.348	5.00	0.502	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23411 MW-21

Lab Sample ID: 400-127445-21

Date Collected: 09/13/16 10:37

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.518		0.135	0.143	1.00	0.131	pCi/L	09/27/16 14:01	10/19/16 11:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					09/27/16 14:01	10/19/16 11:09	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.243	U	0.350	0.351	1.00	0.586	pCi/L	09/27/16 15:10	10/13/16 17:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					09/27/16 15:10	10/13/16 17:32	1
Y Carrier	84.1		40 - 110					09/27/16 15:10	10/13/16 17:32	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	0.761		0.375	0.379	5.00	0.586	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23412 MW-6

Lab Sample ID: 400-127445-22

Date Collected: 09/13/16 11:21

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.244		0.0955	0.0979	1.00	0.108	pCi/L	09/27/16 14:01	10/19/16 11:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					09/27/16 14:01	10/19/16 11:09	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0650	U	0.368	0.368	1.00	0.663	pCi/L	09/27/16 15:10	10/13/16 17:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					09/27/16 15:10	10/13/16 17:32	1
Y Carrier	83.7		40 - 110					09/27/16 15:10	10/13/16 17:32	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	0.179	U	0.380	0.380	5.00	0.663	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23413 MW-7

Lab Sample ID: 400-127445-23

Date Collected: 09/13/16 12:13

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.149		0.0823	0.0834	1.00	0.106	pCi/L	09/27/16 14:01	10/19/16 11:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.2		40 - 110					09/27/16 14:01	10/19/16 11:09	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.132	U	0.388	0.388	1.00	0.711	pCi/L	09/27/16 15:10	10/13/16 17:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.2		40 - 110					09/27/16 15:10	10/13/16 17:32	1
Y Carrier	86.0		40 - 110					09/27/16 15:10	10/13/16 17:32	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	0.0165	U	0.396	0.397	5.00	0.711	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23414 MW-16

Lab Sample ID: 400-127445-24

Date Collected: 09/13/16 14:10

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	2.52		0.268	0.351	1.00	0.110	pCi/L	09/27/16 14:01	10/19/16 11:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.3		40 - 110					09/27/16 14:01	10/19/16 11:10	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.698		0.427	0.432	1.00	0.653	pCi/L	09/27/16 15:10	10/13/16 17:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.3		40 - 110					09/27/16 15:10	10/13/16 17:33	1
Y Carrier	85.6		40 - 110					09/27/16 15:10	10/13/16 17:33	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	3.22		0.504	0.557	5.00	0.653	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23415 MW-17

Lab Sample ID: 400-127445-25

Date Collected: 09/13/16 15:03

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.474		0.117	0.124	1.00	0.0960	pCi/L	09/27/16 14:15	10/19/16 07:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					09/27/16 14:15	10/19/16 07:14	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.537	U	0.380	0.383	1.00	0.590	pCi/L	09/27/16 15:31	10/12/16 17:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					09/27/16 15:31	10/12/16 17:49	1
Y Carrier	76.6		40 - 110					09/27/16 15:31	10/12/16 17:49	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.01		0.397	0.402	5.00	0.590	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23416 MW-18

Lab Sample ID: 400-127445-26

Date Collected: 09/14/16 09:08

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.937		0.166	0.186	1.00	0.130	pCi/L	09/27/16 14:15	10/19/16 07:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					09/27/16 14:15	10/19/16 07:14	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.375	U	0.396	0.398	1.00	0.648	pCi/L	09/27/16 15:31	10/12/16 17:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					09/27/16 15:31	10/12/16 17:49	1
Y Carrier	78.5		40 - 110					09/27/16 15:31	10/12/16 17:49	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.31		0.430	0.439	5.00	0.648	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23417 MW-20

Lab Sample ID: 400-127445-27

Date Collected: 09/14/16 10:00

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	19.4		0.698	1.88	1.00	0.117	pCi/L	09/27/16 14:15	10/19/16 07:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					09/27/16 14:15	10/19/16 07:14	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.906	U G	0.799	0.804	1.00	1.28	pCi/L	10/14/16 17:43	10/19/16 18:36	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.4		40 - 110					10/14/16 17:43	10/19/16 18:36	1
Y Carrier	81.5		40 - 110					10/14/16 17:43	10/19/16 18:36	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	20.3		1.06	2.04	5.00	1.28	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23418 MW-4

Lab Sample ID: 400-127445-28

Date Collected: 09/14/16 11:35

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.218		0.105	0.106	1.00	0.141	pCi/L	09/27/16 14:15	10/19/16 07:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					09/27/16 14:15	10/19/16 07:14	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.487	U	0.344	0.347	1.00	0.532	pCi/L	09/27/16 15:31	10/12/16 18:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					09/27/16 15:31	10/12/16 18:01	1
Y Carrier	82.6		40 - 110					09/27/16 15:31	10/12/16 18:01	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	0.705		0.359	0.362	5.00	0.532	pCi/L		10/21/16 09:29	1

Client Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23419 MW-4 DUP

Lab Sample ID: 400-127445-29

Date Collected: 09/14/16 11:35

Matrix: Water

Date Received: 09/20/16 15:35

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.315		0.119	0.122	1.00	0.148	pCi/L	09/27/16 14:15	10/19/16 07:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					09/27/16 14:15	10/19/16 07:14	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.613		0.380	0.384	1.00	0.574	pCi/L	09/27/16 15:31	10/12/16 18:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					09/27/16 15:31	10/12/16 18:01	1
Y Carrier	74.0		40 - 110					09/27/16 15:31	10/12/16 18:01	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	0.928		0.398	0.403	5.00	0.574	pCi/L		10/21/16 09:29	1

Definitions/Glossary

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

TestAmerica Job ID: 400-127445-1
SDG: Gaston Ash Pond (4)

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23391 FB-1

Lab Sample ID: 400-127445-1

Date Collected: 09/12/16 16:50

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272034	09/27/16 15:39	KKA	TAL SL
Total/NA	Analysis	9315		1	275151	10/19/16 10:55	ALS	TAL SL
Total/NA	Prep	PrecSep_0			272044	09/27/16 18:46	MCJ	TAL SL
Total/NA	Analysis	9320		1	274417	10/13/16 13:16	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Client Sample ID: AW23392 MW-12

Lab Sample ID: 400-127445-2

Date Collected: 09/12/16 17:15

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272034	09/27/16 15:39	KKA	TAL SL
Total/NA	Analysis	9315		1	275151	10/19/16 10:55	ALS	TAL SL
Total/NA	Prep	PrecSep_0			272044	09/27/16 18:46	MCJ	TAL SL
Total/NA	Analysis	9320		1	274417	10/13/16 13:16	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Client Sample ID: AW23393 MW-10

Lab Sample ID: 400-127445-3

Date Collected: 09/13/16 09:18

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272034	09/27/16 15:39	KKA	TAL SL
Total/NA	Analysis	9315		1	275151	10/19/16 10:55	ALS	TAL SL
Total/NA	Prep	PrecSep_0			272044	09/27/16 18:46	MCJ	TAL SL
Total/NA	Analysis	9320		1	274417	10/13/16 13:16	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Client Sample ID: AW23394 MW-11

Lab Sample ID: 400-127445-4

Date Collected: 09/13/16 10:33

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272034	09/27/16 15:39	KKA	TAL SL
Total/NA	Analysis	9315		1	275151	10/19/16 10:55	ALS	TAL SL
Total/NA	Prep	PrecSep_0			272044	09/27/16 18:46	MCJ	TAL SL
Total/NA	Analysis	9320		1	274417	10/13/16 13:16	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23395 MW-14

Lab Sample ID: 400-127445-5

Date Collected: 09/13/16 11:45

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272034	09/27/16 15:39	KKA	TAL SL
Total/NA	Analysis	9315		1	275151	10/19/16 10:55	ALS	TAL SL
Total/NA	Prep	PrecSep_0			272044	09/27/16 18:46	MCJ	TAL SL
Total/NA	Analysis	9320		1	274428	10/13/16 13:09	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Client Sample ID: AW23396 MW-19

Lab Sample ID: 400-127445-6

Date Collected: 09/13/16 14:48

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272034	09/27/16 15:39	KKA	TAL SL
Total/NA	Analysis	9315		1	275151	10/19/16 10:56	ALS	TAL SL
Total/NA	Prep	PrecSep_0			272044	09/27/16 18:46	MCJ	TAL SL
Total/NA	Analysis	9320		1	274428	10/13/16 13:09	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Client Sample ID: AW23397 MW-15R

Lab Sample ID: 400-127445-7

Date Collected: 09/14/16 11:15

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272034	09/27/16 15:39	KKA	TAL SL
Total/NA	Analysis	9315		1	275151	10/19/16 10:56	ALS	TAL SL
Total/NA	Prep	PrecSep_0			272044	09/27/16 18:46	MCJ	TAL SL
Total/NA	Analysis	9320		1	274428	10/13/16 13:09	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Client Sample ID: AW23398 MW-1

Lab Sample ID: 400-127445-8

Date Collected: 09/13/16 10:45

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272034	09/27/16 15:39	KKA	TAL SL
Total/NA	Analysis	9315		1	275151	10/19/16 10:56	ALS	TAL SL
Total/NA	Prep	PrecSep_0			272044	09/27/16 18:46	MCJ	TAL SL
Total/NA	Analysis	9320		1	274428	10/13/16 13:09	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23399 MW-8

Lab Sample ID: 400-127445-9

Date Collected: 09/13/16 12:25

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272034	09/27/16 15:39	KKA	TAL SL
Total/NA	Analysis	9315		1	275152	10/19/16 11:04	RTM	TAL SL
Total/NA	Prep	PrecSep_0			272044	09/27/16 18:46	MCJ	TAL SL
Total/NA	Analysis	9320		1	274428	10/13/16 13:10	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Client Sample ID: AW23400 MW-9

Lab Sample ID: 400-127445-10

Date Collected: 09/13/16 13:56

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272034	09/27/16 15:39	KKA	TAL SL
Total/NA	Analysis	9315		1	275152	10/19/16 11:05	RTM	TAL SL
Total/NA	Prep	PrecSep_0			272044	09/27/16 18:46	MCJ	TAL SL
Total/NA	Analysis	9320		1	274428	10/13/16 13:10	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Client Sample ID: AW23401 FB-3

Lab Sample ID: 400-127445-11

Date Collected: 09/13/16 14:45

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272034	09/27/16 15:39	KKA	TAL SL
Total/NA	Analysis	9315		1	275152	10/19/16 11:05	RTM	TAL SL
Total/NA	Prep	PrecSep_0			272044	09/27/16 18:46	MCJ	TAL SL
Total/NA	Analysis	9320		1	274428	10/13/16 13:10	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Client Sample ID: AW23402 EB-1

Lab Sample ID: 400-127445-12

Date Collected: 09/13/16 15:10

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272034	09/27/16 15:39	KKA	TAL SL
Total/NA	Analysis	9315		1	275152	10/19/16 11:05	RTM	TAL SL
Total/NA	Prep	PrecSep_0			272044	09/27/16 18:46	MCJ	TAL SL
Total/NA	Analysis	9320		1	274428	10/13/16 13:10	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23403 MW-2

Lab Sample ID: 400-127445-13

Date Collected: 09/14/16 10:30

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272034	09/27/16 15:39	KKA	TAL SL
Total/NA	Analysis	9315		1	275152	10/19/16 11:05	RTM	TAL SL
Total/NA	Prep	PrecSep_0			272044	09/27/16 18:46	MCJ	TAL SL
Total/NA	Analysis	9320		1	274428	10/13/16 13:10	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Client Sample ID: AW23404 MW-3

Lab Sample ID: 400-127445-14

Date Collected: 09/14/16 12:00

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272034	09/27/16 15:39	KKA	TAL SL
Total/NA	Analysis	9315		1	275152	10/19/16 11:05	RTM	TAL SL
Total/NA	Prep	PrecSep_0			272044	09/27/16 18:46	MCJ	TAL SL
Total/NA	Analysis	9320		1	274428	10/13/16 13:10	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Client Sample ID: AW23405 FB-2

Lab Sample ID: 400-127445-15

Date Collected: 09/14/16 12:16

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272034	09/27/16 15:39	KKA	TAL SL
Total/NA	Analysis	9315		1	275152	10/19/16 11:05	RTM	TAL SL
Total/NA	Prep	PrecSep_0			272044	09/27/16 18:46	MCJ	TAL SL
Total/NA	Analysis	9320		1	274428	10/13/16 13:10	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Client Sample ID: AW23406 MW-13

Lab Sample ID: 400-127445-16

Date Collected: 09/12/16 16:09

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272034	09/27/16 15:39	KKA	TAL SL
Total/NA	Analysis	9315		1	275152	10/19/16 11:05	RTM	TAL SL
Total/NA	Prep	PrecSep_0			272044	09/27/16 18:46	MCJ	TAL SL
Total/NA	Analysis	9320		1	274428	10/13/16 13:11	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23407 MW-13 DUP

Lab Sample ID: 400-127445-17

Date Collected: 09/12/16 16:09

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272034	09/27/16 15:39	KKA	TAL SL
Total/NA	Analysis	9315		1	275152	10/19/16 11:05	RTM	TAL SL
Total/NA	Prep	PrecSep_0			272044	09/27/16 18:46	MCJ	TAL SL
Total/NA	Analysis	9320		1	274428	10/13/16 13:11	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Client Sample ID: AW23408 MW-5

Lab Sample ID: 400-127445-18

Date Collected: 09/13/16 08:26

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272034	09/27/16 15:39	KKA	TAL SL
Total/NA	Analysis	9315		1	275152	10/19/16 11:06	RTM	TAL SL
Total/NA	Prep	PrecSep_0			272044	09/27/16 18:46	MCJ	TAL SL
Total/NA	Analysis	9320		1	274428	10/13/16 13:11	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Client Sample ID: AW23409 MW-5 DUP

Lab Sample ID: 400-127445-19

Date Collected: 09/13/16 08:26

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272034	09/27/16 15:39	KKA	TAL SL
Total/NA	Analysis	9315		1	275152	10/19/16 11:06	RTM	TAL SL
Total/NA	Prep	PrecSep_0			272044	09/27/16 18:46	MCJ	TAL SL
Total/NA	Analysis	9320		1	274428	10/13/16 13:11	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Client Sample ID: AW23410 MW-22

Lab Sample ID: 400-127445-20

Date Collected: 09/13/16 09:35

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272034	09/27/16 15:39	KKA	TAL SL
Total/NA	Analysis	9315		1	275152	10/19/16 11:06	RTM	TAL SL
Total/NA	Prep	PrecSep_0			272044	09/27/16 18:46	MCJ	TAL SL
Total/NA	Analysis	9320		1	274428	10/13/16 13:11	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-127445-1
SDG: Gaston Ash Pond (4)

Client Sample ID: AW23411 MW-21

Lab Sample ID: 400-127445-21

Date Collected: 09/13/16 10:37

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272008	09/27/16 14:01	KKA	TAL SL
Total/NA	Analysis	9315		1	275152	10/19/16 11:09	RTM	TAL SL
Total/NA	Prep	PrecSep_0			272026	09/27/16 15:10	KKA	TAL SL
Total/NA	Analysis	9320		1	274413	10/13/16 17:32	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Client Sample ID: AW23412 MW-6

Lab Sample ID: 400-127445-22

Date Collected: 09/13/16 11:21

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272008	09/27/16 14:01	KKA	TAL SL
Total/NA	Analysis	9315		1	275152	10/19/16 11:09	RTM	TAL SL
Total/NA	Prep	PrecSep_0			272026	09/27/16 15:10	KKA	TAL SL
Total/NA	Analysis	9320		1	274413	10/13/16 17:32	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Client Sample ID: AW23413 MW-7

Lab Sample ID: 400-127445-23

Date Collected: 09/13/16 12:13

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272008	09/27/16 14:01	KKA	TAL SL
Total/NA	Analysis	9315		1	275152	10/19/16 11:09	RTM	TAL SL
Total/NA	Prep	PrecSep_0			272026	09/27/16 15:10	KKA	TAL SL
Total/NA	Analysis	9320		1	274413	10/13/16 17:32	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Client Sample ID: AW23414 MW-16

Lab Sample ID: 400-127445-24

Date Collected: 09/13/16 14:10

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272008	09/27/16 14:01	KKA	TAL SL
Total/NA	Analysis	9315		1	275152	10/19/16 11:10	RTM	TAL SL
Total/NA	Prep	PrecSep_0			272026	09/27/16 15:10	KKA	TAL SL
Total/NA	Analysis	9320		1	274413	10/13/16 17:33	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW23415 MW-17

Lab Sample ID: 400-127445-25

Date Collected: 09/13/16 15:03

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272009	09/27/16 14:15	MCJ	TAL SL
Total/NA	Analysis	9315		1	275151	10/19/16 07:14	ALS	TAL SL
Total/NA	Prep	PrecSep_0			272032	09/27/16 15:31	MCJ	TAL SL
Total/NA	Analysis	9320		1	274191	10/12/16 17:49	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Client Sample ID: AW23416 MW-18

Lab Sample ID: 400-127445-26

Date Collected: 09/14/16 09:08

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272009	09/27/16 14:15	MCJ	TAL SL
Total/NA	Analysis	9315		1	275151	10/19/16 07:14	ALS	TAL SL
Total/NA	Prep	PrecSep_0			272032	09/27/16 15:31	MCJ	TAL SL
Total/NA	Analysis	9320		1	274191	10/12/16 17:49	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Client Sample ID: AW23417 MW-20

Lab Sample ID: 400-127445-27

Date Collected: 09/14/16 10:00

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272009	09/27/16 14:15	MCJ	TAL SL
Total/NA	Analysis	9315		1	275151	10/19/16 07:14	ALS	TAL SL
Total/NA	Prep	PrecSep_0			274657	10/14/16 17:43	ASS	TAL SL
Total/NA	Analysis	9320		1	275151	10/19/16 18:36	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Client Sample ID: AW23418 MW-4

Lab Sample ID: 400-127445-28

Date Collected: 09/14/16 11:35

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272009	09/27/16 14:15	MCJ	TAL SL
Total/NA	Analysis	9315		1	275151	10/19/16 07:14	ALS	TAL SL
Total/NA	Prep	PrecSep_0			272032	09/27/16 15:31	MCJ	TAL SL
Total/NA	Analysis	9320		1	274195	10/12/16 18:01	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-127445-1
SDG: Gaston Ash Pond (4)

Client Sample ID: AW23419 MW-4 DUP

Lab Sample ID: 400-127445-29

Date Collected: 09/14/16 11:35

Matrix: Water

Date Received: 09/20/16 15:35

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272009	09/27/16 14:15	MCJ	TAL SL
Total/NA	Analysis	9315		1	275151	10/19/16 07:14	ALS	TAL SL
Total/NA	Prep	PrecSep_0			272032	09/27/16 15:31	MCJ	TAL SL
Total/NA	Analysis	9320		1	274195	10/12/16 18:01	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275506	10/21/16 09:29	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: 400-127445-1
 SDG: Gaston Ash Pond (4)

Rad

Prep Batch: 272008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127445-21	AW23411 MW-21	Total/NA	Water	PrecSep-21	
400-127445-22	AW23412 MW-6	Total/NA	Water	PrecSep-21	
400-127445-23	AW23413 MW-7	Total/NA	Water	PrecSep-21	
400-127445-24	AW23414 MW-16	Total/NA	Water	PrecSep-21	
MB 160-272008/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-272008/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-272008/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 272009

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127445-25	AW23415 MW-17	Total/NA	Water	PrecSep-21	
400-127445-26	AW23416 MW-18	Total/NA	Water	PrecSep-21	
400-127445-27	AW23417 MW-20	Total/NA	Water	PrecSep-21	
400-127445-28	AW23418 MW-4	Total/NA	Water	PrecSep-21	
400-127445-29	AW23419 MW-4 DUP	Total/NA	Water	PrecSep-21	
MB 160-272009/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-272009/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-272009/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 272026

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127445-21	AW23411 MW-21	Total/NA	Water	PrecSep_0	
400-127445-22	AW23412 MW-6	Total/NA	Water	PrecSep_0	
400-127445-23	AW23413 MW-7	Total/NA	Water	PrecSep_0	
400-127445-24	AW23414 MW-16	Total/NA	Water	PrecSep_0	
MB 160-272026/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-272026/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-272026/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 272032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127445-25	AW23415 MW-17	Total/NA	Water	PrecSep_0	
400-127445-26	AW23416 MW-18	Total/NA	Water	PrecSep_0	
400-127445-28	AW23418 MW-4	Total/NA	Water	PrecSep_0	
400-127445-29	AW23419 MW-4 DUP	Total/NA	Water	PrecSep_0	
MB 160-272032/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-272032/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-272032/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Prep Batch: 272034

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127445-1	AW23391 FB-1	Total/NA	Water	PrecSep-21	
400-127445-2	AW23392 MW-12	Total/NA	Water	PrecSep-21	
400-127445-3	AW23393 MW-10	Total/NA	Water	PrecSep-21	
400-127445-4	AW23394 MW-11	Total/NA	Water	PrecSep-21	
400-127445-5	AW23395 MW-14	Total/NA	Water	PrecSep-21	
400-127445-6	AW23396 MW-19	Total/NA	Water	PrecSep-21	
400-127445-7	AW23397 MW-15R	Total/NA	Water	PrecSep-21	
400-127445-8	AW23398 MW-1	Total/NA	Water	PrecSep-21	
400-127445-9	AW23399 MW-8	Total/NA	Water	PrecSep-21	
400-127445-10	AW23400 MW-9	Total/NA	Water	PrecSep-21	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-127445-1
SDG: Gaston Ash Pond (4)

Rad (Continued)

Prep Batch: 272034 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127445-11	AW23401 FB-3	Total/NA	Water	PrecSep-21	
400-127445-12	AW23402 EB-1	Total/NA	Water	PrecSep-21	
400-127445-13	AW23403 MW-2	Total/NA	Water	PrecSep-21	
400-127445-14	AW23404 MW-3	Total/NA	Water	PrecSep-21	
400-127445-15	AW23405 FB-2	Total/NA	Water	PrecSep-21	
400-127445-16	AW23406 MW-13	Total/NA	Water	PrecSep-21	
400-127445-17	AW23407 MW-13 DUP	Total/NA	Water	PrecSep-21	
400-127445-18	AW23408 MW-5	Total/NA	Water	PrecSep-21	
400-127445-19	AW23409 MW-5 DUP	Total/NA	Water	PrecSep-21	
400-127445-20	AW23410 MW-22	Total/NA	Water	PrecSep-21	
MB 160-272034/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-272034/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-127445-4 DU	AW23394 MW-11	Total/NA	Water	PrecSep-21	

Prep Batch: 272044

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127445-1	AW23391 FB-1	Total/NA	Water	PrecSep_0	
400-127445-2	AW23392 MW-12	Total/NA	Water	PrecSep_0	
400-127445-3	AW23393 MW-10	Total/NA	Water	PrecSep_0	
400-127445-4	AW23394 MW-11	Total/NA	Water	PrecSep_0	
400-127445-5	AW23395 MW-14	Total/NA	Water	PrecSep_0	
400-127445-6	AW23396 MW-19	Total/NA	Water	PrecSep_0	
400-127445-7	AW23397 MW-15R	Total/NA	Water	PrecSep_0	
400-127445-8	AW23398 MW-1	Total/NA	Water	PrecSep_0	
400-127445-9	AW23399 MW-8	Total/NA	Water	PrecSep_0	
400-127445-10	AW23400 MW-9	Total/NA	Water	PrecSep_0	
400-127445-11	AW23401 FB-3	Total/NA	Water	PrecSep_0	
400-127445-12	AW23402 EB-1	Total/NA	Water	PrecSep_0	
400-127445-13	AW23403 MW-2	Total/NA	Water	PrecSep_0	
400-127445-14	AW23404 MW-3	Total/NA	Water	PrecSep_0	
400-127445-15	AW23405 FB-2	Total/NA	Water	PrecSep_0	
400-127445-16	AW23406 MW-13	Total/NA	Water	PrecSep_0	
400-127445-17	AW23407 MW-13 DUP	Total/NA	Water	PrecSep_0	
400-127445-18	AW23408 MW-5	Total/NA	Water	PrecSep_0	
400-127445-19	AW23409 MW-5 DUP	Total/NA	Water	PrecSep_0	
400-127445-20	AW23410 MW-22	Total/NA	Water	PrecSep_0	
MB 160-272044/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-272044/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-127445-4 DU	AW23394 MW-11	Total/NA	Water	PrecSep_0	

Prep Batch: 274657

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127445-27	AW23417 MW-20	Total/NA	Water	PrecSep_0	
MB 160-274657/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-274657/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-274657/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-272008/1-A
Matrix: Water
Analysis Batch: 275152

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272008

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.02611	U	0.0514	0.0514	1.00	0.0910	pCi/L	09/27/16 14:01	10/19/16 11:09	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		40 - 110						
	80.6					09/27/16 14:01	10/19/16 11:09	1		

Lab Sample ID: LCS 160-272008/2-A
Matrix: Water
Analysis Batch: 275152

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272008

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.1	13.19		1.29	1.00	0.0998	pCi/L	119	68 - 137
Carrier	LCS LCS		Limits			Prepared	Analyzed	Dil Fac	
Ba Carrier	%Yield	Qualifier		40 - 110					
	87.7								

Lab Sample ID: LCSD 160-272008/3-A
Matrix: Water
Analysis Batch: 275152

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 272008

Analyte	Spike Added	LCSD Result	LCSD Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
				Uncert. (2σ+/-)							
Radium-226	11.1	13.44		1.32	1.00	0.0765	pCi/L	121	68 - 137	0.09	1
Carrier	LCSD LCSD		Limits			Prepared	Analyzed	Dil Fac			
Ba Carrier	%Yield	Qualifier		40 - 110							
	88.3										

Lab Sample ID: MB 160-272009/1-A
Matrix: Water
Analysis Batch: 275153

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272009

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.07461	U	0.0528	0.0532	1.00	0.0750	pCi/L	09/27/16 14:15	10/19/16 07:09	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		40 - 110						
	86.9					09/27/16 14:15	10/19/16 07:09	1		

Lab Sample ID: LCS 160-272009/2-A
Matrix: Water
Analysis Batch: 275153

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272009

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.1	14.97		1.45	1.00	0.0923	pCi/L	135	68 - 137

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

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

Lab Sample ID: LCS 160-272009/2-A
Matrix: Water
Analysis Batch: 275153

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272009

	LCS	LCS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	91.2		40 - 110

Lab Sample ID: LCSD 160-272009/3-A
Matrix: Water
Analysis Batch: 275153

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 272009

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		RER	Limit
									68 - 137	0.39	1	
Radium-226	11.1	13.87		1.35	1.00	0.0808	pCi/L	125				

	LCSD	LCSD	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	93.4		40 - 110

Lab Sample ID: MB 160-272034/1-A
Matrix: Water
Analysis Batch: 275151

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272034

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared		Analyzed		Dil Fac
								09/27/16 15:39	10/19/16 10:55	1		
Radium-226	0.07950	U	0.0742	0.0746	1.00	0.116	pCi/L					

	MB	MB	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	90.3		40 - 110

	Prepared		Analyzed		Dil Fac
Ba Carrier	09/27/16 15:39	10/19/16 10:55	10/19/16 10:55	10/19/16 10:55	1

Lab Sample ID: LCS 160-272034/2-A
Matrix: Water
Analysis Batch: 275151

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272034

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	
									68 - 137	
Radium-226	14.8	15.25		1.51	1.00	0.128	pCi/L	103		

	LCS	LCS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	87.7		40 - 110

Lab Sample ID: 400-127445-4 DU
Matrix: Water
Analysis Batch: 275151

Client Sample ID: AW23394 MW-11
Prep Type: Total/NA
Prep Batch: 272034

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	
									0.16	1
Radium-226	0.0875	U	0.06132	U	0.0719	1.00	0.118	pCi/L		

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	95.4		40 - 110

QC Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-272026/1-A
Matrix: Water
Analysis Batch: 274413

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272026

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3195	U	0.303	0.304	1.00	0.490	pCi/L	09/27/16 15:10	10/13/16 17:32	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.6		40 - 110					09/27/16 15:10	10/13/16 17:32	1
Y Carrier	89.3		40 - 110					09/27/16 15:10	10/13/16 17:32	1

Lab Sample ID: LCS 160-272026/2-A
Matrix: Water
Analysis Batch: 274413

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272026

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	14.4	16.15		1.76	1.00	0.533	pCi/L	112	56 - 140
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	87.7		40 - 110						
Y Carrier	83.4		40 - 110						

Lab Sample ID: LCSD 160-272026/3-A
Matrix: Water
Analysis Batch: 274413

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 272026

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	14.4	15.83		1.72	1.00	0.461	pCi/L	110	56 - 140	0.09	1
Carrier	LCSD %Yield	LCSD Qualifier	Limits								
Ba Carrier	88.3		40 - 110								
Y Carrier	83.0		40 - 110								

Lab Sample ID: MB 160-272032/1-A
Matrix: Water
Analysis Batch: 274191

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272032

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.102		0.432	0.444	1.00	0.623	pCi/L	09/27/16 15:31	10/12/16 17:48	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.9		40 - 110					09/27/16 15:31	10/12/16 17:48	1
Y Carrier	73.6		40 - 110					09/27/16 15:31	10/12/16 17:48	1

QC Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

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

Lab Sample ID: LCS 160-272032/2-A
Matrix: Water
Analysis Batch: 274191

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272032

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	14.4	16.06		1.76	1.00	0.499	pCi/L	111	56 - 140
LCS LCS									
Carrier	%Yield	Qualifier	Limits						
Ba Carrier	91.2		40 - 110						
Y Carrier	76.6		40 - 110						

Lab Sample ID: LCSD 160-272032/3-A
Matrix: Water
Analysis Batch: 274191

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 272032

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	14.4	16.87		1.82	1.00	0.481	pCi/L	117	56 - 140	0.23	1
LCSD LCSD											
Carrier	%Yield	Qualifier	Limits								
Ba Carrier	93.4		40 - 110								
Y Carrier	77.8		40 - 110								

Lab Sample ID: MB 160-272044/1-A
Matrix: Water
Analysis Batch: 274417

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272044

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2476	U	0.329	0.329	1.00	0.547	pCi/L	09/27/16 18:46	10/13/16 13:16	1
MB MB										
Carrier	%Yield	Qualifier	Limits							
Ba Carrier	90.3		40 - 110							
Y Carrier	83.7		40 - 110							
								Prepared	Analyzed	Dil Fac
								09/27/16 18:46	10/13/16 13:16	1
								09/27/16 18:46	10/13/16 13:16	1

Lab Sample ID: LCS 160-272044/2-A
Matrix: Water
Analysis Batch: 274417

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272044

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	19.2	21.21		2.28	1.00	0.528	pCi/L	110	56 - 140
LCS LCS									
Carrier	%Yield	Qualifier	Limits						
Ba Carrier	87.7		40 - 110						
Y Carrier	87.5		40 - 110						

QC Sample Results

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

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

Lab Sample ID: 400-127445-4 DU
Matrix: Water
Analysis Batch: 274417

Client Sample ID: AW23394 MW-11
Prep Type: Total/NA
Prep Batch: 272044

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.129	U	0.1040	U	0.291	1.00	0.502	pCi/L	0.04	1
DU DU										
Carrier	%Yield	Qualifier	Limits							
Ba Carrier	95.4		40 - 110							
Y Carrier	88.6		40 - 110							

Lab Sample ID: MB 160-274657/1-A
Matrix: Water
Analysis Batch: 275151

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 274657

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.4449	U	0.395	0.397	1.00	0.632	pCi/L	10/14/16 17:43	10/19/16 18:36	1
MB MB										
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.9		40 - 110					10/14/16 17:43	10/19/16 18:36	1
Y Carrier	78.1		40 - 110					10/14/16 17:43	10/19/16 18:36	1

Lab Sample ID: LCS 160-274657/2-A
Matrix: Water
Analysis Batch: 275151

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 274657

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	19.2	23.95		2.59	1.00	0.646	pCi/L	125	56 - 140
LCS LCS									
Carrier	%Yield	Qualifier	Limits						
Ba Carrier	89.7		40 - 110						
Y Carrier	80.0		40 - 110						

Lab Sample ID: LCSD 160-274657/3-A
Matrix: Water
Analysis Batch: 275151

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 274657


Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	19.2	22.45		2.43	1.00	0.601	pCi/L	117	56 - 140	0.30	1
LCSD LCSD											
Carrier	%Yield	Qualifier	Limits								
Ba Carrier	92.0		40 - 110								
Y Carrier	82.2		40 - 110								

Chain of Custody Record

Client Information
 Sampler: Nick Pitts / Jason Rouss
 Lab PM: Whitmore, Cheyenne R
 Client Contact: Sarah Copeland
 E-Mail: cheyenne.whitmore@testamericainc.com
 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 #: 40007143
 CCR
 Site: Gaston Ash Pond (4)

Due Date Requested:
 TAT Requested (days): Routine
 PO #:
 WO #:
 Project #: 40007143
 SOW#:

Carrier Tracking No(s): 400-56525-24537.1
Page: Page 1 of 3
Job #: 400-127445

Analysis Requested
 9316_Ra226_9320_Ra228_Ra226Ra228_GPPC

 400-127445 COC

Sample Identification

Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Preservation Code	Special Instructions/Note
AW23391	9/12/16	1650	G	Water			D	FB-1 (Field Blank)
AW23392	9/12/16	1715	G	Water				MW-12
AW23393	9/13/16	0918	G	Water				MW-10
AW23394	9/13/16	1033	G	Water				MW-11
AW23395	9/13/16	1145	G	Water				MW-14
AW23396	9/13/16	1448	G	Water				MW-19
AW23397	9/14/16	1115	G	Water				MW-15R
AW23398	9/13/16	1045	G	Water				MW-1
AW23399	9/13/16	1225	G	Water				MW-8
AW23400	9/13/16	1356	G	Water				MW-9
AW23401	9/13/16	1445	G	Water				FB-3 (Field Blank)

Preservation Codes:
 A - HCL
 B - NaOH
 C - Zn Acetate
 D - Nitric Acid
 E - NaHSO4
 F - MeOH
 G - Amchlor
 H - Ascorbic Acid
 I - Ice
 J - DI Water
 K - EDTA
 L - EDA
 Other:
 M - Hexane
 N - None
 O - AsNaO2
 P - Na2O4S
 Q - Na2SO3
 R - Na2SO4
 S - H2SO4
 T - TSP Dodecahydrate
 U - Acetone
 V - MCAA
 W - Ph 4-5
 X - EDTA
 Z - other (specify)

Special Instructions/Note:
 Total Number of Containers: 1
 FB-1 (Field Blank)
 MW-12
 MW-10
 MW-11
 MW-14
 MW-19
 MW-15R
 MW-1
 MW-8
 MW-9
 FB-3 (Field Blank)

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

Deliverable Requested: Poison B Unknown Radiological
 Non-Hazard Flammable Skin Irritant

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant

Empty Kit Relinquished by: Sarah Copeland
 Date: 09/20/2016, 11:30
 Company: APC
 Relinquished by: Sarah Copeland
 Date/Time: 09/20/16 1535
 Company: APC
 Relinquished by:
 Date/Time:
 Company:
 Relinquished by:
 Date/Time:
 Company:
 Custody Seals Intact: Yes No
 Custody Seal No.:
 Cooler Temperature(s) °C and Other Remarks:
 Method of Shipment:
 Date/Time:
 Company:
 Received by:
 Date/Time:
 Company:
 Received by:
 Date/Time:
 Company:
 Cooler Temperature(s) °C and Other Remarks:



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, Zip: AL, 35040
 Phone: 205-664-6121 (Tel)
 Email: sgcopela@southemco.com
 Project Name: CCR
 Site: Gaston Ash Pond (4)

Sampler: Jason Rouss / Anthony Goggins
Lab P/M: Whitmire, Cheyenne R
Carrier Tracking No(s):
Phone:
E-Mail: cheyenne.whitmire@testamericainc.com

Due Date Requested:
TAT Requested (days): Routine
PO #:
WO #:
Project #: 40007143
SSOW#:

Analysis Requested

Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (W=water, S=solid, O=waste/oil, ET=Time Asap)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9316, Ra226, 9320, Ra228, Ra226Ra228, GPCC	Total Number of Containers	Special Instructions/Note:
AW23402	9/13/16	1510	G	Water	X	X	X	1	EB-1 (Equipment Blank)
AW23403	9/14/16	1030	G	Water	X	X	X	1	MW-2
AW23404	9/14/16	1200	G	Water	X	X	X	1	MW-3
AW23405	9/14/16	1216	G	Water	X	X	X	1	FB-2 (Field Blank)
AW23406	9/12/16	1609	G	Water	X	X	X	1	MW-13
AW23407	9/12/16	1609	G	Water	X	X	X	1	MW-13 Dup (Sample Duplicate)
AW23408	9/13/16	0826	G	Water	X	X	X	1	MW-5
AW23409	9/13/16	0826	G	Water	X	X	X	1	MW-5 Dup (Sample Duplicate)
AW23410	9/13/16	0935	G	Water	X	X	X	1	MW-22
AW23411	9/13/16	1037	G	Water	X	X	X	1	MW-21
AW23412	9/13/16	1121	G	Water	X	X	X	1	MW-6

Preservation Codes:
 A - HCL
 B - NaOH
 C - Zn Acetate
 D - Nitric Acid
 E - NaHSO4
 F - MeOH
 G - Amchlor
 H - Ascorbic Acid
 I - Ice
 J - DI Water
 K - EDTA
 L - EDA
 Other:

Preservation Codes:
 M - Hexane
 N - None
 O - AsNeO2
 P - Na2O4S
 Q - Na2SO3
 R - Na2SO3
 S - H2SO4
 T - TSP Dodecahydrate
 U - Acetone
 V - MCAA
 W - ph 4-5
 Z - other (specify)

Special Instructions/Note:

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

Deliverable Requested: Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological

Empty Kit Relinquished by: Sarah Copeland
Relinquished by: Sarah Copeland
Relinquished by:
Relinquished by:

Time: Date: 09/20/2016; 11:30
Received by: [Signature]
Received by:
Received by:

Company: APC
Company:
Company:

Date/Time: 9/20/16 1335
Date/Time:
Date/Time:

Custody Seal No.: Yes No
Cooler Temperature(s) °C and Other Remarks:



Chain of Custody Record

Client Information		Sampler: Anthony Goggins		Lab PM: Whitmire, Cheyenne R		Carrier Tracking No(s):	
Client Contact: Sarah Copeland		Phone:		E-Mail: cheyenne.whitmire@testamericainc.com		COC No: 400-56525-24537.1	
Company: Alabama Power General Test Laboratory		Due Date Requested:		Analysis Requested		Page 3 of 3	
Address: 744 County Rd 87 GSC #8		TAT Requested (days): Routine		9315_Ra226_9320_Ra228, Ra226Ra228_GFPCC		Job #: 400-171445	
City: Calera		PO #:		Perform MS/MSD (Yes or No)		Preservation Codes:	
State, Zip: AL, 35040		W/O #:		Field Filtered Sample (Yes or No)		M - Hexane N - None O - AsNaO2 P - Na2OHS Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 L - EDA Z - other (specify)	
Phone: 205-664-6121 (Tel)		Project #:		Total Number of Containers		Other:	
Email: sgcopela@southernco.com		CCR		X		Special Instructions/Note:	
Site: Gaston Ash Pond (4)		SSOW#:		X			
Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=wastefoil)	Preservation Code (BT=Bubble, A=Air)	Special Instructions/Note	
AW23413	9/13/16	1213	G	Water			MM-7
AW23414	9/13/16	1410	G	Water			MM-16
AW23415	9/13/16	1503	G	Water			MM-17
AW23416	9/14/16	0908	G	Water			MM-18
AW23417	9/14/16	1000	G	Water			MM-20
AW23418	9/14/16	1135	G	Water			MM-4
AW23419	9/14/16	1135	G	Water			MM-4 Dup (Sample Duplicate)
Possible Hazard Identification <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: Sarah Copeland Date/Time: 09/20/2016; 11:30 Relinquished by: Date/Time: Relinquished by: Date/Time: Relinquished by: Date/Time:							
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: Date/Time: 9/20/16 1535 Company: MA-160 Received by: Date/Time: Company: Received by: Date/Time: Company: Received by: Date/Time: Company:							
Cooler Temperature(s) °C and Other Remarks:							



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-127445-1
SDG Number: Gaston Ash Pond (4)

Login Number: 127445

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	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	N/A	
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	



Certification Summary

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

TestAmerica Job ID: 400-127445-1
 SDG: Gaston Ash Pond (4)

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16 *
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	MO00054	06-30-17
California	State Program	9	2886	03-31-18
Connecticut	State Program	1	PH-0241	03-31-17
Florida	NELAP	4	E87689	06-30-17
Illinois	NELAP	5	003757	11-30-16 *
Iowa	State Program	7	373	12-01-16 *
Kansas	NELAP	7	E-10236	10-31-17
Kentucky (DW)	State Program	4	90125	12-31-16
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-17
Louisiana (DW)	NELAP	6	LA160008	12-31-16
Maryland	State Program	3	310	09-30-17
Missouri	State Program	7	780	06-30-17
Nevada	State Program	9	MO000542016-1	07-31-17
New Jersey	NELAP	2	MO002	06-30-17
New York	NELAP	2	11616	03-31-17
North Dakota	State Program	8	R207	06-30-17
NRC	NRC		24-24817-01	12-31-22

* Certification renewal pending - certification considered valid.

Certification Summary

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

TestAmerica Job ID: 400-127445-1
SDG: Gaston Ash Pond (4)

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Oklahoma	State Program	6	9997	08-31-17
Pennsylvania	NELAP	3	68-00540	02-28-17 *
South Carolina	State Program	4	85002001	06-30-17
Texas	NELAP	6	T104704193-16-10	07-31-17
USDA	Federal		P330-14-0016	01-09-17
Utah	NELAP	8	MO000542016-8	07-31-17
Virginia	NELAP	3	460230	06-14-17
Washington	State Program	10	C592	08-30-17
West Virginia DEP	State Program	3	381	08-31-17

* Certification renewal pending - certification considered valid.

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

 Alabama Power



Sample Group : WMWGASAP_1059
Project/Site : Gaston Ash Pond
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:

Supervision:



Anions

Gaston Ash Pond

WMWGASAP_1059

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. All samples were received intact and properly preserved.
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>Chloride Batch ID</u>	<u>Fluoride Batch ID</u>	<u>Sulfate Batch ID</u>	<u>Project ID</u>
AW28357	581982	581984	581986	WMWGASAP_1059
AW28358	581982	581984	581986	WMWGASAP_1059
AW28359	581982	581984	581986	WMWGASAP_1059
AW28360	581982	581984	581986	WMWGASAP_1059
AW28361	581982	581984	581986	WMWGASAP_1059
AW28362	581982	581984	581986	WMWGASAP_1059
AW28363	581982	581984	581986	WMWGASAP_1059
AW28440	581982	581984	581986	WMWGASAP_1059
AW28441	581982	581984	581986	WMWGASAP_1059
AW28442	581982	581984	581986	WMWGASAP_1059
AW28443	581841	581842	581843	WMWGASAP_1059
AW28444	581841	581842	581843	WMWGASAP_1059
AW28445	581841	581842	581843	WMWGASAP_1059
AW28446	581841	581842	581843	WMWGASAP_1059
AW28447	581841	581842	581843	WMWGASAP_1059
AW28448	581841	581842	581843	WMWGASAP_1059
AW28449	581841	581842	581843	WMWGASAP_1059
AW28450	581841	581842	581843	WMWGASAP_1059
AW28463	581983	581985	581987	WMWGASAP_1059
AW28464	582275	582276	582277	WMWGASAP_1059
AW28465	582275	582276	582277	WMWGASAP_1059
AW28466	582275	582276	582277	WMWGASAP_1059
AW28467	582275	582276	582277	WMWGASAP_1059
AW28561	582275	582276	582277	WMWGASAP_1059
AW28562	582275	582276	582277	WMWGASAP_1059
AW28563	582275	582276	582277	WMWGASAP_1059
AW28564	582275	582276	582277	WMWGASAP_1059
AW28565	582275	582276	582277	WMWGASAP_1059
AW28566	582275	582276	582277	WMWGASAP_1059



4. All of the above samples were analyzed and prepared by EPA 300.0.
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 instrument performance check (IPC) was analyzed and all criteria were met.
- All laboratory reagent blanks were less than the method detection limits for the requested anions, with the following exceptions:
 1. The blank for anion sulfate in batch 581986 presented a negative concentration above the MDL of 0.3, at - 0.760 mg/L. One batch sample (AW28357) presented a negative sulfate concentration below 10x the absolute value of the sulfate blank, and should be considered as a quantitatively estimated non-detect concentration, with the potential for low bias on the reported RL value.
 2. The blank for anion sulfate in batch 581843 presented a negative concentration above the MDL of 0.3, at - 0.762 mg/L. Two batch samples (AW28446 and AW28450) presented negative sulfate concentrations below 10x the absolute value of the sulfate blank, and should be considered as quantitatively estimated non-detect concentrations, with the potential for low bias on the reported RL value. One batch sample (AW28449) presented a positive concentration above the MDL but below the RL and below 10x the absolute value of the sulfate blank, and should be considered as quantitatively estimated with the potential for low bias on the reported result.
 3. The blank for anion sulfate in batch 581987 presented a negative concentration above the MDL of 0.3, at - 0.765 mg/L. One associated batch sample (AW28463) presented a positive sulfate concentration below 10x the absolute value of the sulfate blank, and should be considered as a quantitatively estimated concentration with the potential for low bias on the reported result.
 4. The blank for anion sulfate in batch 582277 presented a negative concentration above the MDL of 0.3, at - 0.760 mg/L. Two batch samples (AW28467 and AW28566) presented negative sulfate concentrations below 10x the absolute value of the sulfate blank, and should be considered as quantitatively estimated non-detect concentrations, with the potential for low bias on the reported RL value. One batch sample (AW28564) presented a positive sulfate value below 10x the absolute value of the blank result, and should be considered as a quantitatively estimated concentration with the potential for low bias on the reported result.
- All laboratory fortified blanks (LFB) were within acceptance criteria for the anions requested, with the following exceptions:
 1. The closing LFB for fluoride in batch 581984 was below the lower recovery limit of 90%, at 88%. Due to low LFB recovery, the reported results for associated batch fluoride samples AW28357 - AW28361, inclusive, and AW28440 - AW28442, inclusive) are qualified as quantitatively estimated non-detect values with indication of potential low bias on the reported RL values; the reported results for fluoride in samples AW28362 and AW28363 are qualified as quantitatively estimated values with indication of potential low bias on the reported results.



2. No closing LFB was listed or run for the dilution re-analyses for chloride or sulfate in batches 581982 and 581986, respectively. Due to absence of a closing LFB, the reported results for the following sample dilutions are qualified as quantitatively estimated with indeterminate bias direction and magnitude: for chloride, AW28441 and AW28442; for sulfate, AW28360 - AW28363 inclusive, and AW28440 - AW28442, inclusive.
 3. The opening LFB for fluoride in batch 581842 was below the lower recovery limit of 90%, at 88%. Due to low LFB recovery, the reported results for associated batch fluoride samples AW28443 - AW28448, inclusive, and AW28450) are qualified as quantitatively estimated non-detect values with indication of potential low bias on the reported RL values; the reported result for fluoride in sample AW28449 is qualified as a quantitatively estimated value with indication of potential low bias on the reported result.
 4. No closing LFB was listed or run for the dilution re-analyses for chloride or sulfate in batches 581841 and 581843, respectively. Due to absence of a closing LFB, the reported results for the following sample dilutions are qualified as quantitatively estimated with indeterminate bias direction and magnitude: for chloride, AW28443 and AW28445; for sulfate, AW28443, AW28444 and AW28445.
 5. No closing LFB was listed or run for the dilution re-analyses for chloride or sulfate in batches 582275 and 582277, respectively. Due to absence of a closing LFB, the reported results for the following sample dilutions are qualified as quantitatively estimated with indeterminate bias direction and magnitude: for chloride, AW28565; for sulfate, AW28464 - AW28466 inclusive, and AW28562.
- 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 laboratory fortified matrix (LFM) sample was analyzed with each batch. All acceptance criteria for accuracy were met. It is noted that the concentration of sulfate in batch 581986 in the parent sample of the undiluted LFM was greater than 4x the spike-added sulfate concentration; the results for this LFM are not applicable to assessment for qualification. The sample and LFM were re-analyzed at a 10x dilution, with acceptable recoveries.
- A sample duplicate and/or laboratory fortified matrix duplicate were analyzed with each batch. All acceptance criteria for precision were met. It is noted that separate and distinct criteria for duplicate precision calculations, based on sample and duplicate anion concentrations, are used to assess precision compliance. These are as follow: if the sample and duplicate are both greater than 5x anion Reporting Limit (RL) concentration, the precision is calculated and reported as relative percent difference (RPD), with an acceptance range of 0 - 20%; if either the sample or duplicate are less than 5x anion RL, the precision is calculated and reported as the absolute value of the difference between the two concentrations, with an acceptance range of less than or equal to the anion RL value.



7. Samples AW28441, AW28442, AW28443 and AW28445 were re-analyzed for chloride and for sulfate at a 10x dilution, samples AW28360 - AW28363, inclusive, AW28440, AW28444, AW28464-AW28466 inclusive, and AW28562 were re-analyzed for sulfate at a 10x dilution, and sample AW28565 was re-analyzed for chloride at a 10x dilution, due to undiluted results exceeding the calibrated range of the detector. The dilution results for chloride and for sulfate for these respective samples should be used; reporting limit (RL) values are adjusted upward to reflect the dilution factor applied.

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AW28360	Sulfate	10X
AW28361	Sulfate	10X
AW28362	Sulfate	10X
AW28363	Sulfate	10X
AW28440	Sulfate	10X
AW28441	Chloride, Sulfate	10X
AW28442	Chloride, Sulfate	10X
AW28443	Chloride, Sulfate	10X
AW28444	Sulfate	10X
AW28445	Chloride, Sulfate	10X
AW28464	Sulfate	10X
AW28465	Sulfate	10X
AW28466	Sulfate	10X
AW28562	Sulfate	10X
AW28565	Chloride	10X

8. The raw data results are shown with dilution factors included, when dilutions are manually performed by the analyst.
 The raw data results are shown without dilution factor corrections, when dilutions are run automatically by the instrument.

Case Narrative



Metals ICP

Gaston Ash Pond

WMWGASAP_1059

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. All samples were received intact and properly preserved.
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>
AW28357	20161206B_20161207	WMWGASAP_1059
AW28358	20161206B_20161207	WMWGASAP_1059
AW28359	20161206B_20161207	WMWGASAP_1059
AW28360	20161206B_20161207	WMWGASAP_1059
AW28361	20161206B_20161207	WMWGASAP_1059
AW28362	20170111_20161206B_20161213CCR2_20170223B	WMWGASAP_1059
AW28363	20161206B_20161207	WMWGASAP_1059
AW28440	20161206B_20161207	WMWGASAP_1059
AW28441	20161206B_20161207	WMWGASAP_1059
AW28442	20161206C_20161207A	WMWGASAP_1059
AW28443	20161206C_20161207A	WMWGASAP_1059
AW28444	20161206C_20161207A	WMWGASAP_1059
AW28445	20161206C_20161207A	WMWGASAP_1059
AW28446	20161206C_20161207A	WMWGASAP_1059
AW28447	20161206C_20161207A	WMWGASAP_1059
AW28448	20161206C_20161207A	WMWGASAP_1059
AW28449	20161206C_20161207A	WMWGASAP_1059
AW28450	20161206C_20161207A	WMWGASAP_1059
AW28463	20161213CCR3_20161228A	WMWGASAP_1059
AW28464	20161213CCR3_20161228A	WMWGASAP_1059
AW28465	20161213CCR3_20161228A	WMWGASAP_1059
AW28466	20161213CCR3_20161228A	WMWGASAP_1059
AW28467	20161213CCR3_20161228A	WMWGASAP_1059
AW28561	20161213CCR3_20161228A	WMWGASAP_1059
AW28562	20161213CCR3_20161228A	WMWGASAP_1059
AW28563	20161213CCR3_20161228A	WMWGASAP_1059
AW28564	20161228B_20161227B	WMWGASAP_1059
AW28565	20161228B_20161227B	WMWGASAP_1059
AW28566	20161228B_20161227B	WMWGASAP_1059



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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met.
 - A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.
7. All samples were analyzed without a dilution with the following exceptions: The following samples were diluted due to sample concentrations from the undiluted analysis were over the high standard of the calibration curve.



<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AW28357	Calcium	10X
AW28358	Calcium	10X
AW28360	Calcium	10X
AW28361	Calcium	10X
AW28363	Calcium	10X
AW28440	Calcium	10X
AW28441	Calcium	10X
AW28441MS	Calcium	10X
AW28441MSD	Calcium	10X
AW28442	Calcium	10X
AW28443	Calcium	10X
AW28444	Calcium	10X
AW28445	Calcium	10X
AW28447	Calcium	10X
AW28448	Calcium	10X
AW28464	Calcium	10X
AW28465	Calcium	10X
AW28561	Calcium	10X
AW28562	Calcium	10X
AW28362	Calcium	10X
AW28565	Calcium	10X

Sample AW28362 was originally run in batch 20161206B, Calcium was over the curve. Calcium was analyzed again in batch 20170111, but did not confirm original result. Calcium was analyzed for a second confirmation and reported in batch 20170223B.

8. The raw data results include both results corrected for dilution and results not corrected for dilution.



Metals ICPMS

Gaston Ash Pond

WMWGASAP_1059

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. All samples were received intact and properly preserved.
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>
AW28357	582193	WMWGASAP_1059
AW28358	582193	WMWGASAP_1059
AW28359	582193	WMWGASAP_1059
AW28360	582193	WMWGASAP_1059
AW28361	582193	WMWGASAP_1059
AW28362	582193	WMWGASAP_1059
AW28363	582193	WMWGASAP_1059
AW28440	582193	WMWGASAP_1059
AW28441	582193	WMWGASAP_1059
AW28442	582193	WMWGASAP_1059
AW28443	582194	WMWGASAP_1059
AW28444	582194	WMWGASAP_1059
AW28445	582194	WMWGASAP_1059
AW28446	582194	WMWGASAP_1059
AW28447	582194	WMWGASAP_1059
AW28448	582194	WMWGASAP_1059
AW28449	582194	WMWGASAP_1059
AW28450	582194	WMWGASAP_1059
AW28463	582195	WMWGASAP_1059
AW28464	582196	WMWGASAP_1059
AW28465	582196	WMWGASAP_1059
AW28466	582196	WMWGASAP_1059
AW28467	582196	WMWGASAP_1059
AW28561	582196	WMWGASAP_1059
AW28562	582196	WMWGASAP_1059
AW28563	582196	WMWGASAP_1059
AW28564	582196	WMWGASAP_1059
AW28565	582196	WMWGASAP_1059
AW28566	582196	WMWGASAP_1059

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 Ash Pond

WMWGASAP_1059

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. All samples were received intact and properly preserved.
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>
AW28357	581781	WMWGASAP_1059
AW28358	581781	WMWGASAP_1059
AW28359	581781	WMWGASAP_1059
AW28360	581781	WMWGASAP_1059
AW28361	581781	WMWGASAP_1059
AW28362	581781	WMWGASAP_1059
AW28363	581781	WMWGASAP_1059
AW28440	582539	WMWGASAP_1059
AW28441	582539	WMWGASAP_1059
AW28442	582539	WMWGASAP_1059
AW28443	582539	WMWGASAP_1059
AW28444	582539	WMWGASAP_1059
AW28445	582539	WMWGASAP_1059
AW28446	582539	WMWGASAP_1059
AW28447	582539	WMWGASAP_1059
AW28448	582539	WMWGASAP_1059
AW28449	582539	WMWGASAP_1059
AW28450	582540	WMWGASAP_1059
AW28463	582541	WMWGASAP_1059
AW28464	582541	WMWGASAP_1059
AW28465	582541	WMWGASAP_1059
AW28466	582541	WMWGASAP_1059
AW28467	582541	WMWGASAP_1059
AW28561	582541	WMWGASAP_1059
AW28562	582541	WMWGASAP_1059
AW28563	582541	WMWGASAP_1059
AW28564	582542	WMWGASAP_1059
AW28565	582542	WMWGASAP_1059
AW28566	582542	WMWGASAP_1059



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 Ash Pond

WMWGASAP_1059

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. All samples were received intact and properly preserved.
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>
AW28357	581907	WMWGASAP_1059
AW28358	581907	WMWGASAP_1059
AW28359	581907	WMWGASAP_1059
AW28360	581907	WMWGASAP_1059
AW28361	581907	WMWGASAP_1059
AW28362	581907	WMWGASAP_1059
AW28363	581907	WMWGASAP_1059
AW28440	581907	WMWGASAP_1059
AW28441	581908	WMWGASAP_1059
AW28442	581908	WMWGASAP_1059
AW28443	581908	WMWGASAP_1059
AW28444	581908	WMWGASAP_1059
AW28445	581908	WMWGASAP_1059
AW28446	581908	WMWGASAP_1059
AW28447	581908	WMWGASAP_1059
AW28448	581908	WMWGASAP_1059
AW28449	581908	WMWGASAP_1059
AW28450	581908	WMWGASAP_1059
AW28463	582104	WMWGASAP_1059
AW28464	582104	WMWGASAP_1059
AW28465	582104	WMWGASAP_1059
AW28466	582104	WMWGASAP_1059
AW28467	582104	WMWGASAP_1059
AW28561	581981	WMWGASAP_1059
AW28562	581981	WMWGASAP_1059
AW28563	581981	WMWGASAP_1059
AW28564	581981	WMWGASAP_1059
AW28565	581981	WMWGASAP_1059
AW28566	581981	WMWGASAP_1059



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 0.5 mg 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, with the exception of batch 582104. Samples AW28463-28467, inclusive should be considered as quantitatively estimated results.
- All samples were between 2.5 mg and 200 mg residue with the exception of AW28446, AW28450, AW28467 and AW28566 the results were <2.5 mg.

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Nov-16
 Customer ID:
 Delivery Date: 15-Nov-16

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AW28357

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	J 0.000748	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0353	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/6/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	12/7/2016	EPA 200.7		10	1.0	5.0	46.0	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/17/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/6/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/17/2016	SM 2540C		1		25	197	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	4.76	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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

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

* Test results for these accredited parameters 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:

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Nov-16
 Customer ID:
 Delivery Date: 15-Nov-16

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AW28357

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW28363 Mercury, Total by CVAA	mg/L	0.0000863	0.0005	0.004	0.00396	0.00398	0.00393	0.0034 to 0.0046	99.1	70 to 130	0.348	20	
AW28441 Calcium, Total	mg/L	-0.0368	0.22	5.00	57.3	57.5	5.04	4.25 to 5.75	110	70 to 130	0.348	20	
AW28442 Selenium, Total	mg/L	0.0000775	0.0044	0.10	0.0928	0.0940	0.0969	0.085 to 0.115	92.8	70 to 130	1.31	20	
AW28442 Antimony, Total	mg/L	0.000123	0.00132	0.10	0.0930	0.0938	0.0921	0.085 to 0.115	93.0	70 to 130	0.837	20	
AW28442 Thallium, Total	mg/L	0.0000131	0.00044	0.10	0.103	0.103	0.0949	0.085 to 0.115	103	70 to 130	0.532	20	
AW28441 Lithium, Total	mg/L	-0.0000843	0.022	0.20	0.223	0.225	0.212	0.17 to 0.23	112	70 to 130	0.893	20	
AW28442 Barium, Total	mg/L	-0.000000374	0.0044	0.10	0.110	0.111	0.0919	0.085 to 0.115	94.6	70 to 130	0.522	20	
AW28442 Chromium, Total	mg/L	0.00000785	0.0044	0.10	0.0976	0.0985	0.0929	0.085 to 0.115	97.6	70 to 130	0.973	20	
AW28442 Beryllium, Total	mg/L	0.0000110	0.00132	0.10	0.0913	0.0926	0.0904	0.085 to 0.115	91.3	70 to 130	1.43	20	
AW28442 Molybdenum, Total	mg/L	0.0000138	0.0044	0.10	0.103	0.105	0.0953	0.085 to 0.115	95.6	70 to 130	1.02	20	
AW28442 Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0960	0.0968	0.0941	0.085 to 0.115	96.0	70 to 130	0.839	20	
AW28442 Cadmium, Total	mg/L	0.0000103	0.00044	0.10	0.0941	0.0942	0.0947	0.085 to 0.115	94.1	70 to 130	0.0769	20	
AW28441 Boron, Total	mg/L	-0.000496	0.044	1.00	3.09	3.09	0.995	0.85 to 1.15	101	70 to 130	0.00	20	
AW28442 Cobalt, Total	mg/L	0.00000596	0.0044	0.10	0.0910	0.0918	0.0896	0.085 to 0.115	91.0	70 to 130	0.898	20	
AW28442 Lead, Total	mg/L	0.0000112	0.0022	0.10	0.103	0.104	0.0964	0.085 to 0.115	101	70 to 130	0.628	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:

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Nov-16
 Customer ID:
 Delivery Date: 15-Nov-16

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AW28357

Sample	Analysis	Units MB	MB			Sample		LFB	Rec			Prec
			Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW28442	Fluoride, Total	mg/L -0.058	0.3	2.00	1.81	-0.034	2.20	1.8 to 2.2	90.5	80 to 120	0	20
AW28440	Solids, Dissolved	mg/L -12	25			432	41.0	40 to 60			0.699	5
AW28442	Chloride, Total	mg/L 0.000	0.25	100	126	26.5	9.88	9 to 11	99.6	80 to 120	0.378	20
AW28442	Sulfate, Total	mg/L -0.760	1.0	200	369	163	20.8	18 to 22	104	80 to 120	0.615	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Nov-16
 Customer ID:
 Delivery Date: 15-Nov-16

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AW28358

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	J 0.00241	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0768	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/6/2016	EPA 200.7		1	0.02	0.1	0.323	mg/L
* Calcium, Total	HRG	12/7/2016	EPA 200.7		10	1.0	5.0	61.4	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/17/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/6/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/17/2016	SM 2540C		1		50	322	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	19.7	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1	91.2	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.

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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:

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Nov-16
 Customer ID:
 Delivery Date: 15-Nov-16

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AW28358

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AW28363	Mercury, Total by CVAA	mg/L	0.0000863	0.0005	0.004	0.00396	0.00398	0.00393	0.0034 to 0.0046	99.1	70 to 130	0.348	20
AW28441	Calcium, Total	mg/L	-0.0368	0.22	5.00	57.3	57.5	5.04	4.25 to 5.75	110	70 to 130	0.348	20
AW28442	Selenium, Total	mg/L	0.0000775	0.0044	0.10	0.0928	0.0940	0.0969	0.085 to 0.115	92.8	70 to 130	1.31	20
AW28442	Beryllium, Total	mg/L	0.0000110	0.00132	0.10	0.0913	0.0926	0.0904	0.085 to 0.115	91.3	70 to 130	1.43	20
AW28442	Molybdenum, Total	mg/L	0.0000138	0.0044	0.10	0.103	0.105	0.0953	0.085 to 0.115	95.6	70 to 130	1.02	20
AW28442	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0960	0.0968	0.0941	0.085 to 0.115	96.0	70 to 130	0.839	20
AW28442	Cadmium, Total	mg/L	0.0000103	0.00044	0.10	0.0941	0.0942	0.0947	0.085 to 0.115	94.1	70 to 130	0.0769	20
AW28441	Lithium, Total	mg/L	-0.0000843	0.022	0.20	0.223	0.225	0.212	0.17 to 0.23	112	70 to 130	0.893	20
AW28442	Barium, Total	mg/L	-0.000000374	0.0044	0.10	0.110	0.111	0.0919	0.085 to 0.115	94.6	70 to 130	0.522	20
AW28442	Chromium, Total	mg/L	0.00000785	0.0044	0.10	0.0976	0.0985	0.0929	0.085 to 0.115	97.6	70 to 130	0.973	20
AW28441	Boron, Total	mg/L	-0.000496	0.044	1.00	3.09	3.09	0.995	0.85 to 1.15	101	70 to 130	0.00	20
AW28442	Cobalt, Total	mg/L	0.00000596	0.0044	0.10	0.0910	0.0918	0.0896	0.085 to 0.115	91.0	70 to 130	0.898	20
AW28442	Lead, Total	mg/L	0.0000112	0.0022	0.10	0.103	0.104	0.0964	0.085 to 0.115	101	70 to 130	0.628	20
AW28442	Antimony, Total	mg/L	0.000123	0.00132	0.10	0.0930	0.0938	0.0921	0.085 to 0.115	93.0	70 to 130	0.837	20
AW28442	Thallium, Total	mg/L	0.0000131	0.00044	0.10	0.103	0.103	0.0949	0.085 to 0.115	103	70 to 130	0.532	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:

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Nov-16
 Customer ID:
 Delivery Date: 15-Nov-16

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AW28358

Sample	Analysis	Units MB	MB			Sample		LFB	Rec			Prec
			Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW28442	Fluoride, Total	mg/L -0.058	0.3	2.00	1.81	-0.034	2.20	1.8 to 2.2	90.5	80 to 120	0	20
AW28440	Solids, Dissolved	mg/L -12	25			432	41.0	40 to 60			0.699	5
AW28442	Chloride, Total	mg/L 0.000	0.25	100	126	26.5	9.88	9 to 11	99.6	80 to 120	0.378	20
AW28442	Sulfate, Total	mg/L -0.760	1.0	200	369	163	20.8	18 to 22	104	80 to 120	0.615	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:

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Nov-16
 Customer ID:
 Delivery Date: 15-Nov-16

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AW28359

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	J 0.00973	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/6/2016	EPA 200.7		1	0.02	0.1	0.126	mg/L
* Calcium, Total	HRG	12/6/2016	EPA 200.7		1	0.1	0.5	36.2	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/17/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/6/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/17/2016	SM 2540C		1		25	185	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	5.95	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1	32.1	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Nov-16
 Customer ID:
 Delivery Date: 15-Nov-16

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AW28359

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AW28363	Mercury, Total by CVAA	mg/L	0.0000863	0.0005	0.004	0.00396	0.00398	0.00393	0.0034 to 0.0046		99.1	70 to 130	0.348	20
AW28442	Beryllium, Total	mg/L	0.0000110	0.00132	0.10	0.0913	0.0926	0.0904	0.085 to 0.115		91.3	70 to 130	1.43	20
AW28442	Molybdenum, Total	mg/L	0.0000138	0.0044	0.10	0.103	0.105	0.0953	0.085 to 0.115		95.6	70 to 130	1.02	20
AW28442	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0960	0.0968	0.0941	0.085 to 0.115		96.0	70 to 130	0.839	20
AW28442	Cadmium, Total	mg/L	0.0000103	0.00044	0.10	0.0941	0.0942	0.0947	0.085 to 0.115		94.1	70 to 130	0.0769	20
AW28441	Lithium, Total	mg/L	-0.0000843	0.022	0.20	0.223	0.225	0.212	0.17 to 0.23		112	70 to 130	0.893	20
AW28442	Barium, Total	mg/L	-0.000000374	0.0044	0.10	0.110	0.111	0.0919	0.085 to 0.115		94.6	70 to 130	0.522	20
AW28442	Chromium, Total	mg/L	0.00000785	0.0044	0.10	0.0976	0.0985	0.0929	0.085 to 0.115		97.6	70 to 130	0.973	20
AW28441	Boron, Total	mg/L	-0.000496	0.044	1.00	3.09	3.09	0.995	0.85 to 1.15		101	70 to 130	0.00	20
AW28442	Cobalt, Total	mg/L	0.00000596	0.0044	0.10	0.0910	0.0918	0.0896	0.085 to 0.115		91.0	70 to 130	0.898	20
AW28442	Lead, Total	mg/L	0.0000112	0.0022	0.10	0.103	0.104	0.0964	0.085 to 0.115		101	70 to 130	0.628	20
AW28441	Calcium, Total	mg/L	-0.0368	0.22	5.00	57.3	57.5	5.04	4.25 to 5.75		110	70 to 130	0.348	20
AW28442	Selenium, Total	mg/L	0.0000775	0.0044	0.10	0.0928	0.0940	0.0969	0.085 to 0.115		92.8	70 to 130	1.31	20
AW28442	Antimony, Total	mg/L	0.000123	0.00132	0.10	0.0930	0.0938	0.0921	0.085 to 0.115		93.0	70 to 130	0.837	20
AW28442	Thallium, Total	mg/L	0.0000131	0.00044	0.10	0.103	0.103	0.0949	0.085 to 0.115		103	70 to 130	0.532	20

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Laboratory certification ID: E571114

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Comments:

Alabama Power General Test Laboratory
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Nov-16
 Customer ID:
 Delivery Date: 15-Nov-16

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AW28359

Sample	Analysis	Units MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec Rec	Rec Limit	Prec	Prec Limit
AW28442	Fluoride, Total	mg/L -0.058	0.3	2.00	1.81	-0.034	2.20	1.8 to 2.2	90.5	80 to 120	0	20
AW28440	Solids, Dissolved	mg/L -12	25			432	41.0	40 to 60			0.699	5
AW28442	Chloride, Total	mg/L 0.000	0.25	100	126	26.5	9.88	9 to 11	99.6	80 to 120	0.378	20
AW28442	Sulfate, Total	mg/L -0.760	1.0	200	369	163	20.8	18 to 22	104	80 to 120	0.615	20

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Laboratory certification ID: E571114

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Comments:

CC:

Alabama Power General Test Laboratory
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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Nov-16
 Customer ID:
 Delivery Date: 15-Nov-16

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AW28360

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	J 0.00365	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0634	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/6/2016	EPA 200.7		1	0.02	0.1	3.51	mg/L
* Calcium, Total	HRG	12/7/2016	EPA 200.7		10	1.0	5.0	156	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/17/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/6/2016	EPA 200.7		1	0.01	0.05	0.114	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.630	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/17/2016	SM 2540C		1		100	804	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	16.1	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/18/2016	EPA 300.0		10	3.0	10	551	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

Alabama Power General Test Laboratory
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 Calera, AL 35040
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Nov-16
 Customer ID:
 Delivery Date: 15-Nov-16

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AW28360

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AW28363	Mercury, Total by CVAA	mg/L	0.0000863	0.0005	0.004	0.00396	0.00398	0.00393	0.0034 to 0.0046	99.1	70 to 130	0.348	20
AW28441	Calcium, Total	mg/L	-0.0368	0.22	5.00	57.3	57.5	5.04	4.25 to 5.75	110	70 to 130	0.348	20
AW28442	Selenium, Total	mg/L	0.0000775	0.0044	0.10	0.0928	0.0940	0.0969	0.085 to 0.115	92.8	70 to 130	1.31	20
AW28442	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0960	0.0968	0.0941	0.085 to 0.115	96.0	70 to 130	0.839	20
AW28442	Cadmium, Total	mg/L	0.0000103	0.00044	0.10	0.0941	0.0942	0.0947	0.085 to 0.115	94.1	70 to 130	0.0769	20
AW28442	Beryllium, Total	mg/L	0.0000110	0.00132	0.10	0.0913	0.0926	0.0904	0.085 to 0.115	91.3	70 to 130	1.43	20
AW28442	Molybdenum, Total	mg/L	0.0000138	0.0044	0.10	0.103	0.105	0.0953	0.085 to 0.115	95.6	70 to 130	1.02	20
AW28442	Antimony, Total	mg/L	0.000123	0.00132	0.10	0.0930	0.0938	0.0921	0.085 to 0.115	93.0	70 to 130	0.837	20
AW28442	Thallium, Total	mg/L	0.0000131	0.00044	0.10	0.103	0.103	0.0949	0.085 to 0.115	103	70 to 130	0.532	20
AW28441	Lithium, Total	mg/L	-0.0000843	0.022	0.20	0.223	0.225	0.212	0.17 to 0.23	112	70 to 130	0.893	20
AW28442	Barium, Total	mg/L	-0.000000374	0.0044	0.10	0.110	0.111	0.0919	0.085 to 0.115	94.6	70 to 130	0.522	20
AW28442	Chromium, Total	mg/L	0.00000785	0.0044	0.10	0.0976	0.0985	0.0929	0.085 to 0.115	97.6	70 to 130	0.973	20
AW28441	Boron, Total	mg/L	-0.000496	0.044	1.00	3.09	3.09	0.995	0.85 to 1.15	101	70 to 130	0.00	20
AW28442	Cobalt, Total	mg/L	0.00000596	0.0044	0.10	0.0910	0.0918	0.0896	0.085 to 0.115	91.0	70 to 130	0.898	20
AW28442	Lead, Total	mg/L	0.0000112	0.0022	0.10	0.103	0.104	0.0964	0.085 to 0.115	101	70 to 130	0.628	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
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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Nov-16
 Customer ID:
 Delivery Date: 15-Nov-16

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AW28360

Sample	Analysis	Units MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec Rec	Rec Limit	Prec	Prec Limit
AW28442	Fluoride, Total	mg/L -0.058	0.3	2.00	1.81	-0.034	2.20	1.8 to 2.2	90.5	80 to 120	0	20
AW28440	Solids, Dissolved	mg/L -12	25			432	41.0	40 to 60			0.699	5
AW28442	Chloride, Total	mg/L 0.000	0.25	100	126	26.5	9.88	9 to 11	99.6	80 to 120	0.378	20
AW28442	Sulfate, Total	mg/L -0.760	1.0	200	369	163	20.8	18 to 22	104	80 to 120	0.615	20

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Nov-16
 Customer ID:
 Delivery Date: 15-Nov-16

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AW28361

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	J 0.00232	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0422	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/6/2016	EPA 200.7		1	0.02	0.1	1.31	mg/L
* Calcium, Total	HRG	12/7/2016	EPA 200.7		10	1.0	5.0	105	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/17/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/6/2016	EPA 200.7		1	0.01	0.05	J 0.0398	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0171	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	J 0.000367	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/17/2016	SM 2540C		1		50	514	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	10.3	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/18/2016	EPA 300.0		10	3.0	10	151	mg/L

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Nov-16
 Customer ID:
 Delivery Date: 15-Nov-16

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AW28361

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AW28363	Mercury, Total by CVAA	mg/L	0.0000863	0.0005	0.004	0.00396	0.00398	0.00393	0.0034 to 0.0046		99.1	70 to 130	0.348	20
AW28442	Beryllium, Total	mg/L	0.0000110	0.00132	0.10	0.0913	0.0926	0.0904	0.085 to 0.115		91.3	70 to 130	1.43	20
AW28442	Molybdenum, Total	mg/L	0.0000138	0.0044	0.10	0.103	0.105	0.0953	0.085 to 0.115		95.6	70 to 130	1.02	20
AW28441	Lithium, Total	mg/L	-0.0000843	0.022	0.20	0.223	0.225	0.212	0.17 to 0.23		112	70 to 130	0.893	20
AW28442	Barium, Total	mg/L	-0.00000374	0.0044	0.10	0.110	0.111	0.0919	0.085 to 0.115		94.6	70 to 130	0.522	20
AW28442	Chromium, Total	mg/L	0.00000785	0.0044	0.10	0.0976	0.0985	0.0929	0.085 to 0.115		97.6	70 to 130	0.973	20
AW28442	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0960	0.0968	0.0941	0.085 to 0.115		96.0	70 to 130	0.839	20
AW28442	Cadmium, Total	mg/L	0.0000103	0.00044	0.10	0.0941	0.0942	0.0947	0.085 to 0.115		94.1	70 to 130	0.0769	20
AW28441	Boron, Total	mg/L	-0.000496	0.044	1.00	3.09	3.09	0.995	0.85 to 1.15		101	70 to 130	0.00	20
AW28442	Cobalt, Total	mg/L	0.00000596	0.0044	0.10	0.0910	0.0918	0.0896	0.085 to 0.115		91.0	70 to 130	0.898	20
AW28442	Lead, Total	mg/L	0.0000112	0.0022	0.10	0.103	0.104	0.0964	0.085 to 0.115		101	70 to 130	0.628	20
AW28442	Antimony, Total	mg/L	0.000123	0.00132	0.10	0.0930	0.0938	0.0921	0.085 to 0.115		93.0	70 to 130	0.837	20
AW28442	Thallium, Total	mg/L	0.0000131	0.00044	0.10	0.103	0.103	0.0949	0.085 to 0.115		103	70 to 130	0.532	20
AW28441	Calcium, Total	mg/L	-0.0368	0.22	5.00	57.3	57.5	5.04	4.25 to 5.75		110	70 to 130	0.348	20
AW28442	Selenium, Total	mg/L	0.0000775	0.0044	0.10	0.0928	0.0940	0.0969	0.085 to 0.115		92.8	70 to 130	1.31	20

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Nov-16
 Customer ID:
 Delivery Date: 15-Nov-16

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AW28361

Sample	Analysis	Units MB	MB Limit	Spike	LFM	Sample Duplicate	LFB LFB	LFB Limit	Rec Rec	Rec Limit	Prec Prec	Prec Limit
AW28442	Fluoride, Total	mg/L -0.058	0.3	2.00	1.81	-0.034	2.20	1.8 to 2.2	90.5	80 to 120	0	20
AW28440	Solids, Dissolved	mg/L -12	25			432	41.0	40 to 60			0.699	5
AW28442	Chloride, Total	mg/L 0.000	0.25	100	126	26.5	9.88	9 to 11	99.6	80 to 120	0.378	20
AW28442	Sulfate, Total	mg/L -0.760	1.0	200	369	163	20.8	18 to 22	104	80 to 120	0.615	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:

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Nov-16
 Customer ID:
 Delivery Date: 15-Nov-16

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AW28362

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	J 0.00370	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0296	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/6/2016	EPA 200.7		1	0.02	0.1	1.34	mg/L
* Calcium, Total	HRG	2/23/2017	EPA 200.7		10	1.00	5.0	41.0	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/17/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/6/2016	EPA 200.7		1	0.01	0.05	0.0851	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.305	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/17/2016	SM 2540C		1		25	249	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	10.4	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	J 0.022	mg/L
* Sulfate, Total	SES	11/18/2016	EPA 300.0		10	3.0	10	131	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Nov-16
 Customer ID:
 Delivery Date: 15-Nov-16

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AW28362

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW28363 Mercury, Total by CVAA	mg/L	0.0000863	0.0005	0.004	0.00396	0.00398	0.00393	0.0034 to 0.0046	99.1	70 to 130	0.348	20	
AW28442 Selenium, Total	mg/L	0.0000775	0.0044	0.10	0.0928	0.0940	0.0969	0.085 to 0.115	92.8	70 to 130	1.31	20	
AW28442 Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0960	0.0968	0.0941	0.085 to 0.115	96.0	70 to 130	0.839	20	
AW28442 Cadmium, Total	mg/L	0.0000103	0.00044	0.10	0.0941	0.0942	0.0947	0.085 to 0.115	94.1	70 to 130	0.0769	20	
AX00850 Calcium, Total	mg/L	-0.00867	0.22	5.00	52.0	52.3	4.75	4.25 to 5.75	85.3	70 to 130	0.640	20	
AW28442 Antimony, Total	mg/L	0.000123	0.00132	0.10	0.0930	0.0938	0.0921	0.085 to 0.115	93.0	70 to 130	0.837	20	
AW28442 Thallium, Total	mg/L	0.0000131	0.00044	0.10	0.103	0.103	0.0949	0.085 to 0.115	103	70 to 130	0.532	20	
AW28441 Lithium, Total	mg/L	-0.0000843	0.022	0.20	0.223	0.225	0.212	0.17 to 0.23	112	70 to 130	0.893	20	
AW28442 Barium, Total	mg/L	-0.000000374	0.0044	0.10	0.110	0.111	0.0919	0.085 to 0.115	94.6	70 to 130	0.522	20	
AW28442 Chromium, Total	mg/L	0.00000785	0.0044	0.10	0.0976	0.0985	0.0929	0.085 to 0.115	97.6	70 to 130	0.973	20	
AW28442 Beryllium, Total	mg/L	0.0000110	0.00132	0.10	0.0913	0.0926	0.0904	0.085 to 0.115	91.3	70 to 130	1.43	20	
AW28442 Molybdenum, Total	mg/L	0.0000138	0.0044	0.10	0.103	0.105	0.0953	0.085 to 0.115	95.6	70 to 130	1.02	20	
AW28441 Boron, Total	mg/L	-0.000496	0.044	1.00	3.09	3.09	0.995	0.85 to 1.15	101	70 to 130	0.00	20	
AW28442 Cobalt, Total	mg/L	0.00000596	0.0044	0.10	0.0910	0.0918	0.0896	0.085 to 0.115	91.0	70 to 130	0.898	20	
AW28442 Lead, Total	mg/L	0.0000112	0.0022	0.10	0.103	0.104	0.0964	0.085 to 0.115	101	70 to 130	0.628	20	

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Laboratory certification ID: E571114

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Alabama Power General Test Laboratory
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Nov-16
 Customer ID:
 Delivery Date: 15-Nov-16

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AW28362

Sample	Analysis	Units MB	MB			Sample		LFB	Rec			Prec
			Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW28442	Fluoride, Total	mg/L -0.058	0.3	2.00	1.81	-0.034	2.20	1.8 to 2.2	90.5	80 to 120	0	20
AW28440	Solids, Dissolved	mg/L -12	25			432	41.0	40 to 60			0.699	5
AW28442	Chloride, Total	mg/L 0.000	0.25	100	126	26.5	9.88	9 to 11	99.6	80 to 120	0.378	20
AW28442	Sulfate, Total	mg/L -0.760	1.0	200	369	163	20.8	18 to 22	104	80 to 120	0.615	20

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Nov-16
 Customer ID:
 Delivery Date: 15-Nov-16

Description: Gaston Ash Pond - MW-16 Dup

Laboratory ID Number: AW28363

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	J 0.00368	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0292	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/6/2016	EPA 200.7		1	0.02	0.1	1.34	mg/L
* Calcium, Total	HRG	12/7/2016	EPA 200.7		10	1.0	5.0	41.1	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/17/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/6/2016	EPA 200.7		1	0.01	0.05	0.0839	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.301	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/17/2016	SM 2540C		1		25	260	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	10.4	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	J 0.022	mg/L
* Sulfate, Total	SES	11/18/2016	EPA 300.0		10	3.0	10	130	mg/L

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

Comments:

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Nov-16
 Customer ID:
 Delivery Date: 15-Nov-16

Description: Gaston Ash Pond - MW-16 Dup

Laboratory ID Number: AW28363

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AW28363	Mercury, Total by CVAA	mg/L	0.0000863	0.0005	0.004	0.00396	0.00398	0.00393	0.0034 to 0.0046	99.1	70 to 130	0.348	20
AW28442	Antimony, Total	mg/L	0.000123	0.00132	0.10	0.0930	0.0938	0.0921	0.085 to 0.115	93.0	70 to 130	0.837	20
AW28442	Thallium, Total	mg/L	0.0000131	0.00044	0.10	0.103	0.103	0.0949	0.085 to 0.115	103	70 to 130	0.532	20
AW28441	Boron, Total	mg/L	-0.000496	0.044	1.00	3.09	3.09	0.995	0.85 to 1.15	101	70 to 130	0.00	20
AW28442	Cobalt, Total	mg/L	0.00000596	0.0044	0.10	0.0910	0.0918	0.0896	0.085 to 0.115	91.0	70 to 130	0.898	20
AW28442	Lead, Total	mg/L	0.0000112	0.0022	0.10	0.103	0.104	0.0964	0.085 to 0.115	101	70 to 130	0.628	20
AW28441	Calcium, Total	mg/L	-0.0368	0.22	5.00	57.3	57.5	5.04	4.25 to 5.75	110	70 to 130	0.348	20
AW28442	Selenium, Total	mg/L	0.0000775	0.0044	0.10	0.0928	0.0940	0.0969	0.085 to 0.115	92.8	70 to 130	1.31	20
AW28442	Beryllium, Total	mg/L	0.0000110	0.00132	0.10	0.0913	0.0926	0.0904	0.085 to 0.115	91.3	70 to 130	1.43	20
AW28442	Molybdenum, Total	mg/L	0.0000138	0.0044	0.10	0.103	0.105	0.0953	0.085 to 0.115	95.6	70 to 130	1.02	20
AW28442	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0960	0.0968	0.0941	0.085 to 0.115	96.0	70 to 130	0.839	20
AW28442	Cadmium, Total	mg/L	0.0000103	0.00044	0.10	0.0941	0.0942	0.0947	0.085 to 0.115	94.1	70 to 130	0.0769	20
AW28441	Lithium, Total	mg/L	-0.0000843	0.022	0.20	0.223	0.225	0.212	0.17 to 0.23	112	70 to 130	0.893	20
AW28442	Barium, Total	mg/L	-0.000000374	0.0044	0.10	0.110	0.111	0.0919	0.085 to 0.115	94.6	70 to 130	0.522	20
AW28442	Chromium, Total	mg/L	0.00000785	0.0044	0.10	0.0976	0.0985	0.0929	0.085 to 0.115	97.6	70 to 130	0.973	20

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Laboratory certification ID: E571114

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Comments:

Alabama Power General Test Laboratory
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 14-Nov-16
 Customer ID:
 Delivery Date: 15-Nov-16

Description: Gaston Ash Pond - MW-16 Dup

Laboratory ID Number: AW28363

Sample	Analysis	Units MB	MB			Sample		LFB	Rec			Prec
			Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW28442	Fluoride, Total	mg/L -0.058	0.3	2.00	1.81	-0.034	2.20	1.8 to 2.2	90.5	80 to 120	0	20
AW28440	Solids, Dissolved	mg/L -12	25			432	41.0	40 to 60			0.699	5
AW28442	Chloride, Total	mg/L 0.000	0.25	100	126	26.5	9.88	9 to 11	99.6	80 to 120	0.378	20
AW28442	Sulfate, Total	mg/L -0.760	1.0	200	369	163	20.8	18 to 22	104	80 to 120	0.615	20

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AW28440

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0225	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/6/2016	EPA 200.7		1	0.02	0.1	1.72	mg/L
* Calcium, Total	HRG	12/7/2016	EPA 200.7		10	1.0	5.0	87.9	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/6/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/17/2016	SM 2540C		1		50	426	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	14.3	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/18/2016	EPA 300.0		10	3.0	10	176	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AW28440

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW28442 Antimony, Total	mg/L	0.000123	0.00132	0.10	0.0930	0.0938	0.0921	0.085 to 0.115	93.0	70 to 130	0.837	20	
AW28442 Thallium, Total	mg/L	0.0000131	0.00044	0.10	0.103	0.103	0.0949	0.085 to 0.115	103	70 to 130	0.532	20	
AW28442 Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0960	0.0968	0.0941	0.085 to 0.115	96.0	70 to 130	0.839	20	
AW28442 Cadmium, Total	mg/L	0.0000103	0.00044	0.10	0.0941	0.0942	0.0947	0.085 to 0.115	94.1	70 to 130	0.0769	20	
AW28441 Calcium, Total	mg/L	-0.0368	0.22	5.00	57.3	57.5	5.04	4.25 to 5.75	110	70 to 130	0.348	20	
AW28442 Selenium, Total	mg/L	0.0000775	0.0044	0.10	0.0928	0.0940	0.0969	0.085 to 0.115	92.8	70 to 130	1.31	20	
AW28441 Lithium, Total	mg/L	-0.0000843	0.022	0.20	0.223	0.225	0.212	0.17 to 0.23	112	70 to 130	0.893	20	
AW28442 Barium, Total	mg/L	-0.000000374	0.0044	0.10	0.110	0.111	0.0919	0.085 to 0.115	94.6	70 to 130	0.522	20	
AW28442 Chromium, Total	mg/L	0.00000785	0.0044	0.10	0.0976	0.0985	0.0929	0.085 to 0.115	97.6	70 to 130	0.973	20	
AW28441 Boron, Total	mg/L	-0.000496	0.044	1.00	3.09	3.09	0.995	0.85 to 1.15	101	70 to 130	0.00	20	
AW28442 Cobalt, Total	mg/L	0.00000596	0.0044	0.10	0.0910	0.0918	0.0896	0.085 to 0.115	91.0	70 to 130	0.898	20	
AW28442 Lead, Total	mg/L	0.0000112	0.0022	0.10	0.103	0.104	0.0964	0.085 to 0.115	101	70 to 130	0.628	20	
AW28449 Mercury, Total by CVAA	mg/L	0.0000522	0.0005	0.004	0.00405	0.00401	0.00392	0.0034 to 0.0046	101	70 to 130	0.993	20	
AW28442 Beryllium, Total	mg/L	0.0000110	0.00132	0.10	0.0913	0.0926	0.0904	0.085 to 0.115	91.3	70 to 130	1.43	20	
AW28442 Molybdenum, Total	mg/L	0.0000138	0.0044	0.10	0.103	0.105	0.0953	0.085 to 0.115	95.6	70 to 130	1.02	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AW28440

Sample	Analysis	Units MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28442	Fluoride, Total	mg/L -0.058	0.3	2.00	1.81	-0.034	2.20	1.8 to 2.2	90.5	80 to 120	0	20
AW28440	Solids, Dissolved	mg/L -12	25			432	41.0	40 to 60			0.699	5
AW28442	Chloride, Total	mg/L 0.000	0.25	100	126	26.5	9.88	9 to 11	99.6	80 to 120	0.378	20
AW28442	Sulfate, Total	mg/L -0.760	1.0	200	369	163	20.8	18 to 22	104	80 to 120	0.615	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AW28441

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0151	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/6/2016	EPA 200.7		1	0.02	0.1	2.08	mg/L
* Calcium, Total	HRG	12/7/2016	EPA 200.7		10	1.0	5.0	51.8	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/6/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	J 0.00741	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/17/2016	SM 2540C		1		50	354	mg/L
* Chloride, Total	SES	11/18/2016	EPA 300.0		10	0.40	2.50	25.9	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/18/2016	EPA 300.0		10	3.0	10	161	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AW28441

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	MB					Limit	Rec	Limit	Prec		
AW28442	Antimony, Total	mg/L	0.000123	0.00132	0.10	0.0930	0.0938	0.0921	0.085 to 0.115	93.0	70 to 130	0.837	20	
AW28442	Thallium, Total	mg/L	0.0000131	0.00044	0.10	0.103	0.103	0.0949	0.085 to 0.115	103	70 to 130	0.532	20	
AW28442	Beryllium, Total	mg/L	0.0000110	0.00132	0.10	0.0913	0.0926	0.0904	0.085 to 0.115	91.3	70 to 130	1.43	20	
AW28442	Molybdenum, Total	mg/L	0.0000138	0.0044	0.10	0.103	0.105	0.0953	0.085 to 0.115	95.6	70 to 130	1.02	20	
AW28442	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0960	0.0968	0.0941	0.085 to 0.115	96.0	70 to 130	0.839	20	
AW28442	Cadmium, Total	mg/L	0.0000103	0.00044	0.10	0.0941	0.0942	0.0947	0.085 to 0.115	94.1	70 to 130	0.0769	20	
AW28441	Lithium, Total	mg/L	-0.0000843	0.022	0.20	0.223	0.225	0.212	0.17 to 0.23	112	70 to 130	0.893	20	
AW28442	Barium, Total	mg/L	-0.000000374	0.0044	0.10	0.110	0.111	0.0919	0.085 to 0.115	94.6	70 to 130	0.522	20	
AW28442	Chromium, Total	mg/L	0.00000785	0.0044	0.10	0.0976	0.0985	0.0929	0.085 to 0.115	97.6	70 to 130	0.973	20	
AW28441	Calcium, Total	mg/L	-0.0368	0.22	5.00	57.3	57.5	5.04	4.25 to 5.75	110	70 to 130	0.348	20	
AW28442	Selenium, Total	mg/L	0.0000775	0.0044	0.10	0.0928	0.0940	0.0969	0.085 to 0.115	92.8	70 to 130	1.31	20	
AW28441	Boron, Total	mg/L	-0.000496	0.044	1.00	3.09	3.09	0.995	0.85 to 1.15	101	70 to 130	0.00	20	
AW28442	Cobalt, Total	mg/L	0.00000596	0.0044	0.10	0.0910	0.0918	0.0896	0.085 to 0.115	91.0	70 to 130	0.898	20	
AW28442	Lead, Total	mg/L	0.0000112	0.0022	0.10	0.103	0.104	0.0964	0.085 to 0.115	101	70 to 130	0.628	20	
AW28449	Mercury, Total by CVAA	mg/L	0.0000522	0.0005	0.004	0.00405	0.00401	0.00392	0.0034 to 0.0046	101	70 to 130	0.993	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AW28441

Sample	Analysis	Units MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec Rec	Rec Limit	Prec	Prec Limit
AW28442	Fluoride, Total	mg/L -0.058	0.3	2.00	1.81	-0.034	2.20	1.8 to 2.2	90.5	80 to 120	0	20
AW28448	Solids, Dissolved	mg/L -12	25			272	41.0	40 to 60			1.87	5
AW28442	Chloride, Total	mg/L 0.000	0.25	100	126	26.5	9.88	9 to 11	99.6	80 to 120	0.378	20
AW28442	Sulfate, Total	mg/L -0.760	1.0	200	369	163	20.8	18 to 22	104	80 to 120	0.615	20

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Comments:

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Alabama Power General Test Laboratory
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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-6 Dup

Laboratory ID Number: AW28442

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0155	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/6/2016	EPA 200.7		1	0.02	0.1	2.10	mg/L
* Calcium, Total	HRG	12/7/2016	EPA 200.7		10	1.0	5.0	52.4	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/6/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	J 0.00784	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	J 0.00222	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/17/2016	SM 2540C		1		50	374	mg/L
* Chloride, Total	SES	11/18/2016	EPA 300.0		10	0.40	2.50	26.4	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/18/2016	EPA 300.0		10	3.0	10	162	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-6 Dup

Laboratory ID Number: AW28442

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	MB					Limit	Rec	Limit	Prec		
AW28442	Selenium, Total	mg/L	0.0000775	0.0044	0.10	0.0928	0.0940	0.0969	0.085 to 0.115	92.8	70 to 130	1.31	20	
AW28452	Boron, Total	mg/L	0.0186	0.044	1.00	1.01	1.01	1.02	0.85 to 1.15	101	70 to 130	0.00	20	
AW28452	Calcium, Total	mg/L	-0.0383	0.22	5.00	13.8	13.9	5.04	4.25 to 5.75	92.5	70 to 130	0.722	20	
AW28442	Cobalt, Total	mg/L	0.00000596	0.0044	0.10	0.0910	0.0918	0.0896	0.085 to 0.115	91.0	70 to 130	0.898	20	
AW28442	Lead, Total	mg/L	0.0000112	0.0022	0.10	0.103	0.104	0.0964	0.085 to 0.115	101	70 to 130	0.628	20	
AW28449	Mercury, Total by CVAA	mg/L	0.0000522	0.0005	0.004	0.00405	0.00401	0.00392	0.0034 to 0.0046	101	70 to 130	0.993	20	
AW28442	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0960	0.0968	0.0941	0.085 to 0.115	96.0	70 to 130	0.839	20	
AW28442	Cadmium, Total	mg/L	0.0000103	0.00044	0.10	0.0941	0.0942	0.0947	0.085 to 0.115	94.1	70 to 130	0.0769	20	
AW28442	Barium, Total	mg/L	-0.000000374	0.0044	0.10	0.110	0.111	0.0919	0.085 to 0.115	94.6	70 to 130	0.522	20	
AW28442	Chromium, Total	mg/L	0.00000785	0.0044	0.10	0.0976	0.0985	0.0929	0.085 to 0.115	97.6	70 to 130	0.973	20	
AW28452	Lithium, Total	mg/L	-0.0000258	0.022	0.20	0.216	0.217	0.212	0.17 to 0.23	108	70 to 130	0.462	20	
AW28442	Beryllium, Total	mg/L	0.0000110	0.00132	0.10	0.0913	0.0926	0.0904	0.085 to 0.115	91.3	70 to 130	1.43	20	
AW28442	Molybdenum, Total	mg/L	0.0000138	0.0044	0.10	0.103	0.105	0.0953	0.085 to 0.115	95.6	70 to 130	1.02	20	
AW28442	Antimony, Total	mg/L	0.000123	0.00132	0.10	0.0930	0.0938	0.0921	0.085 to 0.115	93.0	70 to 130	0.837	20	
AW28442	Thallium, Total	mg/L	0.0000131	0.00044	0.10	0.103	0.103	0.0949	0.085 to 0.115	103	70 to 130	0.532	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-6 Dup

Laboratory ID Number: AW28442

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28448	Solids, Dissolved	mg/L	-12	25			272	41.0	40 to 60			1.87	5
AW28442	Fluoride, Total	mg/L	-0.058	0.3	2.00	1.81	-0.034	2.20	1.8 to 2.2	90.5	80 to 120	0	20
AW28442	Chloride, Total	mg/L	0.000	0.25	100	126	26.5	9.88	9 to 11	99.6	80 to 120	0.378	20
AW28442	Sulfate, Total	mg/L	-0.760	1.0	200	369	163	20.8	18 to 22	104	80 to 120	0.615	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

CC:

Alabama Power General Test Laboratory
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 Calera, AL 35040
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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AW28443

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	J 0.00395	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0600	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/6/2016	EPA 200.7		1	0.02	0.1	2.12	mg/L
* Calcium, Total	HRG	12/7/2016	EPA 200.7		10	1.0	5.0	75.2	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/6/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0105	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/17/2016	SM 2540C		1		50	452	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		10	0.40	2.50	40.1	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		10	3.0	10	172	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

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 Calera, AL 35040
 (205) 664-6032 or 6171
 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AW28443

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW28453 Beryllium, Total	mg/L	0.0000110	0.00132	0.10	0.0918	0.0937	0.0904	0.085 to 0.115	91.8	70 to 130	2.11	20	
AW28453 Cadmium, Total	mg/L	0.0000103	0.00044	0.10	0.0937	0.0942	0.0947	0.085 to 0.115	93.7	70 to 130	0.523	20	
AW28453 Thallium, Total	mg/L	0.0000131	0.00044	0.10	0.101	0.103	0.0949	0.085 to 0.115	101	70 to 130	1.79	20	
AW28453 Antimony, Total	mg/L	0.000123	0.00132	0.10	0.0920	0.0924	0.0921	0.085 to 0.115	92.0	70 to 130	0.500	20	
AW28453 Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0937	0.0941	0.0941	0.085 to 0.115	93.7	70 to 130	0.445	20	
AW28453 Selenium, Total	mg/L	0.0000775	0.0044	0.10	0.0940	0.0936	0.0969	0.085 to 0.115	94.0	70 to 130	0.380	20	
AW28449 Mercury, Total by CVAA	mg/L	0.0000522	0.0005	0.004	0.00405	0.00401	0.00392	0.0034 to 0.0046	101	70 to 130	0.993	20	
AW28453 Barium, Total	mg/L	-0.000000374	0.0044	0.10	0.118	0.116	0.0919	0.085 to 0.115	97.6	70 to 130	2.27	20	
AW28453 Chromium, Total	mg/L	0.00000785	0.0044	0.10	0.0962	0.0972	0.0929	0.085 to 0.115	96.2	70 to 130	1.02	20	
AW28453 Molybdenum, Total	mg/L	0.0000138	0.0044	0.10	0.0960	0.0960	0.0953	0.085 to 0.115	96.0	70 to 130	0.0121	20	
AW28452 Boron, Total	mg/L	0.0186	0.044	1.00	1.01	1.01	1.02	0.85 to 1.15	101	70 to 130	0.00	20	
AW28452 Calcium, Total	mg/L	-0.0383	0.22	5.00	13.8	13.9	5.04	4.25 to 5.75	92.5	70 to 130	0.722	20	
AW28453 Cobalt, Total	mg/L	0.00000596	0.0044	0.10	0.0953	0.0951	0.0896	0.085 to 0.115	91.3	70 to 130	0.253	20	
AW28452 Lithium, Total	mg/L	-0.0000258	0.022	0.20	0.216	0.217	0.212	0.17 to 0.23	108	70 to 130	0.462	20	
AW28453 Lead, Total	mg/L	0.0000112	0.0022	0.10	0.101	0.103	0.0964	0.085 to 0.115	101	70 to 130	1.38	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:

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AW28443

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28453	Chloride, Total	mg/L	0.000	0.25	10.00	14.0	4.41	9.90	9 to 11	95.8	80 to 120	0.226	20
AW28453	Fluoride, Total	mg/L	0.000	0.3	2.00	1.86	-0.047		1.8 to 2.2	93.0	80 to 120	0	20
AW28448	Solids, Dissolved	mg/L	-12	25			272	41.0	40 to 60			1.87	5
AW28453	Sulfate, Total	mg/L	-0.762	1.0	20.00	32.6	12.5	20.1	18 to 22	101	80 to 120	0.803	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AW28444

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	J 0.00321	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.132	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/6/2016	EPA 200.7		1	0.02	0.1	2.09	mg/L
* Calcium, Total	HRG	12/7/2016	EPA 200.7		10	1.0	5.0	69.0	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/6/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0940	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/17/2016	SM 2540C		1		50	404	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	22.7	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		10	3.0	10	173	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AW28444

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB	Rec		Prec	Limit
			Limit	Spike					Limit	Prec		
AW28453 Cadmium, Total	mg/L	0.0000103	0.00044	0.10	0.0937	0.0942	0.0947	0.085 to 0.115	93.7	70 to 130	0.523	20
AW28453 Beryllium, Total	mg/L	0.0000110	0.00132	0.10	0.0918	0.0937	0.0904	0.085 to 0.115	91.8	70 to 130	2.11	20
AW28453 Thallium, Total	mg/L	0.0000131	0.00044	0.10	0.101	0.103	0.0949	0.085 to 0.115	101	70 to 130	1.79	20
AW28452 Lithium, Total	mg/L	-0.0000258	0.022	0.20	0.216	0.217	0.212	0.17 to 0.23	108	70 to 130	0.462	20
AW28453 Lead, Total	mg/L	0.0000112	0.0022	0.10	0.101	0.103	0.0964	0.085 to 0.115	101	70 to 130	1.38	20
AW28452 Boron, Total	mg/L	0.0186	0.044	1.00	1.01	1.01	1.02	0.85 to 1.15	101	70 to 130	0.00	20
AW28452 Calcium, Total	mg/L	-0.0383	0.22	5.00	13.8	13.9	5.04	4.25 to 5.75	92.5	70 to 130	0.722	20
AW28453 Cobalt, Total	mg/L	0.00000596	0.0044	0.10	0.0953	0.0951	0.0896	0.085 to 0.115	91.3	70 to 130	0.253	20
AW28449 Mercury, Total by CVAA	mg/L	0.0000522	0.0005	0.004	0.00405	0.00401	0.00392	0.0034 to 0.0046	101	70 to 130	0.993	20
AW28453 Barium, Total	mg/L	-0.000000374	0.0044	0.10	0.118	0.116	0.0919	0.085 to 0.115	97.6	70 to 130	2.27	20
AW28453 Antimony, Total	mg/L	0.000123	0.00132	0.10	0.0920	0.0924	0.0921	0.085 to 0.115	92.0	70 to 130	0.500	20
AW28453 Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0937	0.0941	0.0941	0.085 to 0.115	93.7	70 to 130	0.445	20
AW28453 Selenium, Total	mg/L	0.0000775	0.0044	0.10	0.0940	0.0936	0.0969	0.085 to 0.115	94.0	70 to 130	0.380	20
AW28453 Chromium, Total	mg/L	0.00000785	0.0044	0.10	0.0962	0.0972	0.0929	0.085 to 0.115	96.2	70 to 130	1.02	20
AW28453 Molybdenum, Total	mg/L	0.0000138	0.0044	0.10	0.0960	0.0960	0.0953	0.085 to 0.115	96.0	70 to 130	0.0121	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AW28444

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28453	Chloride, Total	mg/L	0.000	0.25	10.00	14.0	4.41	9.90	9 to 11	95.8	80 to 120	0.226	20
AW28453	Fluoride, Total	mg/L	0.000	0.3	2.00	1.86	-0.047		1.8 to 2.2	93.0	80 to 120	0	20
AW28448	Solids, Dissolved	mg/L	-12	25			272	41.0	40 to 60			1.87	5
AW28453	Sulfate, Total	mg/L	-0.762	1.0	20.00	32.6	12.5	20.1	18 to 22	101	80 to 120	0.803	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

CC:

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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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AW28445

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0296	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/6/2016	EPA 200.7		1	0.02	0.1	2.22	mg/L
* Calcium, Total	HRG	12/7/2016	EPA 200.7		10	1.0	5.0	68.4	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/6/2016	EPA 200.7		1	0.01	0.05	J 0.0494	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.314	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/17/2016	SM 2540C		1		50	412	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		10	0.40	2.50	30.7	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		10	3.0	10	177	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AW28445

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW28453 Cadmium, Total	mg/L	0.0000103	0.00044	0.10	0.0937	0.0942	0.0947	0.085 to 0.115	93.7	70 to 130	0.523	20	
AW28453 Thallium, Total	mg/L	0.0000131	0.00044	0.10	0.101	0.103	0.0949	0.085 to 0.115	101	70 to 130	1.79	20	
AW28453 Beryllium, Total	mg/L	0.0000110	0.00132	0.10	0.0918	0.0937	0.0904	0.085 to 0.115	91.8	70 to 130	2.11	20	
AW28452 Lithium, Total	mg/L	-0.0000258	0.022	0.20	0.216	0.217	0.212	0.17 to 0.23	108	70 to 130	0.462	20	
AW28453 Lead, Total	mg/L	0.0000112	0.0022	0.10	0.101	0.103	0.0964	0.085 to 0.115	101	70 to 130	1.38	20	
AW28449 Mercury, Total by CVAA	mg/L	0.0000522	0.0005	0.004	0.00405	0.00401	0.00392	0.0034 to 0.0046	101	70 to 130	0.993	20	
AW28453 Barium, Total	mg/L	-0.000000374	0.0044	0.10	0.118	0.116	0.0919	0.085 to 0.115	97.6	70 to 130	2.27	20	
AW28453 Chromium, Total	mg/L	0.00000785	0.0044	0.10	0.0962	0.0972	0.0929	0.085 to 0.115	96.2	70 to 130	1.02	20	
AW28453 Molybdenum, Total	mg/L	0.0000138	0.0044	0.10	0.0960	0.0960	0.0953	0.085 to 0.115	96.0	70 to 130	0.0121	20	
AW28453 Antimony, Total	mg/L	0.000123	0.00132	0.10	0.0920	0.0924	0.0921	0.085 to 0.115	92.0	70 to 130	0.500	20	
AW28453 Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0937	0.0941	0.0941	0.085 to 0.115	93.7	70 to 130	0.445	20	
AW28453 Selenium, Total	mg/L	0.0000775	0.0044	0.10	0.0940	0.0936	0.0969	0.085 to 0.115	94.0	70 to 130	0.380	20	
AW28452 Boron, Total	mg/L	0.0186	0.044	1.00	1.01	1.01	1.02	0.85 to 1.15	101	70 to 130	0.00	20	
AW28452 Calcium, Total	mg/L	-0.0383	0.22	5.00	13.8	13.9	5.04	4.25 to 5.75	92.5	70 to 130	0.722	20	
AW28453 Cobalt, Total	mg/L	0.00000596	0.0044	0.10	0.0953	0.0951	0.0896	0.085 to 0.115	91.3	70 to 130	0.253	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AW28445

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28453	Fluoride, Total	mg/L	0.000	0.3	2.00	1.86	-0.047		1.8 to 2.2	93.0	80 to 120	0	20
AW28453	Chloride, Total	mg/L	0.000	0.25	10.00	14.0	4.41	9.90	9 to 11	95.8	80 to 120	0.226	20
AW28448	Solids, Dissolved	mg/L	-12	25			272	41.0	40 to 60			1.87	5
AW28453	Sulfate, Total	mg/L	-0.762	1.0	20.00	32.6	12.5	20.1	18 to 22	101	80 to 120	0.803	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAPEB
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AW28446

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/6/2016	EPA 200.7		1	0.02	0.1	J 0.0298	mg/L
* Calcium, Total	HRG	12/6/2016	EPA 200.7		1	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/6/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/17/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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

* Test results for these accredited parameters 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:

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
 John Pugh

Customer Account: WMWGASAPEB
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AW28446

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	Spike				Limit	Rec	Limit	Prec			
AW28453 Thallium, Total	mg/L	0.0000131	0.00044	0.10	0.101	0.103	0.0949	0.085 to 0.115		101	70 to 130		1.79	20
AW28453 Beryllium, Total	mg/L	0.0000110	0.00132	0.10	0.0918	0.0937	0.0904	0.085 to 0.115		91.8	70 to 130		2.11	20
AW28453 Cadmium, Total	mg/L	0.0000103	0.00044	0.10	0.0937	0.0942	0.0947	0.085 to 0.115		93.7	70 to 130		0.523	20
AW28453 Antimony, Total	mg/L	0.000123	0.00132	0.10	0.0920	0.0924	0.0921	0.085 to 0.115		92.0	70 to 130		0.500	20
AW28453 Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0937	0.0941	0.0941	0.085 to 0.115		93.7	70 to 130		0.445	20
AW28453 Selenium, Total	mg/L	0.0000775	0.0044	0.10	0.0940	0.0936	0.0969	0.085 to 0.115		94.0	70 to 130		0.380	20
AW28452 Lithium, Total	mg/L	-0.0000258	0.022	0.20	0.216	0.217	0.212	0.17 to 0.23		108	70 to 130		0.462	20
AW28453 Lead, Total	mg/L	0.0000112	0.0022	0.10	0.101	0.103	0.0964	0.085 to 0.115		101	70 to 130		1.38	20
AW28452 Boron, Total	mg/L	0.0186	0.044	1.00	1.01	1.01	1.02	0.85 to 1.15		101	70 to 130		0.00	20
AW28452 Calcium, Total	mg/L	-0.0383	0.22	5.00	13.8	13.9	5.04	4.25 to 5.75		92.5	70 to 130		0.722	20
AW28453 Cobalt, Total	mg/L	0.00000596	0.0044	0.10	0.0953	0.0951	0.0896	0.085 to 0.115		91.3	70 to 130		0.253	20
AW28449 Mercury, Total by CVAA	mg/L	0.0000522	0.0005	0.004	0.00405	0.00401	0.00392	0.0034 to 0.0046		101	70 to 130		0.993	20
AW28453 Barium, Total	mg/L	-0.000000374	0.0044	0.10	0.118	0.116	0.0919	0.085 to 0.115		97.6	70 to 130		2.27	20
AW28453 Chromium, Total	mg/L	0.00000785	0.0044	0.10	0.0962	0.0972	0.0929	0.085 to 0.115		96.2	70 to 130		1.02	20
AW28453 Molybdenum, Total	mg/L	0.0000138	0.0044	0.10	0.0960	0.0960	0.0953	0.085 to 0.115		96.0	70 to 130		0.0121	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAPEB
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AW28446

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec			
			Limit	Limit			Duplicate	LFB	Limit	Limit			
AW28453	Fluoride, Total	mg/L	0.000	0.3	2.00	1.86	-0.047		1.8 to 2.2	93.0	80 to 120	0	20
AW28453	Chloride, Total	mg/L	0.000	0.25	10.00	14.0	4.41	9.90	9 to 11	95.8	80 to 120	0.226	20
AW28448	Solids, Dissolved	mg/L	-12	25			272	41.0	40 to 60			1.87	5
AW28453	Sulfate, Total	mg/L	-0.762	1.0	20.00	32.6	12.5	20.1	18 to 22	101	80 to 120	0.803	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

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Comments:

CC:

Alabama Power General Test Laboratory
 744 County Road 87, GSC#8
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 (205) 664-6032 or 6171
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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AW28447

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	0.00571	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0200	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/6/2016	EPA 200.7		1	0.02	0.1	J 0.0246	mg/L
* Calcium, Total	HRG	12/7/2016	EPA 200.7		10	1.0	5.0	55.1	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/6/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	J 0.00598	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/17/2016	SM 2540C		1		50	258	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	2.72	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1	9.07	mg/L

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

Comments:

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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AW28447

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	Spike				Limit	Rec	Limit	Prec			
AW28453 Thallium, Total	mg/L	0.0000131	0.00044	0.10	0.101	0.103	0.0949	0.085 to 0.115		101	70 to 130		1.79	20
AW28453 Cadmium, Total	mg/L	0.0000103	0.00044	0.10	0.0937	0.0942	0.0947	0.085 to 0.115		93.7	70 to 130		0.523	20
AW28453 Beryllium, Total	mg/L	0.0000110	0.00132	0.10	0.0918	0.0937	0.0904	0.085 to 0.115		91.8	70 to 130		2.11	20
AW28453 Chromium, Total	mg/L	0.00000785	0.0044	0.10	0.0962	0.0972	0.0929	0.085 to 0.115		96.2	70 to 130		1.02	20
AW28453 Molybdenum, Total	mg/L	0.0000138	0.0044	0.10	0.0960	0.0960	0.0953	0.085 to 0.115		96.0	70 to 130		0.0121	20
AW28452 Lithium, Total	mg/L	-0.0000258	0.022	0.20	0.216	0.217	0.212	0.17 to 0.23		108	70 to 130		0.462	20
AW28453 Lead, Total	mg/L	0.0000112	0.0022	0.10	0.101	0.103	0.0964	0.085 to 0.115		101	70 to 130		1.38	20
AW28449 Mercury, Total by CVAA	mg/L	0.0000522	0.0005	0.004	0.00405	0.00401	0.00392	0.0034 to 0.0046		101	70 to 130		0.993	20
AW28453 Barium, Total	mg/L	-0.000000374	0.0044	0.10	0.118	0.116	0.0919	0.085 to 0.115		97.6	70 to 130		2.27	20
AW28452 Boron, Total	mg/L	0.0186	0.044	1.00	1.01	1.01	1.02	0.85 to 1.15		101	70 to 130		0.00	20
AW28452 Calcium, Total	mg/L	-0.0383	0.22	5.00	13.8	13.9	5.04	4.25 to 5.75		92.5	70 to 130		0.722	20
AW28453 Cobalt, Total	mg/L	0.00000596	0.0044	0.10	0.0953	0.0951	0.0896	0.085 to 0.115		91.3	70 to 130		0.253	20
AW28453 Antimony, Total	mg/L	0.000123	0.00132	0.10	0.0920	0.0924	0.0921	0.085 to 0.115		92.0	70 to 130		0.500	20
AW28453 Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0937	0.0941	0.0941	0.085 to 0.115		93.7	70 to 130		0.445	20
AW28453 Selenium, Total	mg/L	0.0000775	0.0044	0.10	0.0940	0.0936	0.0969	0.085 to 0.115		94.0	70 to 130		0.380	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AW28447

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28453	Chloride, Total	mg/L	0.000	0.25	10.00	14.0	4.41	9.90	9 to 11	95.8	80 to 120	0.226	20
AW28453	Fluoride, Total	mg/L	0.000	0.3	2.00	1.86	-0.047		1.8 to 2.2	93.0	80 to 120	0	20
AW28448	Solids, Dissolved	mg/L	-12	25			272	41.0	40 to 60			1.87	5
AW28453	Sulfate, Total	mg/L	-0.762	1.0	20.00	32.6	12.5	20.1	18 to 22	101	80 to 120	0.803	20

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AW28448

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	J 0.00171	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0186	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/6/2016	EPA 200.7		1	0.02	0.1	J 0.0853	mg/L
* Calcium, Total	HRG	12/7/2016	EPA 200.7		10	1.0	5.0	51.5	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/6/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/17/2016	SM 2540C		1		50	262	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	3.71	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1	10.1	mg/L

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Laboratory certification ID: E571114

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AW28448

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AW28453	Thallium, Total	mg/L	0.0000131	0.00044	0.10	0.101	0.103	0.0949	0.085 to 0.115		101	70 to 130		1.79	20
AW28453	Cadmium, Total	mg/L	0.0000103	0.00044	0.10	0.0937	0.0942	0.0947	0.085 to 0.115		93.7	70 to 130		0.523	20
AW28453	Beryllium, Total	mg/L	0.0000110	0.00132	0.10	0.0918	0.0937	0.0904	0.085 to 0.115		91.8	70 to 130		2.11	20
AW28453	Chromium, Total	mg/L	0.00000785	0.0044	0.10	0.0962	0.0972	0.0929	0.085 to 0.115		96.2	70 to 130		1.02	20
AW28453	Molybdenum, Total	mg/L	0.0000138	0.0044	0.10	0.0960	0.0960	0.0953	0.085 to 0.115		96.0	70 to 130		0.0121	20
AW28449	Mercury, Total by CVAA	mg/L	0.0000522	0.0005	0.004	0.00405	0.00401	0.00392	0.0034 to 0.0046		101	70 to 130		0.993	20
AW28453	Barium, Total	mg/L	-0.000000374	0.0044	0.10	0.118	0.116	0.0919	0.085 to 0.115		97.6	70 to 130		2.27	20
AW28452	Boron, Total	mg/L	0.0186	0.044	1.00	1.01	1.01	1.02	0.85 to 1.15		101	70 to 130		0.00	20
AW28452	Calcium, Total	mg/L	-0.0383	0.22	5.00	13.8	13.9	5.04	4.25 to 5.75		92.5	70 to 130		0.722	20
AW28453	Cobalt, Total	mg/L	0.00000596	0.0044	0.10	0.0953	0.0951	0.0896	0.085 to 0.115		91.3	70 to 130		0.253	20
AW28453	Antimony, Total	mg/L	0.000123	0.00132	0.10	0.0920	0.0924	0.0921	0.085 to 0.115		92.0	70 to 130		0.500	20
AW28453	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0937	0.0941	0.0941	0.085 to 0.115		93.7	70 to 130		0.445	20
AW28453	Selenium, Total	mg/L	0.0000775	0.0044	0.10	0.0940	0.0936	0.0969	0.085 to 0.115		94.0	70 to 130		0.380	20
AW28452	Lithium, Total	mg/L	-0.0000258	0.022	0.20	0.216	0.217	0.212	0.17 to 0.23		108	70 to 130		0.462	20
AW28453	Lead, Total	mg/L	0.0000112	0.0022	0.10	0.101	0.103	0.0964	0.085 to 0.115		101	70 to 130		1.38	20

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Laboratory certification ID: E571114

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Comments:

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AW28448

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28453	Chloride, Total	mg/L	0.000	0.25	10.00	14.0	4.41	9.90	9 to 11	95.8	80 to 120	0.226	20
AW28453	Fluoride, Total	mg/L	0.000	0.3	2.00	1.86	-0.047		1.8 to 2.2	93.0	80 to 120	0	20
AW28448	Solids, Dissolved	mg/L	-12	25			272	41.0	40 to 60			1.87	5
AW28453	Sulfate, Total	mg/L	-0.762	1.0	20.00	32.6	12.5	20.1	18 to 22	101	80 to 120	0.803	20

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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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AW28449

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	J 0.00181	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0882	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/6/2016	EPA 200.7		1	0.02	0.1	J 0.0256	mg/L
* Calcium, Total	HRG	12/6/2016	EPA 200.7		1	0.1	0.5	31.5	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/6/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/17/2016	SM 2540C		1		25	180	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	6.04	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	J 0.023	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1	J 0.960	mg/L

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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, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AW28449

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW28453 Thallium, Total	mg/L	0.0000131	0.00044	0.10	0.101	0.103	0.0949	0.085 to 0.115	101	70 to 130	1.79	20	
AW28453 Cadmium, Total	mg/L	0.0000103	0.00044	0.10	0.0937	0.0942	0.0947	0.085 to 0.115	93.7	70 to 130	0.523	20	
AW28453 Beryllium, Total	mg/L	0.0000110	0.00132	0.10	0.0918	0.0937	0.0904	0.085 to 0.115	91.8	70 to 130	2.11	20	
AW28452 Lithium, Total	mg/L	-0.0000258	0.022	0.20	0.216	0.217	0.212	0.17 to 0.23	108	70 to 130	0.462	20	
AW28453 Lead, Total	mg/L	0.0000112	0.0022	0.10	0.101	0.103	0.0964	0.085 to 0.115	101	70 to 130	1.38	20	
AW28453 Antimony, Total	mg/L	0.000123	0.00132	0.10	0.0920	0.0924	0.0921	0.085 to 0.115	92.0	70 to 130	0.500	20	
AW28453 Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0937	0.0941	0.0941	0.085 to 0.115	93.7	70 to 130	0.445	20	
AW28453 Selenium, Total	mg/L	0.0000775	0.0044	0.10	0.0940	0.0936	0.0969	0.085 to 0.115	94.0	70 to 130	0.380	20	
AW28449 Mercury, Total by CVAA	mg/L	0.0000522	0.0005	0.004	0.00405	0.00401	0.00392	0.0034 to 0.0046	101	70 to 130	0.993	20	
AW28453 Barium, Total	mg/L	-0.000000374	0.0044	0.10	0.118	0.116	0.0919	0.085 to 0.115	97.6	70 to 130	2.27	20	
AW28453 Chromium, Total	mg/L	0.00000785	0.0044	0.10	0.0962	0.0972	0.0929	0.085 to 0.115	96.2	70 to 130	1.02	20	
AW28453 Molybdenum, Total	mg/L	0.0000138	0.0044	0.10	0.0960	0.0960	0.0953	0.085 to 0.115	96.0	70 to 130	0.0121	20	
AW28452 Boron, Total	mg/L	0.0186	0.044	1.00	1.01	1.01	1.02	0.85 to 1.15	101	70 to 130	0.00	20	
AW28452 Calcium, Total	mg/L	-0.0383	0.22	5.00	13.8	13.9	5.04	4.25 to 5.75	92.5	70 to 130	0.722	20	
AW28453 Cobalt, Total	mg/L	0.00000596	0.0044	0.10	0.0953	0.0951	0.0896	0.085 to 0.115	91.3	70 to 130	0.253	20	

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Laboratory certification ID: E571114

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Comments:

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AW28449

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28453	Fluoride, Total	mg/L	0.000	0.3	2.00	1.86	-0.047		1.8 to 2.2	93.0	80 to 120	0	20
AW28453	Chloride, Total	mg/L	0.000	0.25	10.00	14.0	4.41	9.90	9 to 11	95.8	80 to 120	0.226	20
AW28448	Solids, Dissolved	mg/L	-12	25			272	41.0	40 to 60			1.87	5
AW28453	Sulfate, Total	mg/L	-0.762	1.0	20.00	32.6	12.5	20.1	18 to 22	101	80 to 120	0.803	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW28450

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/6/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	12/6/2016	EPA 200.7		1	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/6/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/17/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW28450

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	Spike				Limit	Rec	Limit	Prec			
AW28453 Thallium, Total	mg/L	0.0000131	0.00044	0.10	0.101	0.103	0.0949	0.085 to 0.115		101	70 to 130		1.79	20
AW28453 Cadmium, Total	mg/L	0.0000103	0.00044	0.10	0.0937	0.0942	0.0947	0.085 to 0.115		93.7	70 to 130		0.523	20
AW28453 Barium, Total	mg/L	-0.000000374	0.0044	0.10	0.118	0.116	0.0919	0.085 to 0.115		97.6	70 to 130		2.27	20
AW28453 Beryllium, Total	mg/L	0.0000110	0.00132	0.10	0.0918	0.0937	0.0904	0.085 to 0.115		91.8	70 to 130		2.11	20
AW28452 Boron, Total	mg/L	0.0186	0.044	1.00	1.01	1.01	1.02	0.85 to 1.15		101	70 to 130		0.00	20
AW28452 Calcium, Total	mg/L	-0.0383	0.22	5.00	13.8	13.9	5.04	4.25 to 5.75		92.5	70 to 130		0.722	20
AW28453 Cobalt, Total	mg/L	0.00000596	0.0044	0.10	0.0953	0.0951	0.0896	0.085 to 0.115		91.3	70 to 130		0.253	20
AW28452 Lithium, Total	mg/L	-0.0000258	0.022	0.20	0.216	0.217	0.212	0.17 to 0.23		108	70 to 130		0.462	20
AW28453 Lead, Total	mg/L	0.0000112	0.0022	0.10	0.101	0.103	0.0964	0.085 to 0.115		101	70 to 130		1.38	20
AW28453 Chromium, Total	mg/L	0.00000785	0.0044	0.10	0.0962	0.0972	0.0929	0.085 to 0.115		96.2	70 to 130		1.02	20
AW28453 Molybdenum, Total	mg/L	0.0000138	0.0044	0.10	0.0960	0.0960	0.0953	0.085 to 0.115		96.0	70 to 130		0.0121	20
AW28460 Mercury, Total by CVAA	mg/L	0.0000498	0.0005	0.004	0.00405	0.00415	0.00409	0.0034 to 0.0046		101	70 to 130		2.44	20
AW28453 Antimony, Total	mg/L	0.000123	0.00132	0.10	0.0920	0.0924	0.0921	0.085 to 0.115		92.0	70 to 130		0.500	20
AW28453 Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0937	0.0941	0.0941	0.085 to 0.115		93.7	70 to 130		0.445	20
AW28453 Selenium, Total	mg/L	0.0000775	0.0044	0.10	0.0940	0.0936	0.0969	0.085 to 0.115		94.0	70 to 130		0.380	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

Alabama Power General Test Laboratory
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW28450

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28453	Fluoride, Total	mg/L	0.000	0.3	2.00	1.86	-0.047		1.8 to 2.2	93.0	80 to 120	0	20
AW28453	Chloride, Total	mg/L	0.000	0.25	10.00	14.0	4.41	9.90	9 to 11	95.8	80 to 120	0.226	20
AW28448	Solids, Dissolved	mg/L	-12	25			272	41.0	40 to 60			1.87	5
AW28453	Sulfate, Total	mg/L	-0.762	1.0	20.00	32.6	12.5	20.1	18 to 22	101	80 to 120	0.803	20

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Expiration: June 30, 2018

Comments:

CC:

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



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AW28463

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0132	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/15/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	12/15/2016	EPA 200.7		1	0.1	0.5	38.0	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/15/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/21/2016	SM 2540C		1		25	180	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	2.75	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1	2.16	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

Alabama Power General Test Laboratory
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AW28463

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW28463 Cobalt, Total	mg/L	0.0000757	0.0044	0.10	0.0908	0.0903	0.0932	0.085 to 0.115	90.8	70 to 130	0.544	20	
AW28563 Calcium, Total	mg/L	-0.0355	0.22	5.00	37.1	37.5	5.16	4.25 to 5.75	74.0	70 to 130	1.10	20	
AW28463 Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0930	0.0948	0.0968	0.085 to 0.115	93.0	70 to 130	1.90	20	
AW28463 Antimony, Total	mg/L	0.0000992	0.00132	0.10	0.0909	0.0918	0.0942	0.085 to 0.115	90.9	70 to 130	0.946	20	
AW28463 Beryllium, Total	mg/L	0.0000922	0.00132	0.10	0.0971	0.0962	0.0995	0.085 to 0.115	97.1	70 to 130	0.974	20	
AW28463 Thallium, Total	mg/L	0.0000138	0.00044	0.10	0.104	0.103	0.0994	0.085 to 0.115	104	70 to 130	0.469	20	
AW28563 Lithium, Total	mg/L	-0.0000653	0.022	0.20	0.207	0.223	0.208	0.17 to 0.23	103	70 to 130	7.41	20	
AW28463 Cadmium, Total	mg/L	0.0000965	0.00044	0.10	0.0949	0.0952	0.0971	0.085 to 0.115	94.9	70 to 130	0.352	20	
AW28463 Lead, Total	mg/L	0.0000109	0.0022	0.10	0.103	0.104	0.102	0.085 to 0.115	103	70 to 130	0.278	20	
AW28563 Mercury, Total by CVAA	mg/L	0.0000491	0.0005	0.004	0.00408	0.00402	0.00398	0.0034 to 0.0046	102	70 to 130	1.48	20	
AW28463 Barium, Total	mg/L	0.0000724	0.0044	0.10	0.109	0.108	0.0967	0.085 to 0.115	96.0	70 to 130	0.792	20	
AW28463 Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0973	0.0987	0.0989	0.085 to 0.115	97.3	70 to 130	1.44	20	
AW28463 Molybdenum, Total	mg/L	0.0000152	0.0044	0.10	0.0970	0.0972	0.0984	0.085 to 0.115	97.0	70 to 130	0.189	20	
AW28463 Selenium, Total	mg/L	0.0000416	0.0044	0.10	0.0947	0.0942	0.0972	0.085 to 0.115	94.7	70 to 130	0.482	20	
AW28563 Boron, Total	mg/L	-0.00962	0.044	1.00	1.01	0.954	0.999	0.85 to 1.15	101	70 to 130	6.17	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AW28463

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28466	Solids, Dissolved	mg/L	11	25			352	44.0	40 to 60			4.14	5
AW28463	Chloride, Total	mg/L	0.000	0.25	10.00	12.5	2.76	9.88	9 to 11	97.5	80 to 120	0.363	20
AW28463	Fluoride, Total	mg/L	0.000	0.3	2.00	1.65	-0.041	1.80	1.8 to 2.2	82.5	80 to 120	0	20
AW28463	Sulfate, Total	mg/L	-0.765	1.0	20.00	22.1	2.17	19.2	18 to 22	99.7	80 to 120	0.462	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:

CC:

Alabama Power General Test Laboratory
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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AW28464

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0634	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/15/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	12/28/2016	EPA 200.7		10	1.0	5.0	102	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/15/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/21/2016	SM 2540C		1		50	452	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	2.55	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/18/2016	EPA 300.0		10	3.0	10	118	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

Alabama Power General Test Laboratory
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 Calera, AL 35040
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AW28464

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW28566 Cadmium, Total	mg/L	0.00000965	0.00044	0.10	0.0967	0.0955	0.0971	0.085 to 0.115		96.7	70 to 130	1.25	20
AW28563 Mercury, Total by CVAA	mg/L	0.0000491	0.0005	0.004	0.00408	0.00402	0.00398	0.0034 to 0.0046		102	70 to 130	1.48	20
AW28566 Lead, Total	mg/L	0.0000109	0.0022	0.10	0.103	0.103	0.102	0.085 to 0.115		103	70 to 130	0.0423	20
AW28566 Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0995	0.0992	0.0989	0.085 to 0.115		99.5	70 to 130	0.359	20
AW28566 Molybdenum, Total	mg/L	0.0000152	0.0044	0.10	0.0966	0.0974	0.0984	0.085 to 0.115		96.6	70 to 130	0.826	20
AW28563 Boron, Total	mg/L	-0.00962	0.044	1.00	1.01	0.954	0.999	0.85 to 1.15		101	70 to 130	6.17	20
AW28566 Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0935	0.0936	0.0968	0.085 to 0.115		93.5	70 to 130	0.150	20
AW28566 Antimony, Total	mg/L	0.0000992	0.00132	0.10	0.0926	0.0924	0.0942	0.085 to 0.115		92.6	70 to 130	0.229	20
AW28566 Selenium, Total	mg/L	0.0000416	0.0044	0.10	0.0923	0.0931	0.0972	0.085 to 0.115		92.3	70 to 130	0.804	20
AW28563 Calcium, Total	mg/L	-0.0355	0.22	5.00	37.1	37.5	5.16	4.25 to 5.75		74.0	70 to 130	1.10	20
AW28566 Beryllium, Total	mg/L	0.00000922	0.00132	0.10	0.0958	0.0958	0.0995	0.085 to 0.115		95.8	70 to 130	0.0998	20
AW28566 Thallium, Total	mg/L	0.0000138	0.00044	0.10	0.103	0.103	0.0994	0.085 to 0.115		103	70 to 130	0.452	20
AW28563 Lithium, Total	mg/L	-0.0000653	0.022	0.20	0.207	0.223	0.208	0.17 to 0.23		103	70 to 130	7.41	20
AW28566 Barium, Total	mg/L	0.00000724	0.0044	0.10	0.0957	0.0948	0.0967	0.085 to 0.115		95.7	70 to 130	1.01	20
AW28566 Cobalt, Total	mg/L	0.00000757	0.0044	0.10	0.0918	0.0910	0.0932	0.085 to 0.115		91.8	70 to 130	0.846	20

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Laboratory certification ID: E571114

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 Calera, AL 35040
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AW28464

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28566	Fluoride, Total	mg/L	0.000	0.3	2.00	2.26	0.000	2.20	1.8 to 2.2	113	80 to 120	0	20
AW28466	Solids, Dissolved	mg/L	11	25			352	44.0	40 to 60			4.14	5
AW28566	Chloride, Total	mg/L	0.000	0.25	10.00	10.0	0.000	9.90	9 to 11	100	80 to 120	0	20
AW28566	Sulfate, Total	mg/L	-0.760	1.0	20.00	20.7	-0.762	21.0	18 to 22	104	80 to 120	0	20

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-14 Dup

Laboratory ID Number: AW28465

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0639	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/15/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	12/28/2016	EPA 200.7		10	1.0	5.0	98.8	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/15/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/21/2016	SM 2540C		1		50	450	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	2.51	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/18/2016	EPA 300.0		10	3.0	10	116	mg/L

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Comments:

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-14 Dup

Laboratory ID Number: AW28465

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW28566 Cadmium, Total	mg/L	0.00000965	0.00044	0.10	0.0967	0.0955	0.0971	0.085 to 0.115	96.7	70 to 130	1.25	20	
AW28566 Antimony, Total	mg/L	0.0000992	0.00132	0.10	0.0926	0.0924	0.0942	0.085 to 0.115	92.6	70 to 130	0.229	20	
AW28566 Selenium, Total	mg/L	0.0000416	0.0044	0.10	0.0923	0.0931	0.0972	0.085 to 0.115	92.3	70 to 130	0.804	20	
AW28563 Calcium, Total	mg/L	-0.0355	0.22	5.00	37.1	37.5	5.16	4.25 to 5.75	74.0	70 to 130	1.10	20	
AW28566 Beryllium, Total	mg/L	0.00000922	0.00132	0.10	0.0958	0.0958	0.0995	0.085 to 0.115	95.8	70 to 130	0.0998	20	
AW28566 Thallium, Total	mg/L	0.0000138	0.00044	0.10	0.103	0.103	0.0994	0.085 to 0.115	103	70 to 130	0.452	20	
AW28563 Lithium, Total	mg/L	-0.0000653	0.022	0.20	0.207	0.223	0.208	0.17 to 0.23	103	70 to 130	7.41	20	
AW28566 Barium, Total	mg/L	0.00000724	0.0044	0.10	0.0957	0.0948	0.0967	0.085 to 0.115	95.7	70 to 130	1.01	20	
AW28566 Cobalt, Total	mg/L	0.00000757	0.0044	0.10	0.0918	0.0910	0.0932	0.085 to 0.115	91.8	70 to 130	0.846	20	
AW28566 Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0995	0.0992	0.0989	0.085 to 0.115	99.5	70 to 130	0.359	20	
AW28566 Molybdenum, Total	mg/L	0.0000152	0.0044	0.10	0.0966	0.0974	0.0984	0.085 to 0.115	96.6	70 to 130	0.826	20	
AW28563 Mercury, Total by CVAA	mg/L	0.0000491	0.0005	0.004	0.00408	0.00402	0.00398	0.0034 to 0.0046	102	70 to 130	1.48	20	
AW28566 Lead, Total	mg/L	0.0000109	0.0022	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.0423	20	
AW28563 Boron, Total	mg/L	-0.00962	0.044	1.00	1.01	0.954	0.999	0.85 to 1.15	101	70 to 130	6.17	20	
AW28566 Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0935	0.0936	0.0968	0.085 to 0.115	93.5	70 to 130	0.150	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-14 Dup

Laboratory ID Number: AW28465

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28466	Solids, Dissolved	mg/L	11	25			352	44.0	40 to 60			4.14	5
AW28566	Fluoride, Total	mg/L	0.000	0.3	2.00	2.26	0.000	2.20	1.8 to 2.2	113	80 to 120	0	20
AW28566	Chloride, Total	mg/L	0.000	0.25	10.00	10.0	0.000	9.90	9 to 11	100	80 to 120	0	20
AW28566	Sulfate, Total	mg/L	-0.760	1.0	20.00	20.7	-0.762	21.0	18 to 22	104	80 to 120	0	20

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AW28466

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0273	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/15/2016	EPA 200.7		1	0.02	0.1	0.894	mg/L
* Calcium, Total	HRG	12/15/2016	EPA 200.7		1	0.1	0.5	36.8	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/15/2016	EPA 200.7		1	0.01	0.05	J 0.0240	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0712	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/21/2016	SM 2540C		1		50	324	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	23.8	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/18/2016	EPA 300.0		10	3.0	10	132	mg/L

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Laboratory certification ID: E571114

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Comments:

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AW28466

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW28566 Cadmium, Total	mg/L	0.0000965	0.00044	0.10	0.0967	0.0955	0.0971	0.085 to 0.115	96.7	70 to 130	1.25	20	
AW28566 Antimony, Total	mg/L	0.0000992	0.00132	0.10	0.0926	0.0924	0.0942	0.085 to 0.115	92.6	70 to 130	0.229	20	
AW28566 Selenium, Total	mg/L	0.0000416	0.0044	0.10	0.0923	0.0931	0.0972	0.085 to 0.115	92.3	70 to 130	0.804	20	
AW28563 Lithium, Total	mg/L	-0.0000653	0.022	0.20	0.207	0.223	0.208	0.17 to 0.23	103	70 to 130	7.41	20	
AW28566 Barium, Total	mg/L	0.0000724	0.0044	0.10	0.0957	0.0948	0.0967	0.085 to 0.115	95.7	70 to 130	1.01	20	
AW28566 Cobalt, Total	mg/L	0.0000757	0.0044	0.10	0.0918	0.0910	0.0932	0.085 to 0.115	91.8	70 to 130	0.846	20	
AW28566 Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0995	0.0992	0.0989	0.085 to 0.115	99.5	70 to 130	0.359	20	
AW28566 Molybdenum, Total	mg/L	0.0000152	0.0044	0.10	0.0966	0.0974	0.0984	0.085 to 0.115	96.6	70 to 130	0.826	20	
AW28563 Mercury, Total by CVAA	mg/L	0.0000491	0.0005	0.004	0.00408	0.00402	0.00398	0.0034 to 0.0046	102	70 to 130	1.48	20	
AW28566 Lead, Total	mg/L	0.0000109	0.0022	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.0423	20	
AW28563 Boron, Total	mg/L	-0.00962	0.044	1.00	1.01	0.954	0.999	0.85 to 1.15	101	70 to 130	6.17	20	
AW28566 Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0935	0.0936	0.0968	0.085 to 0.115	93.5	70 to 130	0.150	20	
AW28563 Calcium, Total	mg/L	-0.0355	0.22	5.00	37.1	37.5	5.16	4.25 to 5.75	74.0	70 to 130	1.10	20	
AW28566 Beryllium, Total	mg/L	0.0000922	0.00132	0.10	0.0958	0.0958	0.0995	0.085 to 0.115	95.8	70 to 130	0.0998	20	
AW28566 Thallium, Total	mg/L	0.0000138	0.00044	0.10	0.103	0.103	0.0994	0.085 to 0.115	103	70 to 130	0.452	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:

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AW28466

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28466	Solids, Dissolved	mg/L	11	25			352	44.0	40 to 60			4.14	5
AW28566	Fluoride, Total	mg/L	0.000	0.3	2.00	2.26	0.000	2.20	1.8 to 2.2	113	80 to 120	0	20
AW28566	Chloride, Total	mg/L	0.000	0.25	10.00	10.0	0.000	9.90	9 to 11	100	80 to 120	0	20
AW28566	Sulfate, Total	mg/L	-0.760	1.0	20.00	20.7	-0.762	21.0	18 to 22	104	80 to 120	0	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

CC:

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW28467

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/15/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	12/15/2016	EPA 200.7		1	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/15/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/21/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

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 Calera, AL 35040
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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW28467

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec Limit
			Limit	Spike				Limit	Rec	Limit	Prec	
AW28566 Cadmium, Total	mg/L	0.0000965	0.00044	0.10	0.0967	0.0955	0.0971	0.085 to 0.115	96.7	70 to 130	1.25	20
AW28566 Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0995	0.0992	0.0989	0.085 to 0.115	99.5	70 to 130	0.359	20
AW28566 Molybdenum, Total	mg/L	0.0000152	0.0044	0.10	0.0966	0.0974	0.0984	0.085 to 0.115	96.6	70 to 130	0.826	20
AW28563 Calcium, Total	mg/L	-0.0355	0.22	5.00	37.1	37.5	5.16	4.25 to 5.75	74.0	70 to 130	1.10	20
AW28566 Beryllium, Total	mg/L	0.0000922	0.00132	0.10	0.0958	0.0958	0.0995	0.085 to 0.115	95.8	70 to 130	0.0998	20
AW28566 Thallium, Total	mg/L	0.0000138	0.00044	0.10	0.103	0.103	0.0994	0.085 to 0.115	103	70 to 130	0.452	20
AW28563 Lithium, Total	mg/L	-0.0000653	0.022	0.20	0.207	0.223	0.208	0.17 to 0.23	103	70 to 130	7.41	20
AW28566 Barium, Total	mg/L	0.0000724	0.0044	0.10	0.0957	0.0948	0.0967	0.085 to 0.115	95.7	70 to 130	1.01	20
AW28566 Cobalt, Total	mg/L	0.0000757	0.0044	0.10	0.0918	0.0910	0.0932	0.085 to 0.115	91.8	70 to 130	0.846	20
AW28563 Mercury, Total by CVAA	mg/L	0.0000491	0.0005	0.004	0.00408	0.00402	0.00398	0.0034 to 0.0046	102	70 to 130	1.48	20
AW28566 Lead, Total	mg/L	0.0000109	0.0022	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.0423	20
AW28566 Antimony, Total	mg/L	0.0000992	0.00132	0.10	0.0926	0.0924	0.0942	0.085 to 0.115	92.6	70 to 130	0.229	20
AW28566 Selenium, Total	mg/L	0.0000416	0.0044	0.10	0.0923	0.0931	0.0972	0.085 to 0.115	92.3	70 to 130	0.804	20
AW28563 Boron, Total	mg/L	-0.00962	0.044	1.00	1.01	0.954	0.999	0.85 to 1.15	101	70 to 130	6.17	20
AW28566 Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0935	0.0936	0.0968	0.085 to 0.115	93.5	70 to 130	0.150	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 15-Nov-16
 Customer ID:
 Delivery Date: 16-Nov-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW28467

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec Rec	Rec Limit	Prec	Prec Limit
AW28466	Solids, Dissolved	mg/L	11	25			352	44.0	40 to 60			4.14	5
AW28566	Fluoride, Total	mg/L	0.000	0.3	2.00	2.26	0.000	2.20	1.8 to 2.2	113	80 to 120	0	20
AW28566	Chloride, Total	mg/L	0.000	0.25	10.00	10.0	0.000	9.90	9 to 11	100	80 to 120	0	20
AW28566	Sulfate, Total	mg/L	-0.760	1.0	20.00	20.7	-0.762	21.0	18 to 22	104	80 to 120	0	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

CC:

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

Certificate Of Analysis Alabama Power



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 16-Nov-16
 Customer ID:
 Delivery Date: 17-Nov-16

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AW28561

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	0.00513	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0420	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/15/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	12/28/2016	EPA 200.7		10	1.0	5.0	42.7	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/15/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0118	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/21/2016	SM 2540C		1		25	224	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	10.2	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1	21.7	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

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 Calera, AL 35040
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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 16-Nov-16
 Customer ID:
 Delivery Date: 17-Nov-16

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AW28561

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW28566 Cadmium, Total	mg/L	0.00000965	0.00044	0.10	0.0967	0.0955	0.0971	0.085 to 0.115	96.7	70 to 130	1.25	20	
AW28566 Antimony, Total	mg/L	0.0000992	0.00132	0.10	0.0926	0.0924	0.0942	0.085 to 0.115	92.6	70 to 130	0.229	20	
AW28566 Selenium, Total	mg/L	0.0000416	0.0044	0.10	0.0923	0.0931	0.0972	0.085 to 0.115	92.3	70 to 130	0.804	20	
AW28563 Lithium, Total	mg/L	-0.0000653	0.022	0.20	0.207	0.223	0.208	0.17 to 0.23	103	70 to 130	7.41	20	
AW28566 Barium, Total	mg/L	0.00000724	0.0044	0.10	0.0957	0.0948	0.0967	0.085 to 0.115	95.7	70 to 130	1.01	20	
AW28566 Cobalt, Total	mg/L	0.00000757	0.0044	0.10	0.0918	0.0910	0.0932	0.085 to 0.115	91.8	70 to 130	0.846	20	
AW28563 Calcium, Total	mg/L	-0.0355	0.22	5.00	37.1	37.5	5.16	4.25 to 5.75	74.0	70 to 130	1.10	20	
AW28566 Beryllium, Total	mg/L	0.00000922	0.00132	0.10	0.0958	0.0958	0.0995	0.085 to 0.115	95.8	70 to 130	0.0998	20	
AW28566 Thallium, Total	mg/L	0.0000138	0.00044	0.10	0.103	0.103	0.0994	0.085 to 0.115	103	70 to 130	0.452	20	
AW28563 Mercury, Total by CVAA	mg/L	0.0000491	0.0005	0.004	0.00408	0.00402	0.00398	0.0034 to 0.0046	102	70 to 130	1.48	20	
AW28566 Lead, Total	mg/L	0.0000109	0.0022	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.0423	20	
AW28563 Boron, Total	mg/L	-0.00962	0.044	1.00	1.01	0.954	0.999	0.85 to 1.15	101	70 to 130	6.17	20	
AW28566 Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0935	0.0936	0.0968	0.085 to 0.115	93.5	70 to 130	0.150	20	
AW28566 Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0995	0.0992	0.0989	0.085 to 0.115	99.5	70 to 130	0.359	20	
AW28566 Molybdenum, Total	mg/L	0.0000152	0.0044	0.10	0.0966	0.0974	0.0984	0.085 to 0.115	96.6	70 to 130	0.826	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 16-Nov-16
 Customer ID:
 Delivery Date: 17-Nov-16

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AW28561

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28566	Fluoride, Total	mg/L	0.000	0.3	2.00	2.26	0.000	2.20	1.8 to 2.2	113	80 to 120	0	20
AW28564	Solids, Dissolved	mg/L	-11	25			142	42.0	40 to 60			5.0	5
AW28566	Chloride, Total	mg/L	0.000	0.25	10.00	10.0	0.000	9.90	9 to 11	100	80 to 120	0	20
AW28566	Sulfate, Total	mg/L	-0.760	1.0	20.00	20.7	-0.762	21.0	18 to 22	104	80 to 120	0	20

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

Comments:

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 16-Nov-16
 Customer ID:
 Delivery Date: 17-Nov-16

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AW28562

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	J 0.000801	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	0.0121	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0833	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/15/2016	EPA 200.7		1	0.02	0.1	2.96	mg/L
* Calcium, Total	HRG	12/28/2016	EPA 200.7		10	1.0	5.0	51.7	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	J 0.000270	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/15/2016	EPA 200.7		1	0.01	0.05	0.603	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	1.92	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/21/2016	SM 2540C		1		50	412	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	14.2	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	J 0.103	mg/L
* Sulfate, Total	SES	11/18/2016	EPA 300.0		10	3.0	10	234	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 16-Nov-16
 Customer ID:
 Delivery Date: 17-Nov-16

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AW28562

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW28566 Cadmium, Total	mg/L	0.00000965	0.00044	0.10	0.0967	0.0955	0.0971	0.085 to 0.115	96.7	70 to 130	1.25	20	
AW28566 Antimony, Total	mg/L	0.0000992	0.00132	0.10	0.0926	0.0924	0.0942	0.085 to 0.115	92.6	70 to 130	0.229	20	
AW28566 Selenium, Total	mg/L	0.0000416	0.0044	0.10	0.0923	0.0931	0.0972	0.085 to 0.115	92.3	70 to 130	0.804	20	
AW28563 Lithium, Total	mg/L	-0.0000653	0.022	0.20	0.207	0.223	0.208	0.17 to 0.23	103	70 to 130	7.41	20	
AW28566 Barium, Total	mg/L	0.00000724	0.0044	0.10	0.0957	0.0948	0.0967	0.085 to 0.115	95.7	70 to 130	1.01	20	
AW28566 Cobalt, Total	mg/L	0.00000757	0.0044	0.10	0.0918	0.0910	0.0932	0.085 to 0.115	91.8	70 to 130	0.846	20	
AW28563 Boron, Total	mg/L	-0.00962	0.044	1.00	1.01	0.954	0.999	0.85 to 1.15	101	70 to 130	6.17	20	
AW28566 Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0935	0.0936	0.0968	0.085 to 0.115	93.5	70 to 130	0.150	20	
AW28566 Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0995	0.0992	0.0989	0.085 to 0.115	99.5	70 to 130	0.359	20	
AW28566 Molybdenum, Total	mg/L	0.0000152	0.0044	0.10	0.0966	0.0974	0.0984	0.085 to 0.115	96.6	70 to 130	0.826	20	
AW28563 Mercury, Total by CVAA	mg/L	0.0000491	0.0005	0.004	0.00408	0.00402	0.00398	0.0034 to 0.0046	102	70 to 130	1.48	20	
AW28566 Lead, Total	mg/L	0.0000109	0.0022	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.0423	20	
AW28563 Calcium, Total	mg/L	-0.0355	0.22	5.00	37.1	37.5	5.16	4.25 to 5.75	74.0	70 to 130	1.10	20	
AW28566 Beryllium, Total	mg/L	0.00000922	0.00132	0.10	0.0958	0.0958	0.0995	0.085 to 0.115	95.8	70 to 130	0.0998	20	
AW28566 Thallium, Total	mg/L	0.0000138	0.00044	0.10	0.103	0.103	0.0994	0.085 to 0.115	103	70 to 130	0.452	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:

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 16-Nov-16
 Customer ID:
 Delivery Date: 17-Nov-16

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AW28562

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28566	Fluoride, Total	mg/L	0.000	0.3	2.00	2.26	0.000	2.20	1.8 to 2.2	113	80 to 120	0	20
AW28564	Solids, Dissolved	mg/L	-11	25			142	42.0	40 to 60			5.0	5
AW28566	Chloride, Total	mg/L	0.000	0.25	10.00	10.0	0.000	9.90	9 to 11	100	80 to 120	0	20
AW28566	Sulfate, Total	mg/L	-0.760	1.0	20.00	20.7	-0.762	21.0	18 to 22	104	80 to 120	0	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 16-Nov-16
 Customer ID:
 Delivery Date: 17-Nov-16

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AW28563

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	J 0.00105	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0247	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/15/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	12/15/2016	EPA 200.7		1	0.1	0.5	33.4	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/15/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	J 0.00215	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/21/2016	SM 2540C		1		25	192	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	3.57	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1	10.5	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 16-Nov-16
 Customer ID:
 Delivery Date: 17-Nov-16

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AW28563

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW28566 Cadmium, Total	mg/L	0.00000965	0.00044	0.10	0.0967	0.0955	0.0971	0.085 to 0.115	96.7	70 to 130	1.25	20	
AW28566 Antimony, Total	mg/L	0.0000992	0.00132	0.10	0.0926	0.0924	0.0942	0.085 to 0.115	92.6	70 to 130	0.229	20	
AW28566 Selenium, Total	mg/L	0.0000416	0.0044	0.10	0.0923	0.0931	0.0972	0.085 to 0.115	92.3	70 to 130	0.804	20	
AW28566 Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0995	0.0992	0.0989	0.085 to 0.115	99.5	70 to 130	0.359	20	
AW28566 Molybdenum, Total	mg/L	0.0000152	0.0044	0.10	0.0966	0.0974	0.0984	0.085 to 0.115	96.6	70 to 130	0.826	20	
AW28563 Mercury, Total by CVAA	mg/L	0.0000491	0.0005	0.004	0.00408	0.00402	0.00398	0.0034 to 0.0046	102	70 to 130	1.48	20	
AW28566 Lead, Total	mg/L	0.0000109	0.0022	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.0423	20	
AW28563 Lithium, Total	mg/L	-0.0000653	0.022	0.20	0.207	0.223	0.208	0.17 to 0.23	103	70 to 130	7.41	20	
AW28566 Barium, Total	mg/L	0.00000724	0.0044	0.10	0.0957	0.0948	0.0967	0.085 to 0.115	95.7	70 to 130	1.01	20	
AW28566 Cobalt, Total	mg/L	0.00000757	0.0044	0.10	0.0918	0.0910	0.0932	0.085 to 0.115	91.8	70 to 130	0.846	20	
AW28563 Boron, Total	mg/L	-0.00962	0.044	1.00	1.01	0.954	0.999	0.85 to 1.15	101	70 to 130	6.17	20	
AW28566 Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0935	0.0936	0.0968	0.085 to 0.115	93.5	70 to 130	0.150	20	
AW28563 Calcium, Total	mg/L	-0.0355	0.22	5.00	37.1	37.5	5.16	4.25 to 5.75	74.0	70 to 130	1.10	20	
AW28566 Beryllium, Total	mg/L	0.00000922	0.00132	0.10	0.0958	0.0958	0.0995	0.085 to 0.115	95.8	70 to 130	0.0998	20	
AW28566 Thallium, Total	mg/L	0.0000138	0.00044	0.10	0.103	0.103	0.0994	0.085 to 0.115	103	70 to 130	0.452	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:

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 16-Nov-16
 Customer ID:
 Delivery Date: 17-Nov-16

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AW28563

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28564	Solids, Dissolved	mg/L	-11	25			142	42.0	40 to 60			5.0	5
AW28566	Fluoride, Total	mg/L	0.000	0.3	2.00	2.26	0.000	2.20	1.8 to 2.2	113	80 to 120	0	20
AW28566	Chloride, Total	mg/L	0.000	0.25	10.00	10.0	0.000	9.90	9 to 11	100	80 to 120	0	20
AW28566	Sulfate, Total	mg/L	-0.760	1.0	20.00	20.7	-0.762	21.0	18 to 22	104	80 to 120	0	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 16-Nov-16
 Customer ID:
 Delivery Date: 17-Nov-16

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AW28564

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	J 0.00917	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/27/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	12/27/2016	EPA 200.7		1	0.1	0.5	30.4	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/27/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	J 0.00663	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/21/2016	SM 2540C		1		25	157	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	1.98	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1	3.71	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 16-Nov-16
 Customer ID:
 Delivery Date: 17-Nov-16

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AW28564

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW28566 Lead, Total	mg/L	0.0000109	0.0022	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.0423	20	
AW28566 Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0935	0.0936	0.0968	0.085 to 0.115	93.5	70 to 130	0.150	20	
AW28566 Barium, Total	mg/L	0.00000724	0.0044	0.10	0.0957	0.0948	0.0967	0.085 to 0.115	95.7	70 to 130	1.01	20	
AW28566 Cobalt, Total	mg/L	0.00000757	0.0044	0.10	0.0918	0.0910	0.0932	0.085 to 0.115	91.8	70 to 130	0.846	20	
AW28566 Cadmium, Total	mg/L	0.00000965	0.00044	0.10	0.0967	0.0955	0.0971	0.085 to 0.115	96.7	70 to 130	1.25	20	
AW28902 Lithium, Total	mg/L	0.0000193	0.022	0.20	0.286	0.291	0.221	0.17 to 0.23	119	70 to 130	1.65	20	
AW28566 Beryllium, Total	mg/L	0.00000922	0.00132	0.10	0.0958	0.0958	0.0995	0.085 to 0.115	95.8	70 to 130	0.0998	20	
AW28566 Thallium, Total	mg/L	0.0000138	0.00044	0.10	0.103	0.103	0.0994	0.085 to 0.115	103	70 to 130	0.452	20	
AW28566 Antimony, Total	mg/L	0.0000992	0.00132	0.10	0.0926	0.0924	0.0942	0.085 to 0.115	92.6	70 to 130	0.229	20	
AW28566 Selenium, Total	mg/L	0.0000416	0.0044	0.10	0.0923	0.0931	0.0972	0.085 to 0.115	92.3	70 to 130	0.804	20	
AW28566 Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0995	0.0992	0.0989	0.085 to 0.115	99.5	70 to 130	0.359	20	
AW28566 Molybdenum, Total	mg/L	0.0000152	0.0044	0.10	0.0966	0.0974	0.0984	0.085 to 0.115	96.6	70 to 130	0.826	20	
AW28902 Boron, Total	mg/L	-0.00331	0.044	1.00	1.08	1.08	1.01	0.85 to 1.15	103	70 to 130	0.391	20	
AW28902 Calcium, Total	mg/L	-0.0398	0.22	5.00	328	345	5.33	4.25 to 5.75	171	70 to 130	5.07	20	
AW28902 Mercury, Total by CVAA	mg/L	0.0000776	0.0005	0.004	0.00396	0.00404	0.00403	0.0034 to 0.0046	99.0	70 to 130	2.00	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

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 Calera, AL 35040
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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 16-Nov-16
 Customer ID:
 Delivery Date: 17-Nov-16

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AW28564

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28566	Fluoride, Total	mg/L	0.000	0.3	2.00	2.26	0.000	2.20	1.8 to 2.2	113	80 to 120	0	20
AW28564	Solids, Dissolved	mg/L	-11	25			142	42.0	40 to 60			5.0	5
AW28566	Chloride, Total	mg/L	0.000	0.25	10.00	10.0	0.000	9.90	9 to 11	100	80 to 120	0	20
AW28566	Sulfate, Total	mg/L	-0.760	1.0	20.00	20.7	-0.762	21.0	18 to 22	104	80 to 120	0	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 16-Nov-16
 Customer ID:
 Delivery Date: 17-Nov-16

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AW28565

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	0.0291	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/27/2016	EPA 200.7		1	0.02	0.1	0.655	mg/L
* Calcium, Total	HRG	12/28/2016	EPA 200.7		10	1.0	5.0	61.8	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/27/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/21/2016	SM 2540C		1		50	338	mg/L
* Chloride, Total	SES	11/18/2016	EPA 300.0		10	0.40	2.50	37.1	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1	38.5	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 16-Nov-16
 Customer ID:
 Delivery Date: 17-Nov-16

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AW28565

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW28566 Lead, Total	mg/L	0.0000109	0.0022	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.0423	20	
AW28566 Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0935	0.0936	0.0968	0.085 to 0.115	93.5	70 to 130	0.150	20	
AW28566 Barium, Total	mg/L	0.00000724	0.0044	0.10	0.0957	0.0948	0.0967	0.085 to 0.115	95.7	70 to 130	1.01	20	
AW28566 Cobalt, Total	mg/L	0.00000757	0.0044	0.10	0.0918	0.0910	0.0932	0.085 to 0.115	91.8	70 to 130	0.846	20	
AW28566 Cadmium, Total	mg/L	0.00000965	0.00044	0.10	0.0967	0.0955	0.0971	0.085 to 0.115	96.7	70 to 130	1.25	20	
AW28902 Lithium, Total	mg/L	0.0000193	0.022	0.20	0.286	0.291	0.221	0.17 to 0.23	119	70 to 130	1.65	20	
AW28566 Antimony, Total	mg/L	0.0000992	0.00132	0.10	0.0926	0.0924	0.0942	0.085 to 0.115	92.6	70 to 130	0.229	20	
AW28566 Selenium, Total	mg/L	0.0000416	0.0044	0.10	0.0923	0.0931	0.0972	0.085 to 0.115	92.3	70 to 130	0.804	20	
AW28566 Beryllium, Total	mg/L	0.00000922	0.00132	0.10	0.0958	0.0958	0.0995	0.085 to 0.115	95.8	70 to 130	0.0998	20	
AW28566 Thallium, Total	mg/L	0.0000138	0.00044	0.10	0.103	0.103	0.0994	0.085 to 0.115	103	70 to 130	0.452	20	
AW28566 Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0995	0.0992	0.0989	0.085 to 0.115	99.5	70 to 130	0.359	20	
AW28566 Molybdenum, Total	mg/L	0.0000152	0.0044	0.10	0.0966	0.0974	0.0984	0.085 to 0.115	96.6	70 to 130	0.826	20	
AW28902 Boron, Total	mg/L	-0.00331	0.044	1.00	1.08	1.08	1.01	0.85 to 1.15	103	70 to 130	0.391	20	
AW28902 Calcium, Total	mg/L	-0.0398	0.22	5.00	328	345	5.33	4.25 to 5.75	171	70 to 130	5.07	20	
AW28902 Mercury, Total by CVAA	mg/L	0.0000776	0.0005	0.004	0.00396	0.00404	0.00403	0.0034 to 0.0046	99.0	70 to 130	2.00	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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 16-Nov-16
 Customer ID:
 Delivery Date: 17-Nov-16

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AW28565

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
			Limit	Limit			Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW28564	Solids, Dissolved	mg/L	-11	25			142	42.0	40 to 60			5.0	5
AW28566	Fluoride, Total	mg/L	0.000	0.3	2.00	2.26	0.000	2.20	1.8 to 2.2	113	80 to 120	0	20
AW28566	Chloride, Total	mg/L	0.000	0.25	10.00	10.0	0.000	9.90	9 to 11	100	80 to 120	0	20
AW28566	Sulfate, Total	mg/L	-0.760	1.0	20.00	20.7	-0.762	21.0	18 to 22	104	80 to 120	0	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:

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
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 16-Nov-16
 Customer ID:
 Delivery Date: 17-Nov-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW28566

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/15/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	12/27/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	12/27/2016	EPA 200.7		1	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	12/27/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	11/21/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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 Calera, AL 35040
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 16-Nov-16
 Customer ID:
 Delivery Date: 17-Nov-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW28566

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW28566 Lead, Total	mg/L	0.0000109	0.0022	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.0423	20	
AW28566 Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0935	0.0936	0.0968	0.085 to 0.115	93.5	70 to 130	0.150	20	
AW28566 Cadmium, Total	mg/L	0.00000965	0.00044	0.10	0.0967	0.0955	0.0971	0.085 to 0.115	96.7	70 to 130	1.25	20	
AW28902 Lithium, Total	mg/L	0.0000193	0.022	0.20	0.286	0.291	0.221	0.17 to 0.23	119	70 to 130	1.65	20	
AW28566 Barium, Total	mg/L	0.00000724	0.0044	0.10	0.0957	0.0948	0.0967	0.085 to 0.115	95.7	70 to 130	1.01	20	
AW28566 Cobalt, Total	mg/L	0.00000757	0.0044	0.10	0.0918	0.0910	0.0932	0.085 to 0.115	91.8	70 to 130	0.846	20	
AW28566 Beryllium, Total	mg/L	0.00000922	0.00132	0.10	0.0958	0.0958	0.0995	0.085 to 0.115	95.8	70 to 130	0.0998	20	
AW28566 Thallium, Total	mg/L	0.0000138	0.00044	0.10	0.103	0.103	0.0994	0.085 to 0.115	103	70 to 130	0.452	20	
AW28566 Antimony, Total	mg/L	0.0000992	0.00132	0.10	0.0926	0.0924	0.0942	0.085 to 0.115	92.6	70 to 130	0.229	20	
AW28566 Selenium, Total	mg/L	0.0000416	0.0044	0.10	0.0923	0.0931	0.0972	0.085 to 0.115	92.3	70 to 130	0.804	20	
AW28566 Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0995	0.0992	0.0989	0.085 to 0.115	99.5	70 to 130	0.359	20	
AW28566 Molybdenum, Total	mg/L	0.0000152	0.0044	0.10	0.0966	0.0974	0.0984	0.085 to 0.115	96.6	70 to 130	0.826	20	
AW28902 Boron, Total	mg/L	-0.00331	0.044	1.00	1.08	1.08	1.01	0.85 to 1.15	103	70 to 130	0.391	20	
AW28902 Calcium, Total	mg/L	-0.0398	0.22	5.00	328	345	5.33	4.25 to 5.75	171	70 to 130	5.07	20	
AW28902 Mercury, Total by CVAA	mg/L	0.0000776	0.0005	0.004	0.00396	0.00404	0.00403	0.0034 to 0.0046	99.0	70 to 130	2.00	20	

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 16-Nov-16
 Customer ID:
 Delivery Date: 17-Nov-16

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AW28566

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec Rec	Rec Limit	Prec	Prec Limit
AW28566	Fluoride, Total	mg/L	0.000	0.3	2.00	2.26	0.000	2.20	1.8 to 2.2	113	80 to 120	0	20
AW28564	Solids, Dissolved	mg/L	-11	25			142	42.0	40 to 60			5.0	5
AW28566	Chloride, Total	mg/L	0.000	0.25	10.00	10.0	0.000	9.90	9 to 11	100	80 to 120	0	20
AW28566	Sulfate, Total	mg/L	-0.760	1.0	20.00	20.7	-0.762	21.0	18 to 22	104	80 to 120	0	20

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

Comments:

CC:

Definitions



Abbreviation	Description
DF	Dilution Factor
LFB	Lab Fortified Blank
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

Requested Complete Date	<input type="text" value="Routine"/>	Results To	<input type="text" value="Dustin Brooks, John Pugh, Greg Dyer"/>
Site Representative	<input type="text" value="Byron Corina"/>	Requested By	<input type="text" value="Greg Dyer"/>
Collector	<input type="text" value="Jason Rouss"/>	Location	<input type="text" value="Gaston Ash Pond"/>

Analysis Requested:

Comments:

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-20	11/14/2016	11:50	3	Groundwater		AW28360
MW-18	11/14/2016	13:05	5	Groundwater		AW28361
MW-16	11/14/2016	16:12	3	Groundwater		AW28362
MW-16 Dup	11/14/2016	16:12	3	Sample Duplicate		AW28363

Relinquished By	Received By	Date/Time
	Sarah Copeland <small>Digitally signed by Sarah Copeland Date: 2016.11.15 08:33:37 -06'00'</small>	11/15/2016 08:33

SmarTroll ID	<input type="text" value="4696-23443-3-2"/>	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	<input type="text" value="4677-23342-4-1"/>	
Cooler Temp	<input type="text" value="0.5 degrees C"/>	
Thermometer ID	<input type="text" value="5408-27568-2-2"/>	
pH Strip ID	<input type="text" value="5521-28272-20-16"/>	



Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Field Complete

Lab Complete

Lab ETA 11/15/2016 08:30

Requested Complete Date	Routine
Site Representative	Byron Corina
Collector	Ben Rothschild

Results To	Dustin Brooks, John Pugh, Greg Dyer
Requested By	Greg Dyer
Location	Gaston Ash Pond

Analysis Requested	Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle
Comments	

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW13	11/14/2016	12:23	3	Groundwater		AW28357
MW12	11/14/2016	15:15	3	Groundwater		AW28358
MW11	11/14/2016	16:53	3	Groundwater		AW28359

Relinquished By	Received By	Date/Time
<i>Ben Rothschild</i>	Sarah Copeland <small>Digitally signed by Sarah Copeland Date: 2016.11.15 08:35:13 -06'00'</small>	11/15/2016 08:35

SmarTroll ID	4696-23441-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	3901-20010-2-2	
	Cooler Temp	2.0 degrees C
	Thermometer ID	5408-27568-2-2
	pH Strip ID	5521-28272-20-16



Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Field Complete

Lab Complete

Lab ETA

Requested Complete Date
 Site Representative
 Collector

Results To
 Requested By
 Location

Analysis Requested
 Comments

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-1	11/15/2016	10:55	3	Groundwater		AW28447
MW-8	11/15/2016	12:34	3	Groundwater		AW28448
MW-9	11/15/2016	14:30	3	Groundwater		AW28449
FB-1	11/15/2016	15:00	3	Field Blank		AW28450

Relinquished By 	Received By 	Date/Time 11/16/2016 07:44
		Sarah Copeland <small>Digitally signed by Sarah Copeland Date: 2016.11.16 13:34:31 -06'00'</small>
		11/16/2016 13:34

SmarTroll ID
 Turbidity ID

All metals and radiological bottles have pH < 2
 Cooler Temp
 Thermometer ID
 pH Strip ID



Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Field Complete

Lab Complete

Lab ETA 11/16/2016 08:00

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Nick Pitts	Location	Gaston Ash Pond
Analysis Requested	Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle		
Comments			

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-7	11/15/2016	11:33	3	Groundwater		AW28440
MW-6	11/15/2016	12:20	3	Groundwater		AW28441
MW-6 Dup	11/15/2016	12:20	3	Sample Duplicate		AW28442
MW-21	11/15/2016	13:50	3	Groundwater		AW28443
MW-22	11/15/2016	14:34	3	Groundwater		AW28444
MW-5	11/15/2016	15:17	3	Groundwater		AW28445
EB-1	11/15/2016	16:05	3	Equipment Blank		AW28446

Relinquished By	Received By	Date/Time
 	Sarah Copeland <small>Digitally signed by Sarah Copeland Date: 2016.11.16 13:36:33 -06'00'</small>	11/16/2016 13:36

SmarTroll ID	5141-26150-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/> Cooler Temp 1.2 degrees C Thermometer ID 5408-27568-2-2 pH Strip ID 5521-28269-20-13
Turbidity ID	3901-20009-2-1	



Chain of Custody

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Field Complete
 Lab Complete

Lab ETA 11/16/2016 08:00

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Ben Rothschild	Location	Gaston Ash Pond
Analysis Requested	Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle		
Comments	Radium Duplicate collected at MW10		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW10	11/15/2016	10:35	5	Groundwater		AW28463
MW14	11/15/2016	12:05	3	Groundwater		AW28464
MW14 DUP	11/15/2016	12:05	3	Sample Duplicate		AW28465
MW15R	11/15/2016	13:56	3	Groundwater		AW28466
FB2	11/15/2016	14:30	3	Field Blank		AW28467

Relinquished By	Received By	Date/Time
<i>Ben Rothschild</i>	<i>Ben Rothschild</i>	11/16/2016 07:45
<i>Greg Dyer</i>	Sarah Copeland <small>Digitally signed by Sarah Copeland Date: 2016.11.16 13:38:08 -06'00'</small>	11/16/2016 13:38

SmarTroll ID	4696-23441-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	3901-20010-2-2	Cooler Temp
		1.2 degrees C
		Thermometer ID
		5408-27568-2-2
		pH Strip ID
		5521-28269-20-13



Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Field Complete

Lab Complete

Lab ETA

Requested Complete Date	Routine
Site Representative	Byron Corina
Collector	Jason Rouss

Results To	Dustin Brooks, John Pugh, Greg Dyer
Requested By	Greg Dyer
Location	Gaston Ash Pond

Analysis Requested	Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle
Comments	

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-19	11/16/2016	11:51	3	Groundwater		AW28561
MW-17	11/16/2016	13:27	3	Groundwater		AW28562

Relinquished By	Received By	Date/Time
	Sarah Copeland <small>Digitally signed by Sarah Copeland Date: 2016.11.17 10:38:49 -06'00'</small>	11/17/2016 10:38

SmarTroll ID	4696-23443-3-2
Turbidity ID	4677-23342-4-1

All metals and radiological bottles have pH < 2

Cooler Temp	0.5 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	5521-28272-20-16



Chain of Custody

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Field Complete

Lab Complete

Lab ETA 11/17/2016 08:30

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer		
	Site Representative		Byron Corina	Requested By	Greg Dyer
	Collector		Ben Rothschadl		Location

Analysis Requested	Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle		
Comments	Description for FB3 was incorrectly listed as Groundwater and has been updated.		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW2	11/16/2016	10:53	3	Groundwater		AW28563
MW3	11/16/2016	12:30	3	Groundwater		AW28564
MW4	11/16/2016	13:47	3	Groundwater		AW28565
FB3	11/16/2016	14:10	3	Field Blank		AW28566

Relinquished By	Received By	Date/Time
<i>Ben Rothschadl</i>	Anne Ryals <small>Digitally signed by Anne Ryals Date: 2016.11.17 10:41:49 -06'00'</small>	11/17/2016 10:41

SmarTroll ID	4696-23441-1-1
Turbidity ID	3901-20010-2-2

All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>	
Cooler Temp	3.2 Degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	5521-28272-20-16

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: 400-130973-1

TestAmerica Sample Delivery Group: Gaston Ash Pond (4)

Client Project/Site: CCR Plant Gaston

For:

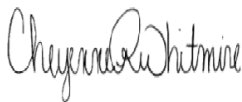
Alabama Power General Test Laboratory

744 County Rd 87

GSC #8

Calera, Alabama 35040

Attn: Sarah Copeland



Authorized for release by:

1/22/2017 10:24:07 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: 400-130973-1
SDG: Gaston Ash Pond (4)

Job ID: 400-130973-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-130973-1

RAD

Method(s) 9315: Radium-226 Prep Batch 160-283739: The Laboratory Control Sample (LCS) spike recovery (140%) associated with the following samples is outside the upper QC limit of 137% indicating a potential positive bias for that analyte : AW28441 MW-6 (400-130973-9), AW28442 MW-6 DUP (400-130973-10), AW28443 MW-21 (400-130973-11), AW28444 MW-22 (400-130973-12), AW28445 MW-5 (400-130973-13), AW28446 EB-1 (400-130973-14), AW28447 MW-1 (400-130973-15), AW28448 MW-8 (400-130973-16), AW28449 MW-9 (400-130973-17), AW28450 FB-1 (400-130973-18), AW28463 MW-10 (400-130973-19), AW28463 MW-10 (400-130973-19[DU]), AW28464 MW-14 (400-130973-20), AW28465 MW-14 DUP (400-130973-21), AW28466 MW-15R (400-130973-22), AW28467 FB-2 (400-130973-23), AW28561 MW-19 (400-130973-24), AW28562 MW-17 (400-130973-25), AW28563 MW-2 (400-130973-26), (LCS 160-283739/2-A) and (MB 160-283739/1-A). This analyte was not observed above the requested limit in the associated samples; therefore the sample data was not adversely affected by this excursion. The data have been qualified and reported.

Method(s) 9320: Radium-228 Batch 283743: The radium-228 detection goal was not met for the following sample due to a reduced aliquot, which can be attributed to insufficient sample volume, in addition to a low carrier recovery: AW28443 MW-21 (400-130973-11) (47.3%). The carrier recovery is within acceptance criteria and analytical results are reported with the detection limit achieved.

Method(s) PrecSep_0: Radium-228 Prep Batch 160-283743: The following samples were prepared at a reduced aliquot due to limited volume: AW28441 MW-6 (400-130973-9), AW28442 MW-6 DUP (400-130973-10), AW28443 MW-21 (400-130973-11), AW28444 MW-22 (400-130973-12), AW28445 MW-5 (400-130973-13), AW28446 EB-1 (400-130973-14), AW28447 MW-1 (400-130973-15), AW28448 MW-8 (400-130973-16), AW28449 MW-9 (400-130973-17), AW28450 FB-1 (400-130973-18), AW28463 MW-10 (400-130973-19), AW28463 MW-10 (400-130973-19[DU]), AW28464 MW-14 (400-130973-20), AW28465 MW-14 DUP (400-130973-21), AW28466 MW-15R (400-130973-22), AW28467 FB-2 (400-130973-23), AW28561 MW-19 (400-130973-24), AW28562 MW-17 (400-130973-25) and AW28563 MW-2 (400-130973-26).

Method(s) PrecSep_0: Radium-228 Prep Batch 160-283754: The following samples were prepared at a reduced aliquot due to limited volume: AW28357 MW-13 (400-130973-1), AW28358 MW-12 (400-130973-2), AW28359 MW-11 (400-130973-3), AW28360 MW-20 (400-130973-4), AW28361 MW-18 (400-130973-5), AW28361 MW-18 (400-130973-5[DU]), AW28362 MW-16 (400-130973-6), AW28363 MW-16 DUP (400-130973-7), AW28440 MW-7 (400-130973-8), AW28564 MW-3 (400-130973-27), AW28565 MW-4 (400-130973-28) and AW28566 FB-3 (400-130973-29).

Method(s) PrecSep-21: Radium-226 Prep Batch 160-283739: The following samples were prepared at a reduced aliquot due to limited volume: AW28441 MW-6 (400-130973-9), AW28442 MW-6 DUP (400-130973-10), AW28443 MW-21 (400-130973-11), AW28444 MW-22 (400-130973-12), AW28445 MW-5 (400-130973-13), AW28446 EB-1 (400-130973-14), AW28447 MW-1 (400-130973-15), AW28448 MW-8 (400-130973-16), AW28449 MW-9 (400-130973-17), AW28450 FB-1 (400-130973-18), AW28463 MW-10 (400-130973-19), AW28463 MW-10 (400-130973-19[DU]), AW28464 MW-14 (400-130973-20), AW28465 MW-14 DUP (400-130973-21), AW28466 MW-15R (400-130973-22), AW28467 FB-2 (400-130973-23), AW28561 MW-19 (400-130973-24), AW28562 MW-17 (400-130973-25) and AW28563 MW-2 (400-130973-26).

Method(s) PrecSep-21: Radium-226 Prep Batch 160-283746: The following samples were prepared at a reduced aliquot due to limited volume: AW28357 MW-13 (400-130973-1), AW28358 MW-12 (400-130973-2), AW28359 MW-11 (400-130973-3), AW28360 MW-20 (400-130973-4), AW28361 MW-18 (400-130973-5), AW28361 MW-18 (400-130973-5[DU]), AW28362 MW-16 (400-130973-6), AW28363 MW-16 DUP (400-130973-7), AW28440 MW-7 (400-130973-8), AW28564 MW-3 (400-130973-27), AW28565 MW-4 (400-130973-28) and AW28566 FB-3 (400-130973-29).

Method Summary

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

TestAmerica Job ID: 400-130973-1
SDG: Gaston Ash Pond (4)

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: 400-130973-1
SDG: Gaston Ash Pond (4)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-130973-1	AW28357 MW-13	Water	11/14/16 12:23	12/05/16 11:02
400-130973-2	AW28358 MW-12	Water	11/14/16 15:15	12/05/16 11:02
400-130973-3	AW28359 MW-11	Water	11/14/16 16:53	12/05/16 11:02
400-130973-4	AW28360 MW-20	Water	11/14/16 11:50	12/05/16 11:02
400-130973-5	AW28361 MW-18	Water	11/14/16 13:05	12/05/16 11:02
400-130973-6	AW28362 MW-16	Water	11/14/16 16:12	12/05/16 11:02
400-130973-7	AW28363 MW-16 DUP	Water	11/14/16 16:12	12/05/16 11:02
400-130973-8	AW28440 MW-7	Water	11/15/16 11:33	12/05/16 11:02
400-130973-9	AW28441 MW-6	Water	11/15/16 12:20	12/05/16 11:02
400-130973-10	AW28442 MW-6 DUP	Water	11/15/16 12:20	12/05/16 11:02
400-130973-11	AW28443 MW-21	Water	11/15/16 13:50	12/05/16 11:02
400-130973-12	AW28444 MW-22	Water	11/15/16 14:34	12/05/16 11:02
400-130973-13	AW28445 MW-5	Water	11/15/16 15:17	12/05/16 11:02
400-130973-14	AW28446 EB-1	Water	11/15/16 16:05	12/05/16 11:02
400-130973-15	AW28447 MW-1	Water	11/15/16 10:55	12/05/16 11:02
400-130973-16	AW28448 MW-8	Water	11/15/16 13:52	12/05/16 11:02
400-130973-17	AW28449 MW-9	Water	11/15/16 12:30	12/05/16 11:02
400-130973-18	AW28450 FB-1	Water	11/15/16 15:00	12/05/16 11:02
400-130973-19	AW28463 MW-10	Water	11/15/16 10:35	12/05/16 11:02
400-130973-20	AW28464 MW-14	Water	11/15/16 12:05	12/05/16 11:02
400-130973-21	AW28465 MW-14 DUP	Water	11/15/16 12:05	12/05/16 11:02
400-130973-22	AW28466 MW-15R	Water	11/15/16 13:56	12/05/16 11:02
400-130973-23	AW28467 FB-2	Water	11/15/16 14:30	12/05/16 11:02
400-130973-24	AW28561 MW-19	Water	11/16/16 11:51	12/05/16 11:02
400-130973-25	AW28562 MW-17	Water	11/16/16 13:27	12/05/16 11:02
400-130973-26	AW28563 MW-2	Water	11/16/16 10:53	12/05/16 11:02
400-130973-27	AW28564 MW-3	Water	11/16/16 12:30	12/05/16 11:02
400-130973-28	AW28565 MW-4	Water	11/16/16 13:47	12/05/16 11:02
400-130973-29	AW28566 FB-3	Water	11/16/16 14:10	12/05/16 11:02

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28357 MW-13

Lab Sample ID: 400-130973-1

Date Collected: 11/14/16 12:23

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.379		0.136	0.140	1.00	0.125	pCi/L	12/13/16 14:15	01/04/17 13:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.6		40 - 110					12/13/16 14:15	01/04/17 13:37	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.355	U	0.301	0.303	1.00	0.481	pCi/L	12/13/16 14:48	12/19/16 16:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.6		40 - 110					12/13/16 14:48	12/19/16 16:59	1
Y Carrier	102		40 - 110					12/13/16 14:48	12/19/16 16:59	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	0.734		0.330	0.334	5.00	0.481	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28358 MW-12

Lab Sample ID: 400-130973-2

Date Collected: 11/14/16 15:15

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.338		0.146	0.149	1.00	0.160	pCi/L	12/13/16 14:15	01/04/17 13:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.1		40 - 110					12/13/16 14:15	01/04/17 13:39	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.249	U	0.301	0.302	1.00	0.498	pCi/L	12/13/16 14:48	12/19/16 16:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.1		40 - 110					12/13/16 14:48	12/19/16 16:59	1
Y Carrier	102		40 - 110					12/13/16 14:48	12/19/16 16:59	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	0.586		0.334	0.337	5.00	0.498	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28359 MW-11

Lab Sample ID: 400-130973-3

Date Collected: 11/14/16 16:53

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0630	U	0.0852	0.0854	1.00	0.143	pCi/L	12/13/16 14:15	01/04/17 13:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.7		40 - 110					12/13/16 14:15	01/04/17 13:43	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.255	U	0.289	0.290	1.00	0.476	pCi/L	12/13/16 14:48	12/19/16 16:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.7		40 - 110					12/13/16 14:48	12/19/16 16:59	1
Y Carrier	99.1		40 - 110					12/13/16 14:48	12/19/16 16:59	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	0.318	U	0.302	0.303	5.00	0.476	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28360 MW-20

Lab Sample ID: 400-130973-4

Date Collected: 11/14/16 11:50

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	16.4		0.902	1.73	1.00	0.220	pCi/L	12/13/16 14:15	01/04/17 13:43	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	70.4		40 - 110					12/13/16 14:15	01/04/17 13:43	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.767		0.410	0.416	1.00	0.610	pCi/L	12/13/16 14:48	12/19/16 16:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	70.4		40 - 110					12/13/16 14:48	12/19/16 16:59	1
Y Carrier	98.7		40 - 110					12/13/16 14:48	12/19/16 16:59	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	17.2		0.991	1.78	5.00	0.610	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28361 MW-18

Lab Sample ID: 400-130973-5

Date Collected: 11/14/16 13:05

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.668		0.192	0.201	1.00	0.179	pCi/L	12/13/16 14:15	01/04/17 13:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.9		40 - 110					12/13/16 14:15	01/04/17 13:44	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.623		0.313	0.318	1.00	0.453	pCi/L	12/13/16 14:48	12/19/16 17:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.9		40 - 110					12/13/16 14:48	12/19/16 17:00	1
Y Carrier	98.7		40 - 110					12/13/16 14:48	12/19/16 17:00	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	1.29		0.367	0.376	5.00	0.453	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28362 MW-16

Lab Sample ID: 400-130973-6

Date Collected: 11/14/16 16:12

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	3.27		0.379	0.480	1.00	0.167	pCi/L	12/13/16 14:15	01/04/17 14:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.2		40 - 110					12/13/16 14:15	01/04/17 14:39	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.907		0.358	0.368	1.00	0.494	pCi/L	12/13/16 14:48	12/19/16 17:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.2		40 - 110					12/13/16 14:48	12/19/16 17:00	1
Y Carrier	96.4		40 - 110					12/13/16 14:48	12/19/16 17:00	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	4.18		0.521	0.605	5.00	0.494	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28363 MW-16 DUP

Lab Sample ID: 400-130973-7

Date Collected: 11/14/16 16:12

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	3.52		0.396	0.507	1.00	0.156	pCi/L	12/13/16 14:15	01/04/17 14:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.3		40 - 110					12/13/16 14:15	01/04/17 14:39	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.664		0.338	0.344	1.00	0.496	pCi/L	12/13/16 14:48	12/19/16 17:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.3		40 - 110					12/13/16 14:48	12/19/16 17:00	1
Y Carrier	96.8		40 - 110					12/13/16 14:48	12/19/16 17:00	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	4.18		0.521	0.613	5.00	0.496	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28440 MW-7

Lab Sample ID: 400-130973-8

Date Collected: 11/15/16 11:33

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0955	U	0.121	0.121	1.00	0.201	pCi/L	12/13/16 14:15	01/04/17 14:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	59.5		40 - 110					12/13/16 14:15	01/04/17 14:39	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.141	U	0.444	0.445	1.00	0.771	pCi/L	12/13/16 14:48	12/19/16 17:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	59.5		40 - 110					12/13/16 14:48	12/19/16 17:00	1
Y Carrier	95.3		40 - 110					12/13/16 14:48	12/19/16 17:00	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	0.236	U	0.461	0.461	5.00	0.771	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28441 MW-6

Lab Sample ID: 400-130973-9

Date Collected: 11/15/16 12:20

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.699	*	0.378	0.383	1.00	0.461	pCi/L	12/13/16 12:59	01/20/17 06:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.8		40 - 110					12/13/16 12:59	01/20/17 06:53	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.753		0.404	0.410	1.00	0.603	pCi/L	12/13/16 13:45	01/19/17 18:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.8		40 - 110					12/13/16 13:45	01/19/17 18:11	1
Y Carrier	88.2		40 - 110					12/13/16 13:45	01/19/17 18:11	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	1.45		0.553	0.561	5.00	0.603	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28442 MW-6 DUP

Lab Sample ID: 400-130973-10

Date Collected: 11/15/16 12:20

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.196	U *	0.246	0.246	1.00	0.405	pCi/L	12/13/16 12:59	01/20/17 06:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.3		40 - 110					12/13/16 12:59	01/20/17 06:53	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.381	U	0.366	0.367	1.00	0.593	pCi/L	12/13/16 13:45	01/19/17 18:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.3		40 - 110					12/13/16 13:45	01/19/17 18:11	1
Y Carrier	93.5		40 - 110					12/13/16 13:45	01/19/17 18:11	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	U	0.441	0.442	5.00	0.593	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28443 MW-21

Lab Sample ID: 400-130973-11

Date Collected: 11/15/16 13:50

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.687	U *	0.546	0.550	1.00	0.811	pCi/L	12/13/16 12:59	01/20/17 06:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	47.3		40 - 110					12/13/16 12:59	01/20/17 06:53	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.746	U G	0.634	0.637	1.00	1.01	pCi/L	12/13/16 13:45	01/19/17 18:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	47.3		40 - 110					12/13/16 13:45	01/19/17 18:38	1
Y Carrier	93.1		40 - 110					12/13/16 13:45	01/19/17 18:38	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	1.43		0.836	0.841	5.00	1.01	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28444 MW-22

Lab Sample ID: 400-130973-12

Date Collected: 11/15/16 14:34

Matrix: Water

Date Received: 12/05/16 11:02

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	U *	0.323	0.324	1.00	0.504	pCi/L	12/13/16 12:59	01/20/17 06:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.5		40 - 110					12/13/16 12:59	01/20/17 06:54	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.343	U	0.364	0.365	1.00	0.594	pCi/L	12/13/16 13:45	01/19/17 18:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.5		40 - 110					12/13/16 13:45	01/19/17 18:38	1
Y Carrier	95.0		40 - 110					12/13/16 13:45	01/19/17 18:38	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	0.671		0.486	0.488	5.00	0.594	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28445 MW-5

Lab Sample ID: 400-130973-13

Date Collected: 11/15/16 15:17

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.185	U *	0.263	0.263	1.00	0.447	pCi/L	12/13/16 12:59	01/20/17 06:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.0		40 - 110					12/13/16 12:59	01/20/17 06:54	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.619		0.372	0.376	1.00	0.562	pCi/L	12/13/16 13:45	01/19/17 18:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.0		40 - 110					12/13/16 13:45	01/19/17 18:38	1
Y Carrier	85.2		40 - 110					12/13/16 13:45	01/19/17 18:38	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	0.804		0.456	0.459	5.00	0.562	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28446 EB-1

Lab Sample ID: 400-130973-14

Date Collected: 11/15/16 16:05

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.242	U *	0.288	0.289	1.00	0.470	pCi/L	12/13/16 12:59	01/20/17 06:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.8		40 - 110					12/13/16 12:59	01/20/17 06:54	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.406	U	0.469	0.470	1.00	0.772	pCi/L	12/13/16 13:45	01/19/17 18:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.8		40 - 110					12/13/16 13:45	01/19/17 18:38	1
Y Carrier	86.4		40 - 110					12/13/16 13:45	01/19/17 18:38	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	0.647	U	0.550	0.552	5.00	0.772	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28447 MW-1

Lab Sample ID: 400-130973-15

Date Collected: 11/15/16 10:55

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.846	*	0.408	0.415	1.00	0.487	pCi/L	12/13/16 12:59	01/20/17 06:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.8		40 - 110					12/13/16 12:59	01/20/17 06:54	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.435	U	0.344	0.347	1.00	0.543	pCi/L	12/13/16 13:45	01/19/17 18:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.8		40 - 110					12/13/16 13:45	01/19/17 18:38	1
Y Carrier	92.3		40 - 110					12/13/16 13:45	01/19/17 18:38	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	1.28		0.533	0.540	5.00	0.543	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28448 MW-8

Lab Sample ID: 400-130973-16

Date Collected: 11/15/16 13:52

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.150	U *	0.270	0.271	1.00	0.478	pCi/L	12/13/16 12:59	01/20/17 06:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.8		40 - 110					12/13/16 12:59	01/20/17 06:54	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.256	U	0.358	0.359	1.00	0.598	pCi/L	12/13/16 13:45	01/19/17 18:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.8		40 - 110					12/13/16 13:45	01/19/17 18:38	1
Y Carrier	87.5		40 - 110					12/13/16 13:45	01/19/17 18:38	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	0.406	U	0.449	0.449	5.00	0.598	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28449 MW-9

Lab Sample ID: 400-130973-17

Date Collected: 11/15/16 12:30

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.530	U *	0.384	0.387	1.00	0.556	pCi/L	12/13/16 12:59	01/20/17 06:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.2		40 - 110					12/13/16 12:59	01/20/17 06:56	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.245	U	0.349	0.350	1.00	0.585	pCi/L	12/13/16 13:45	01/19/17 18:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.2		40 - 110					12/13/16 13:45	01/19/17 18:38	1
Y Carrier	89.7		40 - 110					12/13/16 13:45	01/19/17 18:38	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	0.775		0.519	0.522	5.00	0.585	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28450 FB-1

Lab Sample ID: 400-130973-18

Date Collected: 11/15/16 15:00

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0579	U *	0.229	0.229	1.00	0.441	pCi/L	12/13/16 12:59	01/20/17 06:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		40 - 110					12/13/16 12:59	01/20/17 06:56	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.405	U	0.324	0.326	1.00	0.512	pCi/L	12/13/16 13:45	01/19/17 18:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.9		40 - 110					12/13/16 13:45	01/19/17 18:38	1
Y Carrier	94.2		40 - 110					12/13/16 13:45	01/19/17 18:38	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	0.463	U	0.396	0.398	5.00	0.512	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28463 MW-10

Lab Sample ID: 400-130973-19

Date Collected: 11/15/16 10:35

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0859	U *	0.275	0.275	1.00	0.516	pCi/L	12/13/16 12:59	01/20/17 06:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.8		40 - 110					12/13/16 12:59	01/20/17 06:56	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.220	U	0.350	0.351	1.00	0.591	pCi/L	12/13/16 13:45	01/19/17 18:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.8		40 - 110					12/13/16 13:45	01/19/17 18:38	1
Y Carrier	90.5		40 - 110					12/13/16 13:45	01/19/17 18:38	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	0.305	U	0.445	0.446	5.00	0.591	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28464 MW-14

Lab Sample ID: 400-130973-20

Date Collected: 11/15/16 12:05

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.386	U *	0.311	0.313	1.00	0.453	pCi/L	12/13/16 12:59	01/20/17 06:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.6		40 - 110					12/13/16 12:59	01/20/17 06:56	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.321	U	0.400	0.401	1.00	0.663	pCi/L	12/13/16 13:45	01/19/17 18:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.6		40 - 110					12/13/16 13:45	01/19/17 18:39	1
Y Carrier	87.9		40 - 110					12/13/16 13:45	01/19/17 18:39	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	0.707		0.507	0.509	5.00	0.663	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28465 MW-14 DUP

Lab Sample ID: 400-130973-21

Date Collected: 11/15/16 12:05

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.242	U *	0.293	0.294	1.00	0.481	pCi/L	12/13/16 12:59	01/20/17 06:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	72.9		40 - 110					12/13/16 12:59	01/20/17 06:57	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.124	U	0.379	0.379	1.00	0.658	pCi/L	12/13/16 13:45	01/19/17 18:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	72.9		40 - 110					12/13/16 13:45	01/19/17 18:39	1
Y Carrier	91.6		40 - 110					12/13/16 13:45	01/19/17 18:39	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	0.366	U	0.479	0.480	5.00	0.658	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28466 MW-15R

Lab Sample ID: 400-130973-22

Date Collected: 11/15/16 13:56

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0489	U *	0.245	0.245	1.00	0.479	pCi/L	12/13/16 12:59	01/20/17 06:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.6		40 - 110					12/13/16 12:59	01/20/17 06:57	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.489	U	0.376	0.379	1.00	0.592	pCi/L	12/13/16 13:45	01/19/17 18:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.6		40 - 110					12/13/16 13:45	01/19/17 18:39	1
Y Carrier	89.3		40 - 110					12/13/16 13:45	01/19/17 18:39	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	0.538	U	0.449	0.451	5.00	0.592	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28467 FB-2

Lab Sample ID: 400-130973-23

Date Collected: 11/15/16 14:30

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0131	U *	0.195	0.195	1.00	0.425	pCi/L	12/13/16 12:59	01/20/17 06:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.6		40 - 110					12/13/16 12:59	01/20/17 06:57	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.115	U	0.351	0.351	1.00	0.608	pCi/L	12/13/16 13:45	01/19/17 18:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.6		40 - 110					12/13/16 13:45	01/19/17 18:39	1
Y Carrier	91.2		40 - 110					12/13/16 13:45	01/19/17 18:39	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	0.102	U	0.401	0.401	5.00	0.608	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28561 MW-19

Lab Sample ID: 400-130973-24

Date Collected: 11/16/16 11:51

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.806	*	0.387	0.394	1.00	0.449	pCi/L	12/13/16 12:59	01/20/17 06:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.9		40 - 110					12/13/16 12:59	01/20/17 06:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.771		0.380	0.387	1.00	0.552	pCi/L	12/13/16 13:45	01/19/17 18:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.9		40 - 110					12/13/16 13:45	01/19/17 18:39	1
Y Carrier	90.1		40 - 110					12/13/16 13:45	01/19/17 18:39	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	1.58		0.543	0.552	5.00	0.552	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28562 MW-17

Lab Sample ID: 400-130973-25

Date Collected: 11/16/16 13:27

Matrix: Water

Date Received: 12/05/16 11:02

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	*	0.338	0.342	1.00	0.433	pCi/L	12/13/16 12:59	01/20/17 06:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	70.1		40 - 110					12/13/16 12:59	01/20/17 06:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.713		0.429	0.434	1.00	0.652	pCi/L	12/13/16 13:45	01/19/17 18:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	70.1		40 - 110					12/13/16 13:45	01/19/17 18:40	1
Y Carrier	94.6		40 - 110					12/13/16 13:45	01/19/17 18:40	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	1.27		0.546	0.552	5.00	0.652	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28563 MW-2

Lab Sample ID: 400-130973-26

Date Collected: 11/16/16 10:53

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.279	U *	0.298	0.299	1.00	0.475	pCi/L	12/13/16 12:59	01/20/17 07:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.2		40 - 110					12/13/16 12:59	01/20/17 07:00	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0944	U	0.330	0.331	1.00	0.576	pCi/L	12/13/16 13:45	01/19/17 18:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.2		40 - 110					12/13/16 13:45	01/19/17 18:40	1
Y Carrier	94.2		40 - 110					12/13/16 13:45	01/19/17 18:40	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.373	U	0.445	0.446	5.00	0.576	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28564 MW-3

Lab Sample ID: 400-130973-27

Date Collected: 11/16/16 12:30

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0706	U	0.100	0.101	1.00	0.171	pCi/L	12/13/16 14:15	01/04/17 10:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		40 - 110					12/13/16 14:15	01/04/17 10:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.224	U	0.251	0.252	1.00	0.411	pCi/L	12/13/16 14:48	12/19/16 16:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		40 - 110					12/13/16 14:48	12/19/16 16:57	1
Y Carrier	99.4		40 - 110					12/13/16 14:48	12/19/16 16:57	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	0.295	U	0.270	0.271	5.00	0.411	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28565 MW-4

Lab Sample ID: 400-130973-28

Date Collected: 11/16/16 13:47

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.320		0.138	0.141	1.00	0.153	pCi/L	12/13/16 14:15	01/04/17 10:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		40 - 110					12/13/16 14:15	01/04/17 10:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.171	U	0.329	0.330	1.00	0.559	pCi/L	12/13/16 14:48	12/19/16 16:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		40 - 110					12/13/16 14:48	12/19/16 16:58	1
Y Carrier	99.1		40 - 110					12/13/16 14:48	12/19/16 16:58	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	0.491	U	0.357	0.358	5.00	0.559	pCi/L		01/20/17 17:28	1

Client Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28566 FB-3

Lab Sample ID: 400-130973-29

Date Collected: 11/16/16 14:10

Matrix: Water

Date Received: 12/05/16 11:02

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00954	U	0.0858	0.0859	1.00	0.169	pCi/L	12/13/16 14:15	01/04/17 10:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.0		40 - 110					12/13/16 14:15	01/04/17 10:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0145	U	0.271	0.271	1.00	0.486	pCi/L	12/13/16 14:48	12/19/16 16:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.0		40 - 110					12/13/16 14:48	12/19/16 16:58	1
Y Carrier	97.6		40 - 110					12/13/16 14:48	12/19/16 16:58	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	0.0240	U	0.284	0.284	5.00	0.486	pCi/L		01/20/17 17:28	1

Definitions/Glossary

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

TestAmerica Job ID: 400-130973-1
SDG: Gaston Ash Pond (4)

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.
*	LCS or LCSD is outside acceptance limits.
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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 400-130973-1
SDG: Gaston Ash Pond (4)

Client Sample ID: AW28357 MW-13

Date Collected: 11/14/16 12:23

Date Received: 12/05/16 11:02

Lab Sample ID: 400-130973-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283746	12/13/16 14:15	AS	TAL SL
Total/NA	Analysis	9315		1	286428	01/04/17 13:37	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283754	12/13/16 14:48	AS	TAL SL
Total/NA	Analysis	9320		1	284475	12/19/16 16:59	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Client Sample ID: AW28358 MW-12

Date Collected: 11/14/16 15:15

Date Received: 12/05/16 11:02

Lab Sample ID: 400-130973-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283746	12/13/16 14:15	AS	TAL SL
Total/NA	Analysis	9315		1	286427	01/04/17 13:39	RTM	TAL SL
Total/NA	Prep	PrecSep_0			283754	12/13/16 14:48	AS	TAL SL
Total/NA	Analysis	9320		1	284475	12/19/16 16:59	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Client Sample ID: AW28359 MW-11

Date Collected: 11/14/16 16:53

Date Received: 12/05/16 11:02

Lab Sample ID: 400-130973-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283746	12/13/16 14:15	AS	TAL SL
Total/NA	Analysis	9315		1	286045	01/04/17 13:43	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283754	12/13/16 14:48	AS	TAL SL
Total/NA	Analysis	9320		1	284475	12/19/16 16:59	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Client Sample ID: AW28360 MW-20

Date Collected: 11/14/16 11:50

Date Received: 12/05/16 11:02

Lab Sample ID: 400-130973-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283746	12/13/16 14:15	AS	TAL SL
Total/NA	Analysis	9315		1	286045	01/04/17 13:43	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283754	12/13/16 14:48	AS	TAL SL
Total/NA	Analysis	9320		1	284475	12/19/16 16:59	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28361 MW-18

Lab Sample ID: 400-130973-5

Date Collected: 11/14/16 13:05

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283746	12/13/16 14:15	AS	TAL SL
Total/NA	Analysis	9315		1	286045	01/04/17 13:44	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283754	12/13/16 14:48	AS	TAL SL
Total/NA	Analysis	9320		1	284475	12/19/16 17:00	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Client Sample ID: AW28362 MW-16

Lab Sample ID: 400-130973-6

Date Collected: 11/14/16 16:12

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283746	12/13/16 14:15	AS	TAL SL
Total/NA	Analysis	9315		1	286045	01/04/17 14:39	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283754	12/13/16 14:48	AS	TAL SL
Total/NA	Analysis	9320		1	284475	12/19/16 17:00	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Client Sample ID: AW28363 MW-16 DUP

Lab Sample ID: 400-130973-7

Date Collected: 11/14/16 16:12

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283746	12/13/16 14:15	AS	TAL SL
Total/NA	Analysis	9315		1	286045	01/04/17 14:39	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283754	12/13/16 14:48	AS	TAL SL
Total/NA	Analysis	9320		1	284475	12/19/16 17:00	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Client Sample ID: AW28440 MW-7

Lab Sample ID: 400-130973-8

Date Collected: 11/15/16 11:33

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283746	12/13/16 14:15	AS	TAL SL
Total/NA	Analysis	9315		1	286045	01/04/17 14:39	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283754	12/13/16 14:48	AS	TAL SL
Total/NA	Analysis	9320		1	284476	12/19/16 17:00	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-130973-1
SDG: Gaston Ash Pond (4)

Client Sample ID: AW28441 MW-6

Lab Sample ID: 400-130973-9

Date Collected: 11/15/16 12:20

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283739	12/13/16 12:59	AS	TAL SL
Total/NA	Analysis	9315		1	288517	01/20/17 06:53	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283743	12/13/16 13:45	AS	TAL SL
Total/NA	Analysis	9320		1	288249	01/19/17 18:11	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Client Sample ID: AW28442 MW-6 DUP

Lab Sample ID: 400-130973-10

Date Collected: 11/15/16 12:20

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283739	12/13/16 12:59	AS	TAL SL
Total/NA	Analysis	9315		1	288517	01/20/17 06:53	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283743	12/13/16 13:45	AS	TAL SL
Total/NA	Analysis	9320		1	288249	01/19/17 18:11	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Client Sample ID: AW28443 MW-21

Lab Sample ID: 400-130973-11

Date Collected: 11/15/16 13:50

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283739	12/13/16 12:59	AS	TAL SL
Total/NA	Analysis	9315		1	288517	01/20/17 06:53	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283743	12/13/16 13:45	AS	TAL SL
Total/NA	Analysis	9320		1	288247	01/19/17 18:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Client Sample ID: AW28444 MW-22

Lab Sample ID: 400-130973-12

Date Collected: 11/15/16 14:34

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283739	12/13/16 12:59	AS	TAL SL
Total/NA	Analysis	9315		1	288517	01/20/17 06:54	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283743	12/13/16 13:45	AS	TAL SL
Total/NA	Analysis	9320		1	288247	01/19/17 18:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-130973-1
SDG: Gaston Ash Pond (4)

Client Sample ID: AW28445 MW-5

Lab Sample ID: 400-130973-13

Date Collected: 11/15/16 15:17

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283739	12/13/16 12:59	AS	TAL SL
Total/NA	Analysis	9315		1	288517	01/20/17 06:54	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283743	12/13/16 13:45	AS	TAL SL
Total/NA	Analysis	9320		1	288247	01/19/17 18:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Client Sample ID: AW28446 EB-1

Lab Sample ID: 400-130973-14

Date Collected: 11/15/16 16:05

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283739	12/13/16 12:59	AS	TAL SL
Total/NA	Analysis	9315		1	288517	01/20/17 06:54	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283743	12/13/16 13:45	AS	TAL SL
Total/NA	Analysis	9320		1	288247	01/19/17 18:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Client Sample ID: AW28447 MW-1

Lab Sample ID: 400-130973-15

Date Collected: 11/15/16 10:55

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283739	12/13/16 12:59	AS	TAL SL
Total/NA	Analysis	9315		1	288517	01/20/17 06:54	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283743	12/13/16 13:45	AS	TAL SL
Total/NA	Analysis	9320		1	288247	01/19/17 18:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Client Sample ID: AW28448 MW-8

Lab Sample ID: 400-130973-16

Date Collected: 11/15/16 13:52

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283739	12/13/16 12:59	AS	TAL SL
Total/NA	Analysis	9315		1	288517	01/20/17 06:54	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283743	12/13/16 13:45	AS	TAL SL
Total/NA	Analysis	9320		1	288247	01/19/17 18:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-130973-1
SDG: Gaston Ash Pond (4)

Client Sample ID: AW28449 MW-9

Lab Sample ID: 400-130973-17

Date Collected: 11/15/16 12:30

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283739	12/13/16 12:59	AS	TAL SL
Total/NA	Analysis	9315		1	288518	01/20/17 06:56	RTM	TAL SL
Total/NA	Prep	PrecSep_0			283743	12/13/16 13:45	AS	TAL SL
Total/NA	Analysis	9320		1	288247	01/19/17 18:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Client Sample ID: AW28450 FB-1

Lab Sample ID: 400-130973-18

Date Collected: 11/15/16 15:00

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283739	12/13/16 12:59	AS	TAL SL
Total/NA	Analysis	9315		1	288518	01/20/17 06:56	RTM	TAL SL
Total/NA	Prep	PrecSep_0			283743	12/13/16 13:45	AS	TAL SL
Total/NA	Analysis	9320		1	288247	01/19/17 18:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Client Sample ID: AW28463 MW-10

Lab Sample ID: 400-130973-19

Date Collected: 11/15/16 10:35

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283739	12/13/16 12:59	AS	TAL SL
Total/NA	Analysis	9315		1	288518	01/20/17 06:56	RTM	TAL SL
Total/NA	Prep	PrecSep_0			283743	12/13/16 13:45	AS	TAL SL
Total/NA	Analysis	9320		1	288247	01/19/17 18:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Client Sample ID: AW28464 MW-14

Lab Sample ID: 400-130973-20

Date Collected: 11/15/16 12:05

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283739	12/13/16 12:59	AS	TAL SL
Total/NA	Analysis	9315		1	288518	01/20/17 06:56	RTM	TAL SL
Total/NA	Prep	PrecSep_0			283743	12/13/16 13:45	AS	TAL SL
Total/NA	Analysis	9320		1	288247	01/19/17 18:39	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28465 MW-14 DUP

Lab Sample ID: 400-130973-21

Date Collected: 11/15/16 12:05

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283739	12/13/16 12:59	AS	TAL SL
Total/NA	Analysis	9315		1	288518	01/20/17 06:57	RTM	TAL SL
Total/NA	Prep	PrecSep_0			283743	12/13/16 13:45	AS	TAL SL
Total/NA	Analysis	9320		1	288247	01/19/17 18:39	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Client Sample ID: AW28466 MW-15R

Lab Sample ID: 400-130973-22

Date Collected: 11/15/16 13:56

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283739	12/13/16 12:59	AS	TAL SL
Total/NA	Analysis	9315		1	288518	01/20/17 06:57	RTM	TAL SL
Total/NA	Prep	PrecSep_0			283743	12/13/16 13:45	AS	TAL SL
Total/NA	Analysis	9320		1	288247	01/19/17 18:39	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Client Sample ID: AW28467 FB-2

Lab Sample ID: 400-130973-23

Date Collected: 11/15/16 14:30

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283739	12/13/16 12:59	AS	TAL SL
Total/NA	Analysis	9315		1	288518	01/20/17 06:57	RTM	TAL SL
Total/NA	Prep	PrecSep_0			283743	12/13/16 13:45	AS	TAL SL
Total/NA	Analysis	9320		1	288247	01/19/17 18:39	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Client Sample ID: AW28561 MW-19

Lab Sample ID: 400-130973-24

Date Collected: 11/16/16 11:51

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283739	12/13/16 12:59	AS	TAL SL
Total/NA	Analysis	9315		1	288518	01/20/17 06:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			283743	12/13/16 13:45	AS	TAL SL
Total/NA	Analysis	9320		1	288247	01/19/17 18:39	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Client Sample ID: AW28562 MW-17

Lab Sample ID: 400-130973-25

Date Collected: 11/16/16 13:27

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283739	12/13/16 12:59	AS	TAL SL
Total/NA	Analysis	9315		1	288518	01/20/17 06:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			283743	12/13/16 13:45	AS	TAL SL
Total/NA	Analysis	9320		1	288247	01/19/17 18:40	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Client Sample ID: AW28563 MW-2

Lab Sample ID: 400-130973-26

Date Collected: 11/16/16 10:53

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283739	12/13/16 12:59	AS	TAL SL
Total/NA	Analysis	9315		1	288510	01/20/17 07:00	RTM	TAL SL
Total/NA	Prep	PrecSep_0			283743	12/13/16 13:45	AS	TAL SL
Total/NA	Analysis	9320		1	288247	01/19/17 18:40	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Client Sample ID: AW28564 MW-3

Lab Sample ID: 400-130973-27

Date Collected: 11/16/16 12:30

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283746	12/13/16 14:15	AS	TAL SL
Total/NA	Analysis	9315		1	286427	01/04/17 10:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			283754	12/13/16 14:48	AS	TAL SL
Total/NA	Analysis	9320		1	284475	12/19/16 16:57	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Client Sample ID: AW28565 MW-4

Lab Sample ID: 400-130973-28

Date Collected: 11/16/16 13:47

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283746	12/13/16 14:15	AS	TAL SL
Total/NA	Analysis	9315		1	286427	01/04/17 10:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			283754	12/13/16 14:48	AS	TAL SL
Total/NA	Analysis	9320		1	284475	12/19/16 16:58	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-130973-1
SDG: Gaston Ash Pond (4)

Client Sample ID: AW28566 FB-3

Lab Sample ID: 400-130973-29

Date Collected: 11/16/16 14:10

Matrix: Water

Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283746	12/13/16 14:15	AS	TAL SL
Total/NA	Analysis	9315		1	286427	01/04/17 10:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			283754	12/13/16 14:48	AS	TAL SL
Total/NA	Analysis	9320		1	284475	12/19/16 16:58	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288586	01/20/17 17:28	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: 400-130973-1
 SDG: Gaston Ash Pond (4)

Rad

Prep Batch: 283739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130973-9	AW28441 MW-6	Total/NA	Water	PrecSep-21	
400-130973-10	AW28442 MW-6 DUP	Total/NA	Water	PrecSep-21	
400-130973-11	AW28443 MW-21	Total/NA	Water	PrecSep-21	
400-130973-12	AW28444 MW-22	Total/NA	Water	PrecSep-21	
400-130973-13	AW28445 MW-5	Total/NA	Water	PrecSep-21	
400-130973-14	AW28446 EB-1	Total/NA	Water	PrecSep-21	
400-130973-15	AW28447 MW-1	Total/NA	Water	PrecSep-21	
400-130973-16	AW28448 MW-8	Total/NA	Water	PrecSep-21	
400-130973-17	AW28449 MW-9	Total/NA	Water	PrecSep-21	
400-130973-18	AW28450 FB-1	Total/NA	Water	PrecSep-21	
400-130973-19	AW28463 MW-10	Total/NA	Water	PrecSep-21	
400-130973-20	AW28464 MW-14	Total/NA	Water	PrecSep-21	
400-130973-21	AW28465 MW-14 DUP	Total/NA	Water	PrecSep-21	
400-130973-22	AW28466 MW-15R	Total/NA	Water	PrecSep-21	
400-130973-23	AW28467 FB-2	Total/NA	Water	PrecSep-21	
400-130973-24	AW28561 MW-19	Total/NA	Water	PrecSep-21	
400-130973-25	AW28562 MW-17	Total/NA	Water	PrecSep-21	
400-130973-26	AW28563 MW-2	Total/NA	Water	PrecSep-21	
MB 160-283739/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-283739/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-130973-19 DU	AW28463 MW-10	Total/NA	Water	PrecSep-21	

Prep Batch: 283743

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130973-9	AW28441 MW-6	Total/NA	Water	PrecSep_0	
400-130973-10	AW28442 MW-6 DUP	Total/NA	Water	PrecSep_0	
400-130973-11	AW28443 MW-21	Total/NA	Water	PrecSep_0	
400-130973-12	AW28444 MW-22	Total/NA	Water	PrecSep_0	
400-130973-13	AW28445 MW-5	Total/NA	Water	PrecSep_0	
400-130973-14	AW28446 EB-1	Total/NA	Water	PrecSep_0	
400-130973-15	AW28447 MW-1	Total/NA	Water	PrecSep_0	
400-130973-16	AW28448 MW-8	Total/NA	Water	PrecSep_0	
400-130973-17	AW28449 MW-9	Total/NA	Water	PrecSep_0	
400-130973-18	AW28450 FB-1	Total/NA	Water	PrecSep_0	
400-130973-19	AW28463 MW-10	Total/NA	Water	PrecSep_0	
400-130973-20	AW28464 MW-14	Total/NA	Water	PrecSep_0	
400-130973-21	AW28465 MW-14 DUP	Total/NA	Water	PrecSep_0	
400-130973-22	AW28466 MW-15R	Total/NA	Water	PrecSep_0	
400-130973-23	AW28467 FB-2	Total/NA	Water	PrecSep_0	
400-130973-24	AW28561 MW-19	Total/NA	Water	PrecSep_0	
400-130973-25	AW28562 MW-17	Total/NA	Water	PrecSep_0	
400-130973-26	AW28563 MW-2	Total/NA	Water	PrecSep_0	
MB 160-283743/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-283743/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-130973-19 DU	AW28463 MW-10	Total/NA	Water	PrecSep_0	

Prep Batch: 283746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130973-1	AW28357 MW-13	Total/NA	Water	PrecSep-21	
400-130973-2	AW28358 MW-12	Total/NA	Water	PrecSep-21	
400-130973-3	AW28359 MW-11	Total/NA	Water	PrecSep-21	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Rad (Continued)

Prep Batch: 283746 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130973-4	AW28360 MW-20	Total/NA	Water	PrecSep-21	
400-130973-5	AW28361 MW-18	Total/NA	Water	PrecSep-21	
400-130973-6	AW28362 MW-16	Total/NA	Water	PrecSep-21	
400-130973-7	AW28363 MW-16 DUP	Total/NA	Water	PrecSep-21	
400-130973-8	AW28440 MW-7	Total/NA	Water	PrecSep-21	
400-130973-27	AW28564 MW-3	Total/NA	Water	PrecSep-21	
400-130973-28	AW28565 MW-4	Total/NA	Water	PrecSep-21	
400-130973-29	AW28566 FB-3	Total/NA	Water	PrecSep-21	
MB 160-283746/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-283746/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-130973-5 DU	AW28361 MW-18	Total/NA	Water	PrecSep-21	

Prep Batch: 283754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130973-1	AW28357 MW-13	Total/NA	Water	PrecSep_0	
400-130973-2	AW28358 MW-12	Total/NA	Water	PrecSep_0	
400-130973-3	AW28359 MW-11	Total/NA	Water	PrecSep_0	
400-130973-4	AW28360 MW-20	Total/NA	Water	PrecSep_0	
400-130973-5	AW28361 MW-18	Total/NA	Water	PrecSep_0	
400-130973-6	AW28362 MW-16	Total/NA	Water	PrecSep_0	
400-130973-7	AW28363 MW-16 DUP	Total/NA	Water	PrecSep_0	
400-130973-8	AW28440 MW-7	Total/NA	Water	PrecSep_0	
400-130973-27	AW28564 MW-3	Total/NA	Water	PrecSep_0	
400-130973-28	AW28565 MW-4	Total/NA	Water	PrecSep_0	
400-130973-29	AW28566 FB-3	Total/NA	Water	PrecSep_0	
MB 160-283754/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-283754/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-130973-5 DU	AW28361 MW-18	Total/NA	Water	PrecSep_0	
400-130978-B-11-A DU	Duplicate	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-283739/1-A
Matrix: Water
Analysis Batch: 288517

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 283739

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.2736	U	0.311	0.312	1.00	0.502	pCi/L	12/13/16 12:59	01/20/17 06:52	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		12/13/16 12:59	01/20/17 06:52				1	

Lab Sample ID: LCS 160-283739/2-A
Matrix: Water
Analysis Batch: 288517

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 283739

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Carrier	LCS LCS		Limits			Prepared	Analyzed	Dil Fac	
Ba Carrier	%Yield	Qualifier		12/13/16 12:59	01/20/17 06:52				1

Lab Sample ID: 400-130973-19 DU
Matrix: Water
Analysis Batch: 288518

Client Sample ID: AW28463 MW-10
Prep Type: Total/NA
Prep Batch: 283739

Analyte	Sample Sample		DU	DU	Total	RL	MDC	Unit	RER	RER
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					Limit
Radium-226	0.0859	U*	0.1257	U*	0.300	1.00	0.544	pCi/L	0.07	1
Carrier	DU DU		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		12/13/16 14:15	01/04/17 10:58				1	

Lab Sample ID: MB 160-283746/1-A
Matrix: Water
Analysis Batch: 286427

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 283746

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.02426	U	0.0634	0.0634	1.00	0.148	pCi/L	12/13/16 14:15	01/04/17 10:58	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		12/13/16 14:15	01/04/17 10:58				1	

Lab Sample ID: LCS 160-283746/2-A
Matrix: Water
Analysis Batch: 286427

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 283746

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

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

Lab Sample ID: LCS 160-283746/2-A
Matrix: Water
Analysis Batch: 286427

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 283746

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	82.9		40 - 110

Lab Sample ID: 400-130973-5 DU
Matrix: Water
Analysis Batch: 286045

Client Sample ID: AW28361 MW-18
Prep Type: Total/NA
Prep Batch: 283746

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.668		0.7269		0.202	1.00	0.159	pCi/L	0.15	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	84.6		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-283743/1-A
Matrix: Water
Analysis Batch: 288249

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 283743

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.5047	U	0.595	0.597	1.00	0.981	pCi/L	12/13/16 13:45	01/19/17 18:10	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	76.9		40 - 110	12/13/16 13:45	01/19/17 18:10	1
Y Carrier	66.5		40 - 110	12/13/16 13:45	01/19/17 18:10	1

Lab Sample ID: LCS 160-283743/2-A
Matrix: Water
Analysis Batch: 288249

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 283743

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	18.6	20.52		2.23	1.00	0.613	pCi/L	110	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	78.6		40 - 110
Y Carrier	92.3		40 - 110

Lab Sample ID: 400-130973-19 DU
Matrix: Water
Analysis Batch: 288247

Client Sample ID: AW28463 MW-10
Prep Type: Total/NA
Prep Batch: 283743

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.220	U	0.3748	U	0.451	1.00	0.742	pCi/L	0.19	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

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

Lab Sample ID: 400-130973-19 DU
Matrix: Water
Analysis Batch: 288247

Client Sample ID: AW28463 MW-10
Prep Type: Total/NA
Prep Batch: 283743

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	79.5		40 - 110
Y Carrier	92.0		40 - 110

Lab Sample ID: MB 160-283754/1-A
Matrix: Water
Analysis Batch: 284475

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 283754

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.08800	U	0.295	0.295	1.00	0.513	pCi/L	12/13/16 14:48	12/19/16 16:57	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	86.9		40 - 110	12/13/16 14:48	12/19/16 16:57	1
Y Carrier	97.9		40 - 110	12/13/16 14:48	12/19/16 16:57	1

Lab Sample ID: LCS 160-283754/2-A
Matrix: Water
Analysis Batch: 284475

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 283754

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	18.8	20.08		2.16	1.00	0.512	pCi/L	107	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	82.9		40 - 110
Y Carrier	98.3		40 - 110

Lab Sample ID: 400-130973-5 DU
Matrix: Water
Analysis Batch: 284475

Client Sample ID: AW28361 MW-18
Prep Type: Total/NA
Prep Batch: 283754

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.623		0.3445	U	0.309	1.00	0.493	pCi/L	0.44	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	84.6		40 - 110
Y Carrier	96.4		40 - 110

Lab Sample ID: 400-130978-B-11-A DU
Matrix: Water
Analysis Batch: 284475

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 283754

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.708		0.5022	U	0.355	1.00	0.549	pCi/L	0.28	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

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

Lab Sample ID: 400-130978-B-11-A DU
 Matrix: Water
 Analysis Batch: 284475

Client Sample ID: Duplicate
 Prep Type: Total/NA
 Prep Batch: 283754

Carrier	%Yield	DU Qualifier	Limits
Ba Carrier	87.7	DU	40 - 110
Y Carrier	93.1	DU	40 - 110

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

Lab Sample ID: 400-130973-5 DU
 Matrix: Water
 Analysis Batch: 288586

Client Sample ID: AW28361 MW-18
 Prep Type: Total/NA

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Combined Radium 226 + 228	1.29		1.071		0.369	5.00	0.493	pCi/L	0.29	

Lab Sample ID: 400-130973-19 DU
 Matrix: Water
 Analysis Batch: 288586

Client Sample ID: AW28463 MW-10
 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	0.305	U	0.5005	U	0.541	5.00	0.742	pCi/L	0.20	

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

Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information		Lab PM: Whitmire, Cheyenne R.		Carrier Tracking No(s): 400-56525-24537.1	
Client Contact: Sarah Copeland		E-Mail: cheyenne.whitmire@testamericainc.com		Page: 1 of 3	
Company: Alabama Power General Test Laboratory		Address: 744 County Rd 87 GSC #8		Job #: 400-130973	
City: Calera		State, Zip: AL, 35040		Preservation Codes: A- HCL B- NaOH N- None O- AsNaO2 P- Na2O4S Q- NaHSO4 R- Na2SO3 S- H2SO4 G- Amchlor H- Ascorbic Acid I- Ice J- DI Water K- EDTA L- EDA Other:	
PO #: 205-664-6121(Tel)		WO #: 40007143		Special Instructions/Note:	
Email: sgcopela@southernco.com		Project #: 40007143		Total Number of Containers	
CCR		Site: Gaston Ash Pond (4)		MW-13	
Due Date Requested:		TAT Requested (days): Routine		MW-12	
Sample Date		Sample Time		MW-11	
Sample Identification		Sample Type (C=Comp, G=grab)		MW-20	
AW28357		G		MW-18	
AW28358		G		MW-16	
AW28359		G		MW-16 Dup (Sample Duplicate)	
AW28360		G		MW-7	
AW28361		G		MW-6	
AW28362		G		MW-6 Dup (Sample Duplicate)	
AW28363		G		MW-21	
AW28440		G		MW-22	
AW28441		G			
AW28442		G			
AW28443		G			
AW28444		G			
Possible Hazard Identification <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: Sarah Copeland					
Relinquished by:					
Relinquished by:					
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No					
Custody Seal No.:					



TestAmerica Pensacola
 3355 McLemore 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, Zip: AL, 35040
 Phone: 205-664-6121(Tel)
 Email: sgcopela@southernco.com
 Project Name: CCR
 Site: Gaston Ash Pond (4)

Lab PM: Whitmire, Chyenne R
E-Mail: chyenne.whitmire@testamericainc.com

Sampler: Ben Rotfschadi / Jason Rouss / Nick Pitts
Phone:

COC No.: 400-56525-24537.1
Page: Page 2 of 3
Job #: 400-130973

Carrier Tracking No(s):

Analysis Requested

Due Date Requested:

TAT Requested (days): Routine

PO #:

WO #:

Project #: 40007143

SSON#:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, B=biomass, L=leaf)	Field Filtered Sample (Yes or No)	Retention MS/MSD (Yes or No)	Preservation Code	Total Number of Containers	Special Instructions/Note:
AW28445	11/15/16	1517	G	Water				1	MM-5
AW28446	11/15/16	1605	G	Water				1	EB-1 (Equipment Blank)
AW28447	11/15/16	1055	G	Water				1	MM-1
AW28448	11/15/16	1352	G	Water				1	MM-8
AW28449	11/15/16	1230	G	Water				1	MM-9
AW28450	11/15/16	1500	G	Water				1	FB-1 (Field Blank)
AW28463	11/15/16	1035	G	Water	Y			3	MM-10
AW28464	11/15/16	1205	G	Water				1	MM-14
AW28465	11/15/16	1205	G	Water				1	MM-14 Dup (Sample Duplicate)
AW28466	11/15/16	1356	G	Water				1	MM-15R
AW28467	11/15/16	1430	G	Water				1	FB-2 (Field Blank)

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

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

Special Instructions/OC Requirements:

Method of Shipment:

Received by: *[Signature]* Date/Time: 12/15/16 11 02 Company: JA

Received by: Date/Time: Company:

Received by: Date/Time: Company:

Cooler Temperature(s) °C and Other Remarks:

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

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/Zip: AL, 35040 Phone: 205-664-6121 (Tel) Email: sgcopela@southernco.com Project Name: CCR Site: Gaston Ash Pond (4)	Lab P.M.: Whitire: Cheyenne R E-Mail: cheyenne.whitire@testamericainc.com	Carrier Tracking No(s): 400-56525-24537.1 Page: 3 of 3 Job #: 400-130973	COC No: 400-56525-24537.1 Page: Job #:
Due Date Requested: TAT Requested (days): Routine		Analysis Requested	
PO #:	WO #:	Project #: 40007143	Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - Acetic Acid P - Na2SO4 Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)
Site:	SSOW#:	Other:	

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Sewage, Oil, etc.)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315, Ra228, 9320, Ra228, Ra228Ra228, GFC	Total Number of Containers	Special Instructions/Note:
AW28561	11/16/16	1151	G	Water	X	X	X	1	MW-19
AW28562	11/16/16	1327	G	Water	X	X	X	1	MW-17
AW28563	11/16/16	1053	G	Water	X	X	X	1	MW-2
AW28564	11/16/16	1230	G	Water	X	X	X	1	MW-3
AW28565	11/16/16	1347	G	Water	X	X	X	1	MW-4
AW28566	11/16/16	1410	G	Water	X	X	X	1	FB-3 (Field Blank)

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

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

Special Instructions/QC Requirements:

Empty Kit Relinquished by: Sarah Copeland Date: 12/05/2016; 0940
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Relinquished by: Date/Time:
Custody Seals Intact: Custody Seal No.:
A Yes Δ No

Received by: [Signature] Date/Time: 12/5/16 11:02 Company: TA
Received by: Date/Time: Company:
Received by: Date/Time: Company:
Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-130973-1
SDG Number: Gaston Ash Pond (4)

Login Number: 130973

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	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	19.1°C, 19.0°C, 18.7°C, 19.4°C, 18.7°C IR-5
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	



Certification Summary

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

TestAmerica Job ID: 400-130973-1
 SDG: Gaston Ash Pond (4)

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-16 *
Louisiana	NELAP	6	30976	06-30-17
Louisiana (DW)	NELAP Secondary AB	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-16 *
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	MO00054	06-30-17
California	State Program	9	2886	03-31-18 *
Connecticut	State Program	1	PH-0241	03-31-17 *
Florida	NELAP	4	E87689	06-30-17
Illinois	NELAP	5	200023	11-30-17
Iowa	State Program	7	373	12-01-16 *
Kansas	NELAP	7	E-10236	10-31-17
Kentucky (DW)	State Program	4	90125	12-31-16 *
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-17
Louisiana (DW)	NELAP	6	LA170011	12-31-17
Maryland	State Program	3	310	09-30-17
Missouri	State Program	7	780	06-30-17
Nevada	State Program	9	MO000542017-1	07-31-17
New Jersey	NELAP	2	MO002	06-30-17
New York	NELAP	2	11616	03-31-17 *
North Dakota	State Program	8	R207	06-30-17

* Certification renewal pending - certification considered valid.

Certification Summary

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

TestAmerica Job ID: 400-130973-1
SDG: Gaston Ash Pond (4)

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-17
Pennsylvania	NELAP	3	68-00540	02-28-17 *
South Carolina	State Program	4	85002001	06-30-17
Texas	NELAP	6	T104704193-16-10	07-31-17
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		P330-14-0016	01-09-17 *
Utah	NELAP	8	MO000542016-8	07-31-17
Virginia	NELAP	3	460230	06-14-17
Washington	State Program	10	C592	08-30-17
West Virginia DEP	State Program	3	381	08-31-17 *

* Certification renewal pending - certification considered valid.

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

 Alabama Power



Sample Group : WMWGASAP_1068
Project/Site : Gaston Ash Pond
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:

Supervision:



Anions

Gaston Ash Pond

WMWGASAP_1068

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. All samples were received intact and properly preserved.
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>Chloride Batch ID</u>	<u>Fluoride Batch ID</u>	<u>Sulfate Batch ID</u>	<u>Project ID</u>
AX00118	585212	585214	585216	WMWGASAP_1068
AX00119	585212	585214	585216	WMWGASAP_1068
AX00120	585212	585214	585216	WMWGASAP_1068
AX00121	585212	585214	585216	WMWGASAP_1068
AX00122	585212	585214	585216	WMWGASAP_1068
AX00123	585218	585219	585220	WMWGASAP_1068

4. All of the above samples were analyzed and prepared by EPA 300.0.
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 instrument performance check (IPC) was analyzed and all criteria were met.
- All laboratory reagent blanks were less than the method detection limits for the requested anions, with the following exception:
 1. The blank for anion sulfate presented a negative concentration above the MDL of 0.3, at -0.462 mg/L. One batch sample (AX00123) presented a negative sulfate concentration (-0.455 mg/L) below 10x the absolute value of the sulfate blank, and should be considered as a quantitatively estimated non-detect concentration, with the potential for low bias on the reported RL value.
- All laboratory fortified blanks were within acceptance criteria for the anions requested, with the following exception:
 1. No closing LFB was listed for the dilution re-analyses for chloride or for sulfate in batches 585212 and 585216, respectively. Due to absence of LFB data, the reported results for the following sample dilutions are qualified as quantitatively estimated with indeterminate bias direction and magnitude: for chloride, AX00118, AX00119 and AX00120; for sulfate, AX00118, AX00119, AX00120 and AX00121.
- 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 laboratory fortified matrix sample was analyzed with each batch. All acceptance criteria for accuracy were met.
 - A sample duplicate and/or laboratory fortified matrix duplicate were analyzed with each batch. All acceptance criteria for precision were met. It is noted that separate and distinct criteria for duplicate precision calculations, based on sample and duplicate anion concentrations, are used to assess precision compliance. These are as follow: if the sample and duplicate are both greater than 5x anion Reporting Limit (RL) concentration, the precision is calculated and reported as relative percent difference (RPD), with an acceptance range of 0 - 20%; if either the sample or duplicate are less than 5x anion RL, the precision is calculated and reported as the absolute value of the difference between the two concentrations, with an acceptance range of less than or equal to the anion RL value.
7. Samples AX00118 and AX00119 were re-analyzed for chloride and for sulfate at a 5x dilution, sample AX00120 was re-analyzed for chloride and for sulfate at a 4x dilution, and sample AX00121 was re-analyzed for sulfate at a 4x dilution, due to the undiluted results exceeding the calibrated range of the detector. The dilution results for chloride and for sulfate for these respective samples should be used; reporting limit (RL) values are adjusted upward to reflect the dilution factor applied.

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AX00118	Chloride, Sulfate	5X
AX00119	Chloride, Sulfate	5X
AX00120	Chloride, Sulfate	4X
AX00121	Sulfate	4X

8. The raw data results are shown with dilution factors included, when dilutions are manually performed by the analyst.
 The raw data results are shown without dilution factor corrections, when dilutions are run automatically by the instrument.



Metals ICP

Gaston Ash Pond

WMWGASAP_1068

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. All samples were received intact and properly preserved.
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>
AX00118	20170124C_20170126B_20170124CDL	WMWGASAP_1068
AX00119	20170124C_20170126B_20170124CDL	WMWGASAP_1068
AX00120	20170124C_20170126B_20170124CDL	WMWGASAP_1068
AX00121	20170124C_20170126B_20170124CDL	WMWGASAP_1068
AX00122	20170124C_20170126B_20170124CDL	WMWGASAP_1068
AX00123	20170124C_20170126B_20170124CDL	WMWGASAP_1068

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

General Quality Control Procedures:

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



Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met.
 - A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.
7. All samples were analyzed without a dilution with the following exceptions: The following samples were diluted due to sample concentrations from the undiluted analysis were over the high standard of the calibration curve.

<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AX00118	Calcium	10X
AX00119	Calcium	10X
AX00120	Calcium	10X

8. The raw data results include both results corrected for dilution and results not corrected for dilution.



Metals ICPMS

Gaston Ash Pond

WMWGASAP_1068

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. All samples were received intact and properly preserved.
3. All standards and solutions are NIST/ISO/IEC/Guide 34 traceable and were used within their recommended shelf life.

Sample ID	Batch ID	Project ID
AX00118	585062	WMWGASAP_1068
AX00119	585062	WMWGASAP_1068
AX00120	585062	WMWGASAP_1068
AX00121	585062	WMWGASAP_1068
AX00122	585062	WMWGASAP_1068
AX00123	585062	WMWGASAP_1068

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 Ash Pond

WMWGASAP_1068

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. All samples were received intact and properly preserved.
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>
AX00118	585237	WMWGASAP_1068
AX00119	585237	WMWGASAP_1068
AX00120	585237	WMWGASAP_1068
AX00121	585237	WMWGASAP_1068
AX00122	585237	WMWGASAP_1068
AX00123	585237	WMWGASAP_1068

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 Ash Pond

WMWGASAP_1068

1. This report consists of all MWs and corresponding Lab IDs listed on the Chain of Custody.
2. All samples were received intact and properly preserved.
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>
AX00118	584906	WMWGASAP_1068
AX00119	584906	WMWGASAP_1068
AX00120	584906	WMWGASAP_1068
AX00121	584906	WMWGASAP_1068
AX00122	584907	WMWGASAP_1068
AX00123	584907	WMWGASAP_1068

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 0.5 mg of the previous weight.
- A sample duplicate was analyzed with each batch. RPD/2 was not less than 5% for batch 584907. The QC sample did not meet the 2.5 mg requirement.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- All samples were between 2.5 mg and 200 mg residue with the exception of AX00122 and AX00123 which did not meet the 2.5 mg requirement.

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 03-Jan-17
 Customer ID:
 Delivery Date: 04-Jan-17

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AX00118

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	J 0.00261	mg/L
* Barium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	0.0980	mg/L
* Beryllium, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	1/24/2017	EPA 200.7		1	0.02	0.1	1.89	mg/L
* Calcium, Total	HRG	1/27/2017	EPA 200.7		10	1.0	5.0	77.4	mg/L
* Cadmium, Total	ABB	1/12/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	1/12/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	1/24/2017	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	0.0783	mg/L
* Lead, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	ABB	1/12/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	1/10/2017	SM 2540C		1		50	428	mg/L
* Chloride, Total	SES	1/11/2017	EPA 300.0		5	0.20	1.25	26.5	mg/L
* Fluoride, Total	SES	1/11/2017	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	1/11/2017	EPA 300.0		5	1.5	5	183	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:

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 03-Jan-17
 Customer ID:
 Delivery Date: 04-Jan-17

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AX00118

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX00201	Selenium, Total	mg/L	0.0000905	0.0044	0.10	0.0924	0.0933	0.0967	0.085 to 0.115	92.4	70 to 130	0.959	20	
AX00123	Lithium, Total	mg/L	-0.0000169	0.022	0.20	0.232	0.228	0.224	0.17 to 0.23	116	70 to 130	1.64	20	
AX00201	Cobalt, Total	mg/L	0.00000694	0.0044	0.10	0.0857	0.0874	0.0920	0.085 to 0.115	82.0	70 to 130	1.94	20	
AX00201	Thallium, Total	mg/L	0.0000224	0.00044	0.10	0.0966	0.0984	0.0977	0.085 to 0.115	96.6	70 to 130	1.84	20	
AX00123	Boron, Total	mg/L	0.00143	0.044	1.00	0.947	0.946	0.942	0.85 to 1.15	94.7	70 to 130	0.0624	20	
AX00123	Calcium, Total	mg/L	-0.00565	0.22	5.00	5.04	5.02	5.04	4.25 to 5.75	101	70 to 130	0.442	20	
AX00201	Barium, Total	mg/L	-0.00000198	0.0044	0.10	0.126	0.130	0.0901	0.085 to 0.115	85.3	70 to 130	2.69	20	
AX00201	Antimony, Total	mg/L	0.0000781	0.00132	0.10	0.0833	0.0849	0.0880	0.085 to 0.115	83.3	70 to 130	1.98	20	
AX00201	Beryllium, Total	mg/L	0.0000210	0.00132	0.10	0.0991	0.101	0.103	0.085 to 0.115	99.1	70 to 130	1.89	20	
AX00201	Chromium, Total	mg/L	0.0000115	0.0044	0.10	0.0925	0.0951	0.0948	0.085 to 0.115	92.5	70 to 130	2.74	20	
AX00201	Lead, Total	mg/L	0.0000260	0.0022	0.10	0.0976	0.0995	0.0998	0.085 to 0.115	97.6	70 to 130	1.86	20	
AX00201	Mercury, Total by CVAA	mg/L	0.000108	0.0005	0.004	0.00373	0.00375	0.00374	0.0034 to 0.0046	93.2	70 to 130	0.623	20	
AX00201	Arsenic, Total	mg/L	0.0000169	0.0022	0.10	0.0951	0.0971	0.0963	0.085 to 0.115	95.1	70 to 130	2.13	20	
AX00201	Cadmium, Total	mg/L	0.00000861	0.00044	0.10	0.0873	0.0878	0.0933	0.085 to 0.115	87.3	70 to 130	0.544	20	
AX00201	Molybdenum, Total	mg/L	0.0000112	0.0044	0.10	0.0831	0.0839	0.0870	0.085 to 0.115	83.1	70 to 130	0.905	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
 (205) 664-6032 or 6171
 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 03-Jan-17
 Customer ID:
 Delivery Date: 04-Jan-17

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AX00118

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AX00117	Chloride, Total	mg/L	0.00	0.25	10.00	9.83	0.00	9.98	9 to 11	98.3	80 to 120	0.00	20
AX00117	Fluoride, Total	mg/L	0.00	0.3	2.00	2.00	0.00	2.15	1.8 to 2.2	100	80 to 120	0.00	20
AX00117	Sulfate, Total	mg/L	-0.462	1.0	20.00	19.3	-0.457	20.5	18 to 22	96.5	80 to 120	0.00	20
AX00121	Solids, Dissolved	mg/L	-1.0	25			340	53.0	40 to 60			1.16	5

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 03-Jan-17
 Customer ID:
 Delivery Date: 04-Jan-17

Description: Gaston Ash Pond - MW-22 Dup

Laboratory ID Number: AX00119

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	J 0.00255	mg/L
* Barium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	0.0976	mg/L
* Beryllium, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	1/24/2017	EPA 200.7		1	0.02	0.1	1.91	mg/L
* Calcium, Total	HRG	1/27/2017	EPA 200.7		10	1.0	5.0	77.1	mg/L
* Cadmium, Total	ABB	1/12/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	1/12/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	1/24/2017	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	0.0780	mg/L
* Lead, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	ABB	1/12/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	1/10/2017	SM 2540C		1		50	436	mg/L
* Chloride, Total	SES	1/11/2017	EPA 300.0		5	0.20	1.25	26.6	mg/L
* Fluoride, Total	SES	1/11/2017	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	1/11/2017	EPA 300.0		5	1.5	5	182	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, 2018

Comments:

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



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 03-Jan-17
 Customer ID:
 Delivery Date: 04-Jan-17

Description: Gaston Ash Pond - MW-22 Dup

Laboratory ID Number: AX00119

Sample	Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
				Limit	Spike				Limit	Rec	Limit	Prec		
AX00201	Selenium, Total	mg/L	0.0000905	0.0044	0.10	0.0924	0.0933	0.0967	0.085 to 0.115	92.4	70 to 130	0.959	20	
AX00123	Lithium, Total	mg/L	-0.0000169	0.022	0.20	0.232	0.228	0.224	0.17 to 0.23	116	70 to 130	1.64	20	
AX00201	Thallium, Total	mg/L	0.0000224	0.00044	0.10	0.0966	0.0984	0.0977	0.085 to 0.115	96.6	70 to 130	1.84	20	
AX00201	Cobalt, Total	mg/L	0.00000694	0.0044	0.10	0.0857	0.0874	0.0920	0.085 to 0.115	82.0	70 to 130	1.94	20	
AX00201	Antimony, Total	mg/L	0.0000781	0.00132	0.10	0.0833	0.0849	0.0880	0.085 to 0.115	83.3	70 to 130	1.98	20	
AX00201	Beryllium, Total	mg/L	0.0000210	0.00132	0.10	0.0991	0.101	0.103	0.085 to 0.115	99.1	70 to 130	1.89	20	
AX00201	Chromium, Total	mg/L	0.0000115	0.0044	0.10	0.0925	0.0951	0.0948	0.085 to 0.115	92.5	70 to 130	2.74	20	
AX00201	Lead, Total	mg/L	0.0000260	0.0022	0.10	0.0976	0.0995	0.0998	0.085 to 0.115	97.6	70 to 130	1.86	20	
AX00201	Mercury, Total by CVAA	mg/L	0.000108	0.0005	0.004	0.00373	0.00375	0.00374	0.0034 to 0.0046	93.2	70 to 130	0.623	20	
AX00201	Arsenic, Total	mg/L	0.0000169	0.0022	0.10	0.0951	0.0971	0.0963	0.085 to 0.115	95.1	70 to 130	2.13	20	
AX00201	Cadmium, Total	mg/L	0.00000861	0.00044	0.10	0.0873	0.0878	0.0933	0.085 to 0.115	87.3	70 to 130	0.544	20	
AX00201	Molybdenum, Total	mg/L	0.0000112	0.0044	0.10	0.0831	0.0839	0.0870	0.085 to 0.115	83.1	70 to 130	0.905	20	
AX00123	Boron, Total	mg/L	0.00143	0.044	1.00	0.947	0.946	0.942	0.85 to 1.15	94.7	70 to 130	0.0624	20	
AX00123	Calcium, Total	mg/L	-0.00565	0.22	5.00	5.04	5.02	5.04	4.25 to 5.75	101	70 to 130	0.442	20	
AX00201	Barium, Total	mg/L	-0.00000198	0.0044	0.10	0.126	0.130	0.0901	0.085 to 0.115	85.3	70 to 130	2.69	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 03-Jan-17
 Customer ID:
 Delivery Date: 04-Jan-17

Description: Gaston Ash Pond - MW-22 Dup

Laboratory ID Number: AX00119

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AX00117	Chloride, Total	mg/L	0.00	0.25	10.00	9.83	0.00	9.98	9 to 11	98.3	80 to 120	0.00	20
AX00117	Fluoride, Total	mg/L	0.00	0.3	2.00	2.00	0.00	2.15	1.8 to 2.2	100	80 to 120	0.00	20
AX00117	Sulfate, Total	mg/L	-0.462	1.0	20.00	19.3	-0.457	20.5	18 to 22	96.5	80 to 120	0.00	20
AX00121	Solids, Dissolved	mg/L	-1.0	25			340	53.0	40 to 60			1.16	5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 03-Jan-17
 Customer ID:
 Delivery Date: 04-Jan-17

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AX00120

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	J 0.00343	mg/L
* Barium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	0.0348	mg/L
* Beryllium, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	1/24/2017	EPA 200.7		1	0.02	0.1	2.01	mg/L
* Calcium, Total	HRG	1/27/2017	EPA 200.7		10	1.0	5.0	80.9	mg/L
* Cadmium, Total	ABB	1/12/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	1/12/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	1/24/2017	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	0.0131	mg/L
* Lead, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	ABB	1/12/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	1/10/2017	SM 2540C		1		50	418	mg/L
* Chloride, Total	SES	1/11/2017	EPA 300.0		4	0.16	1.0	38.5	mg/L
* Fluoride, Total	SES	1/11/2017	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	1/11/2017	EPA 300.0		4	1.2	4	163	mg/L

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 03-Jan-17
 Customer ID:
 Delivery Date: 04-Jan-17

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AX00120

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec
			MB	Limit					Limit	Rec	Limit	Prec	
AX00123	Lithium, Total	mg/L	-0.0000169	0.022	0.20	0.232	0.228	0.224	0.17 to 0.23	116	70 to 130	1.64	20
AX00201	Selenium, Total	mg/L	0.0000905	0.0044	0.10	0.0924	0.0933	0.0967	0.085 to 0.115	92.4	70 to 130	0.959	20
AX00201	Cobalt, Total	mg/L	0.00000694	0.0044	0.10	0.0857	0.0874	0.0920	0.085 to 0.115	82.0	70 to 130	1.94	20
AX00201	Thallium, Total	mg/L	0.0000224	0.00044	0.10	0.0966	0.0984	0.0977	0.085 to 0.115	96.6	70 to 130	1.84	20
AX00123	Boron, Total	mg/L	0.00143	0.044	1.00	0.947	0.946	0.942	0.85 to 1.15	94.7	70 to 130	0.0624	20
AX00123	Calcium, Total	mg/L	-0.00565	0.22	5.00	5.04	5.02	5.04	4.25 to 5.75	101	70 to 130	0.442	20
AX00201	Barium, Total	mg/L	-0.00000198	0.0044	0.10	0.126	0.130	0.0901	0.085 to 0.115	85.3	70 to 130	2.69	20
AX00201	Antimony, Total	mg/L	0.0000781	0.00132	0.10	0.0833	0.0849	0.0880	0.085 to 0.115	83.3	70 to 130	1.98	20
AX00201	Beryllium, Total	mg/L	0.0000210	0.00132	0.10	0.0991	0.101	0.103	0.085 to 0.115	99.1	70 to 130	1.89	20
AX00201	Chromium, Total	mg/L	0.0000115	0.0044	0.10	0.0925	0.0951	0.0948	0.085 to 0.115	92.5	70 to 130	2.74	20
AX00201	Lead, Total	mg/L	0.0000260	0.0022	0.10	0.0976	0.0995	0.0998	0.085 to 0.115	97.6	70 to 130	1.86	20
AX00201	Mercury, Total by CVAA	mg/L	0.000108	0.0005	0.004	0.00373	0.00375	0.00374	0.0034 to 0.0046	93.2	70 to 130	0.623	20
AX00201	Arsenic, Total	mg/L	0.0000169	0.0022	0.10	0.0951	0.0971	0.0963	0.085 to 0.115	95.1	70 to 130	2.13	20
AX00201	Cadmium, Total	mg/L	0.00000861	0.00044	0.10	0.0873	0.0878	0.0933	0.085 to 0.115	87.3	70 to 130	0.544	20
AX00201	Molybdenum, Total	mg/L	0.0000112	0.0044	0.10	0.0831	0.0839	0.0870	0.085 to 0.115	83.1	70 to 130	0.905	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 03-Jan-17
 Customer ID:
 Delivery Date: 04-Jan-17

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AX00120

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AX00117	Chloride, Total	mg/L	0.00	0.25	10.00	9.83	0.00	9.98	9 to 11	98.3	80 to 120	0.00	20
AX00117	Fluoride, Total	mg/L	0.00	0.3	2.00	2.00	0.00	2.15	1.8 to 2.2	100	80 to 120	0.00	20
AX00117	Sulfate, Total	mg/L	-0.462	1.0	20.00	19.3	-0.457	20.5	18 to 22	96.5	80 to 120	0.00	20
AX00121	Solids, Dissolved	mg/L	-1.0	25			340	53.0	40 to 60			1.16	5

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 03-Jan-17
 Customer ID:
 Delivery Date: 04-Jan-17

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AX00121

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	0.0260	mg/L
* Beryllium, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	1/24/2017	EPA 200.7		1	0.02	0.1	0.897	mg/L
* Calcium, Total	HRG	1/24/2017	EPA 200.7		1	0.1	0.5	38.0	mg/L
* Cadmium, Total	ABB	1/12/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	1/12/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	1/24/2017	EPA 200.7		1	0.01	0.05	J 0.0305	mg/L
* Molybdenum, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	0.0788	mg/L
* Lead, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	ABB	1/12/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	1/10/2017	SM 2540C		1		50	348	mg/L
* Chloride, Total	SES	1/11/2017	EPA 300.0		1	0.04	0.25	24.1	mg/L
* Fluoride, Total	SES	1/11/2017	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	1/11/2017	EPA 300.0		4	1.2	4	143	mg/L

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 03-Jan-17
 Customer ID:
 Delivery Date: 04-Jan-17

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AX00121

Sample	Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
				Limit	Spike				Limit	Rec	Limit	Prec		
AX00123	Lithium, Total	mg/L	-0.0000169	0.022	0.20	0.232	0.228	0.224	0.17 to 0.23	116	70 to 130	1.64	20	
AX00201	Selenium, Total	mg/L	0.0000905	0.0044	0.10	0.0924	0.0933	0.0967	0.085 to 0.115	92.4	70 to 130	0.959	20	
AX00201	Cobalt, Total	mg/L	0.00000694	0.0044	0.10	0.0857	0.0874	0.0920	0.085 to 0.115	82.0	70 to 130	1.94	20	
AX00201	Thallium, Total	mg/L	0.0000224	0.00044	0.10	0.0966	0.0984	0.0977	0.085 to 0.115	96.6	70 to 130	1.84	20	
AX00201	Arsenic, Total	mg/L	0.0000169	0.0022	0.10	0.0951	0.0971	0.0963	0.085 to 0.115	95.1	70 to 130	2.13	20	
AX00201	Cadmium, Total	mg/L	0.00000861	0.00044	0.10	0.0873	0.0878	0.0933	0.085 to 0.115	87.3	70 to 130	0.544	20	
AX00201	Molybdenum, Total	mg/L	0.0000112	0.0044	0.10	0.0831	0.0839	0.0870	0.085 to 0.115	83.1	70 to 130	0.905	20	
AX00123	Boron, Total	mg/L	0.00143	0.044	1.00	0.947	0.946	0.942	0.85 to 1.15	94.7	70 to 130	0.0624	20	
AX00123	Calcium, Total	mg/L	-0.00565	0.22	5.00	5.04	5.02	5.04	4.25 to 5.75	101	70 to 130	0.442	20	
AX00201	Barium, Total	mg/L	-0.00000198	0.0044	0.10	0.126	0.130	0.0901	0.085 to 0.115	85.3	70 to 130	2.69	20	
AX00201	Antimony, Total	mg/L	0.0000781	0.00132	0.10	0.0833	0.0849	0.0880	0.085 to 0.115	83.3	70 to 130	1.98	20	
AX00201	Beryllium, Total	mg/L	0.0000210	0.00132	0.10	0.0991	0.101	0.103	0.085 to 0.115	99.1	70 to 130	1.89	20	
AX00201	Chromium, Total	mg/L	0.0000115	0.0044	0.10	0.0925	0.0951	0.0948	0.085 to 0.115	92.5	70 to 130	2.74	20	
AX00201	Lead, Total	mg/L	0.0000260	0.0022	0.10	0.0976	0.0995	0.0998	0.085 to 0.115	97.6	70 to 130	1.86	20	
AX00201	Mercury, Total by CVAA	mg/L	0.000108	0.0005	0.004	0.00373	0.00375	0.00374	0.0034 to 0.0046	93.2	70 to 130	0.623	20	

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments:

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAP
 Sample Date: 03-Jan-17
 Customer ID:
 Delivery Date: 04-Jan-17

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AX00121

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AX00117	Chloride, Total	mg/L	0.00	0.25	10.00	9.83	0.00	9.98	9 to 11	98.3	80 to 120	0.00	20
AX00117	Fluoride, Total	mg/L	0.00	0.3	2.00	2.00	0.00	2.15	1.8 to 2.2	100	80 to 120	0.00	20
AX00117	Sulfate, Total	mg/L	-0.462	1.0	20.00	19.3	-0.457	20.5	18 to 22	96.5	80 to 120	0.00	20
AX00121	Solids, Dissolved	mg/L	-1.0	25			340	53.0	40 to 60			1.16	5

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Laboratory certification ID: E571114

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 03-Jan-17
 Customer ID:
 Delivery Date: 04-Jan-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX00122

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Beryllium, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	1/24/2017	EPA 200.7		1	0.02	0.1	J 0.0209	mg/L
* Calcium, Total	HRG	1/24/2017	EPA 200.7		1	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	ABB	1/12/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	1/12/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	1/24/2017	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	ABB	1/12/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	1/10/2017	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	1/11/2017	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	1/11/2017	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	1/11/2017	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 03-Jan-17
 Customer ID:
 Delivery Date: 04-Jan-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX00122

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	Limit
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit		
AX00123	Lithium, Total	mg/L	-0.0000169	0.022	0.20	0.232	0.228	0.224	0.17 to 0.23	116	70 to 130	1.64	20
AX00201	Selenium, Total	mg/L	0.0000905	0.0044	0.10	0.0924	0.0933	0.0967	0.085 to 0.115	92.4	70 to 130	0.959	20
AX00201	Cobalt, Total	mg/L	0.00000694	0.0044	0.10	0.0857	0.0874	0.0920	0.085 to 0.115	82.0	70 to 130	1.94	20
AX00201	Thallium, Total	mg/L	0.0000224	0.00044	0.10	0.0966	0.0984	0.0977	0.085 to 0.115	96.6	70 to 130	1.84	20
AX00123	Boron, Total	mg/L	0.00143	0.044	1.00	0.947	0.946	0.942	0.85 to 1.15	94.7	70 to 130	0.0624	20
AX00123	Calcium, Total	mg/L	-0.00565	0.22	5.00	5.04	5.02	5.04	4.25 to 5.75	101	70 to 130	0.442	20
AX00201	Barium, Total	mg/L	-0.00000198	0.0044	0.10	0.126	0.130	0.0901	0.085 to 0.115	85.3	70 to 130	2.69	20
AX00201	Antimony, Total	mg/L	0.0000781	0.00132	0.10	0.0833	0.0849	0.0880	0.085 to 0.115	83.3	70 to 130	1.98	20
AX00201	Beryllium, Total	mg/L	0.0000210	0.00132	0.10	0.0991	0.101	0.103	0.085 to 0.115	99.1	70 to 130	1.89	20
AX00201	Chromium, Total	mg/L	0.0000115	0.0044	0.10	0.0925	0.0951	0.0948	0.085 to 0.115	92.5	70 to 130	2.74	20
AX00201	Lead, Total	mg/L	0.0000260	0.0022	0.10	0.0976	0.0995	0.0998	0.085 to 0.115	97.6	70 to 130	1.86	20
AX00201	Mercury, Total by CVAA	mg/L	0.000108	0.0005	0.004	0.00373	0.00375	0.00374	0.0034 to 0.0046	93.2	70 to 130	0.623	20
AX00201	Arsenic, Total	mg/L	0.0000169	0.0022	0.10	0.0951	0.0971	0.0963	0.085 to 0.115	95.1	70 to 130	2.13	20
AX00201	Cadmium, Total	mg/L	0.00000861	0.00044	0.10	0.0873	0.0878	0.0933	0.085 to 0.115	87.3	70 to 130	0.544	20
AX00201	Molybdenum, Total	mg/L	0.0000112	0.0044	0.10	0.0831	0.0839	0.0870	0.085 to 0.115	83.1	70 to 130	0.905	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:

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
 John Pugh

Customer Account: WMWGASAPFB
 Sample Date: 03-Jan-17
 Customer ID:
 Delivery Date: 04-Jan-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX00122

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AX00117	Chloride, Total	mg/L	0.00	0.25	10.00	9.83	0.00	9.98	9 to 11	98.3	80 to 120	0.00	20
AX00117	Fluoride, Total	mg/L	0.00	0.3	2.00	2.00	0.00	2.15	1.8 to 2.2	100	80 to 120	0.00	20
AX00117	Sulfate, Total	mg/L	-0.462	1.0	20.00	19.3	-0.457	20.5	18 to 22	96.5	80 to 120	0.00	20
AX00207	Solids, Dissolved	mg/L	-1.0	25			1.3	53.0	40 to 60			0.00	5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAPEB
 Sample Date: 03-Jan-17
 Customer ID:
 Delivery Date: 04-Jan-17

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AX00123

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Beryllium, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	1/24/2017	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	1/24/2017	EPA 200.7		1	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	ABB	1/12/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	1/12/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	1/24/2017	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	ABB	1/12/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	1/10/2017	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	1/11/2017	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	1/11/2017	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	1/11/2017	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

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Comments:

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 Calera, AL 35040
 (205) 664-6032 or 6171
 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWGASAPEB
 Sample Date: 03-Jan-17
 Customer ID:
 Delivery Date: 04-Jan-17

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AX00123

Sample	Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
				Limit	Spike				Limit	Rec	Limit	Prec		
AX00123	Lithium, Total	mg/L	-0.0000169	0.022	0.20	0.232	0.228	0.224	0.17 to 0.23	116	70 to 130	1.64	20	
AX00201	Thallium, Total	mg/L	0.0000224	0.00044	0.10	0.0966	0.0984	0.0977	0.085 to 0.115	96.6	70 to 130	1.84	20	
AX00201	Cobalt, Total	mg/L	0.00000694	0.0044	0.10	0.0857	0.0874	0.0920	0.085 to 0.115	82.0	70 to 130	1.94	20	
AX00201	Selenium, Total	mg/L	0.0000905	0.0044	0.10	0.0924	0.0933	0.0967	0.085 to 0.115	92.4	70 to 130	0.959	20	
AX00201	Arsenic, Total	mg/L	0.0000169	0.0022	0.10	0.0951	0.0971	0.0963	0.085 to 0.115	95.1	70 to 130	2.13	20	
AX00201	Cadmium, Total	mg/L	0.00000861	0.00044	0.10	0.0873	0.0878	0.0933	0.085 to 0.115	87.3	70 to 130	0.544	20	
AX00201	Molybdenum, Total	mg/L	0.0000112	0.0044	0.10	0.0831	0.0839	0.0870	0.085 to 0.115	83.1	70 to 130	0.905	20	
AX00201	Antimony, Total	mg/L	0.0000781	0.00132	0.10	0.0833	0.0849	0.0880	0.085 to 0.115	83.3	70 to 130	1.98	20	
AX00201	Beryllium, Total	mg/L	0.0000210	0.00132	0.10	0.0991	0.101	0.103	0.085 to 0.115	99.1	70 to 130	1.89	20	
AX00201	Chromium, Total	mg/L	0.0000115	0.0044	0.10	0.0925	0.0951	0.0948	0.085 to 0.115	92.5	70 to 130	2.74	20	
AX00201	Lead, Total	mg/L	0.0000260	0.0022	0.10	0.0976	0.0995	0.0998	0.085 to 0.115	97.6	70 to 130	1.86	20	
AX00201	Mercury, Total by CVAA	mg/L	0.000108	0.0005	0.004	0.00373	0.00375	0.00374	0.0034 to 0.0046	93.2	70 to 130	0.623	20	
AX00123	Boron, Total	mg/L	0.00143	0.044	1.00	0.947	0.946	0.942	0.85 to 1.15	94.7	70 to 130	0.0624	20	
AX00123	Calcium, Total	mg/L	-0.00565	0.22	5.00	5.04	5.02	5.04	4.25 to 5.75	101	70 to 130	0.442	20	
AX00201	Barium, Total	mg/L	-0.00000198	0.0044	0.10	0.126	0.130	0.0901	0.085 to 0.115	85.3	70 to 130	2.69	20	

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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
 John Pugh

Customer Account: WMWGASAPEB
 Sample Date: 03-Jan-17
 Customer ID:
 Delivery Date: 04-Jan-17

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AX00123

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AX00123	Chloride, Total	mg/L	0.00	0.25	10.00	9.83	0.00	9.98	9 to 11	98.3	80 to 120	0.00	20
AX00123	Fluoride, Total	mg/L	0.00	0.3	2.00	2.00	0.00	2.15	1.8 to 2.2	100	80 to 120	0.00	20
AX00123	Sulfate, Total	mg/L	-0.462	1.0	20.00	19.3	-0.457	20.5	18 to 22	96.5	80 to 120	0.00	20
AX00207	Solids, Dissolved	mg/L	-1.0	25			1.3	53.0	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, 2018

Comments:

CC:

Definitions



Abbreviation	Description
DF	Dilution Factor
LFB	Lab Fortified Blank
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 01/04/2017 09:00

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Gaston Ash Pond
Analysis Requested	Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle		
Comments	MW-21 Radium Duplicate FB-1 and EB-1 taken by Jason Rouss at Gaston Gypsum		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-22	01/03/2017	13:38	3	Groundwater		AX00118
MW-22DUP	01/03/2017	13:38	3	Sample Duplicate		AX00119
MW-21	01/03/2017	14:28	5	Groundwater		AX00120
MW-15R	01/03/2017	15:44	3	Groundwater		AX00121
FB-1	01/03/2017	13:20	0	Field Blank		AX00122
EB-1	01/03/2017	15:50	0	Equipment Blank		AX00123

Relinquished By	Received By	Date/Time
<i>Anthony Goggins</i>	Sarah Copeland <small>Digitally signed by Sarah Copeland Date: 2017.01.04 10:13:41 -06'00'</small>	01/04/2017 10:13

SmarTroll ID	5151-26193-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	5160-26211-1-1	Cooler Temp
		2.2 degrees C
		Thermometer ID
		5408-27568-2-2
		pH Strip ID
		5521-28271-20-15

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: 400-132436-1

TestAmerica SDG: Gaston Ash Pond New Wells (3)

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:

2/10/2017 5:41:13 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

LINKS

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results through

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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: 400-132436-1
SDG: Gaston Ash Pond New Wells (3)

Job ID: 400-132436-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-132436-1

RAD

Method(s) PrecSep_0: Radium-228 Prep Batch 160-287997: The following samples were prepared at a reduced aliquot due to limited volume: AX00122 FB-1 (400-132436-1), AX00123 EB-1 (400-132436-2), AX00118 MW-22 (400-132436-3), AX00119 MW-22 DUP (400-132436-4) and AX00121 MW-15R (400-132436-6).

Method(s) PrecSep-21: Radium-226 Prep Batch 160-287992: The following samples were prepared at a reduced aliquot due to limited volume: AX00122 FB-1 (400-132436-1), AX00123 EB-1 (400-132436-2), AX00118 MW-22 (400-132436-3), AX00119 MW-22 DUP (400-132436-4) and AX00121 MW-15R (400-132436-6).

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Method Summary

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

TestAmerica Job ID: 400-132436-1
SDG: Gaston Ash Pond New Wells (3)

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: 400-132436-1
SDG: Gaston Ash Pond New Wells (3)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-132436-1	AX00122 FB-1	Water	01/03/17 13:20	01/10/17 15:30
400-132436-2	AX00123 EB-1	Water	01/03/17 15:50	01/10/17 15:30
400-132436-3	AX00118 MW-22	Water	01/03/17 13:38	01/10/17 15:30
400-132436-4	AX00119 MW-22 DUP	Water	01/03/17 13:38	01/10/17 15:30
400-132436-5	AX00120 MW-21	Water	01/03/17 14:28	01/10/17 15:30
400-132436-6	AX00121 MW-15R	Water	01/03/17 15:44	01/10/17 15:30

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Client Sample Results

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

TestAmerica Job ID: 400-132436-1
 SDG: Gaston Ash Pond New Wells (3)

Client Sample ID: AX00122 FB-1

Lab Sample ID: 400-132436-1

Date Collected: 01/03/17 13:20

Matrix: Water

Date Received: 01/10/17 15:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0869	U	0.134	0.134	1.00	0.231	pCi/L	01/17/17 12:52	02/08/17 07:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.1		40 - 110					01/17/17 12:52	02/08/17 07:02	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.863		0.478	0.485	1.00	0.726	pCi/L	01/17/17 13:21	02/03/17 17:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.1		40 - 110					01/17/17 13:21	02/03/17 17:22	1
Y Carrier	89.0		40 - 110					01/17/17 13:21	02/03/17 17:22	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	0.950		0.497	0.503	5.00	0.726	pCi/L		02/09/17 10:03	1

Client Sample Results

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

TestAmerica Job ID: 400-132436-1
 SDG: Gaston Ash Pond New Wells (3)

Client Sample ID: AX00123 EB-1

Lab Sample ID: 400-132436-2

Date Collected: 01/03/17 15:50

Matrix: Water

Date Received: 01/10/17 15:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.205	U	0.155	0.156	1.00	0.217	pCi/L	01/17/17 12:52	02/08/17 07:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.5		40 - 110					01/17/17 12:52	02/08/17 07:03	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.145	U	0.348	0.348	1.00	0.600	pCi/L	01/17/17 13:21	02/03/17 17:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.5		40 - 110					01/17/17 13:21	02/03/17 17:22	1
Y Carrier	87.9		40 - 110					01/17/17 13:21	02/03/17 17:22	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	0.350	U	0.381	0.381	5.00	0.600	pCi/L		02/09/17 10:03	1

Client Sample Results

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

TestAmerica Job ID: 400-132436-1
 SDG: Gaston Ash Pond New Wells (3)

Client Sample ID: AX00118 MW-22

Lab Sample ID: 400-132436-3

Date Collected: 01/03/17 13:38

Matrix: Water

Date Received: 01/10/17 15:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.490		0.204	0.208	1.00	0.217	pCi/L	01/17/17 12:52	02/08/17 07:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.5		40 - 110					01/17/17 12:52	02/08/17 07:03	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.515	U	0.367	0.370	1.00	0.570	pCi/L	01/17/17 13:21	02/03/17 17:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.5		40 - 110					01/17/17 13:21	02/03/17 17:23	1
Y Carrier	84.5		40 - 110					01/17/17 13:21	02/03/17 17:23	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	1.00		0.420	0.425	5.00	0.570	pCi/L		02/09/17 10:03	1

Client Sample Results

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

TestAmerica Job ID: 400-132436-1
 SDG: Gaston Ash Pond New Wells (3)

Client Sample ID: AX00119 MW-22 DUP

Lab Sample ID: 400-132436-4

Date Collected: 01/03/17 13:38

Matrix: Water

Date Received: 01/10/17 15:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.281		0.175	0.177	1.00	0.232	pCi/L	01/17/17 12:52	02/08/17 07:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.6		40 - 110					01/17/17 12:52	02/08/17 07:03	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.572	U	0.406	0.410	1.00	0.632	pCi/L	01/17/17 13:21	02/03/17 17:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.6		40 - 110					01/17/17 13:21	02/03/17 17:23	1
Y Carrier	83.7		40 - 110					01/17/17 13:21	02/03/17 17:23	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	0.853		0.442	0.446	5.00	0.632	pCi/L		02/09/17 10:03	1

Client Sample Results

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

TestAmerica Job ID: 400-132436-1
 SDG: Gaston Ash Pond New Wells (3)

Client Sample ID: AX00120 MW-21

Lab Sample ID: 400-132436-5

Date Collected: 01/03/17 14:28

Matrix: Water

Date Received: 01/10/17 15:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.391		0.163	0.167	1.00	0.176	pCi/L	01/17/17 12:52	02/08/17 07:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.8		40 - 110					01/17/17 12:52	02/08/17 07:03	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.719		0.366	0.371	1.00	0.543	pCi/L	01/17/17 13:21	02/03/17 17:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.8		40 - 110					01/17/17 13:21	02/03/17 17:23	1
Y Carrier	83.0		40 - 110					01/17/17 13:21	02/03/17 17:23	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	1.11		0.400	0.407	5.00	0.543	pCi/L		02/09/17 10:03	1

Client Sample Results

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

TestAmerica Job ID: 400-132436-1
 SDG: Gaston Ash Pond New Wells (3)

Client Sample ID: AX00121 MW-15R

Lab Sample ID: 400-132436-6

Date Collected: 01/03/17 15:44

Matrix: Water

Date Received: 01/10/17 15:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.277		0.165	0.167	1.00	0.216	pCi/L	01/17/17 12:52	02/08/17 07:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.2		40 - 110					01/17/17 12:52	02/08/17 07:04	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.117	U	0.358	0.359	1.00	0.621	pCi/L	01/17/17 13:21	02/03/17 17:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.2		40 - 110					01/17/17 13:21	02/03/17 17:23	1
Y Carrier	86.0		40 - 110					01/17/17 13:21	02/03/17 17:23	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	0.394	U	0.395	0.395	5.00	0.621	pCi/L		02/09/17 10:03	1

Definitions/Glossary

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

TestAmerica Job ID: 400-132436-1
SDG: Gaston Ash Pond New Wells (3)

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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 400-132436-1
 SDG: Gaston Ash Pond New Wells (3)

Client Sample ID: AX00122 FB-1

Lab Sample ID: 400-132436-1

Date Collected: 01/03/17 13:20

Matrix: Water

Date Received: 01/10/17 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			287992	01/17/17 12:52	AS	TAL SL
Total/NA	Analysis	9315		1	291519	02/08/17 07:02	ALD	TAL SL
Total/NA	Prep	PrecSep_0			287997	01/17/17 13:21	AS	TAL SL
Total/NA	Analysis	9320		1	290910	02/03/17 17:22	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	291720	02/09/17 10:03	RTM	TAL SL

Client Sample ID: AX00123 EB-1

Lab Sample ID: 400-132436-2

Date Collected: 01/03/17 15:50

Matrix: Water

Date Received: 01/10/17 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			287992	01/17/17 12:52	AS	TAL SL
Total/NA	Analysis	9315		1	291519	02/08/17 07:03	ALD	TAL SL
Total/NA	Prep	PrecSep_0			287997	01/17/17 13:21	AS	TAL SL
Total/NA	Analysis	9320		1	290910	02/03/17 17:22	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	291720	02/09/17 10:03	RTM	TAL SL

Client Sample ID: AX00118 MW-22

Lab Sample ID: 400-132436-3

Date Collected: 01/03/17 13:38

Matrix: Water

Date Received: 01/10/17 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			287992	01/17/17 12:52	AS	TAL SL
Total/NA	Analysis	9315		1	291519	02/08/17 07:03	ALD	TAL SL
Total/NA	Prep	PrecSep_0			287997	01/17/17 13:21	AS	TAL SL
Total/NA	Analysis	9320		1	290910	02/03/17 17:23	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	291720	02/09/17 10:03	RTM	TAL SL

Client Sample ID: AX00119 MW-22 DUP

Lab Sample ID: 400-132436-4

Date Collected: 01/03/17 13:38

Matrix: Water

Date Received: 01/10/17 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			287992	01/17/17 12:52	AS	TAL SL
Total/NA	Analysis	9315		1	291519	02/08/17 07:03	ALD	TAL SL
Total/NA	Prep	PrecSep_0			287997	01/17/17 13:21	AS	TAL SL
Total/NA	Analysis	9320		1	290910	02/03/17 17:23	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	291720	02/09/17 10:03	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-132436-1
SDG: Gaston Ash Pond New Wells (3)

Client Sample ID: AX00120 MW-21

Lab Sample ID: 400-132436-5

Date Collected: 01/03/17 14:28

Matrix: Water

Date Received: 01/10/17 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			287992	01/17/17 12:52	AS	TAL SL
Total/NA	Analysis	9315		1	291519	02/08/17 07:03	ALD	TAL SL
Total/NA	Prep	PrecSep_0			287997	01/17/17 13:21	AS	TAL SL
Total/NA	Analysis	9320		1	290910	02/03/17 17:23	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	291720	02/09/17 10:03	RTM	TAL SL

Client Sample ID: AX00121 MW-15R

Lab Sample ID: 400-132436-6

Date Collected: 01/03/17 15:44

Matrix: Water

Date Received: 01/10/17 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			287992	01/17/17 12:52	AS	TAL SL
Total/NA	Analysis	9315		1	291519	02/08/17 07:04	ALD	TAL SL
Total/NA	Prep	PrecSep_0			287997	01/17/17 13:21	AS	TAL SL
Total/NA	Analysis	9320		1	290910	02/03/17 17:23	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	291720	02/09/17 10:03	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: 400-132436-1
SDG: Gaston Ash Pond New Wells (3)

Rad

Prep Batch: 287992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132436-1	AX00122 FB-1	Total/NA	Water	PrecSep-21	
400-132436-2	AX00123 EB-1	Total/NA	Water	PrecSep-21	
400-132436-3	AX00118 MW-22	Total/NA	Water	PrecSep-21	
400-132436-4	AX00119 MW-22 DUP	Total/NA	Water	PrecSep-21	
400-132436-5	AX00120 MW-21	Total/NA	Water	PrecSep-21	
400-132436-6	AX00121 MW-15R	Total/NA	Water	PrecSep-21	
MB 160-287992/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-287992/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-132436-5 DU	AX00120 MW-21	Total/NA	Water	PrecSep-21	

Prep Batch: 287997

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132436-1	AX00122 FB-1	Total/NA	Water	PrecSep_0	
400-132436-2	AX00123 EB-1	Total/NA	Water	PrecSep_0	
400-132436-3	AX00118 MW-22	Total/NA	Water	PrecSep_0	
400-132436-4	AX00119 MW-22 DUP	Total/NA	Water	PrecSep_0	
400-132436-5	AX00120 MW-21	Total/NA	Water	PrecSep_0	
400-132436-6	AX00121 MW-15R	Total/NA	Water	PrecSep_0	
MB 160-287997/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-287997/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-132436-5 DU	AX00120 MW-21	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-132436-1
 SDG: Gaston Ash Pond New Wells (3)

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-287992/1-A
Matrix: Water
Analysis Batch: 291519

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 287992

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.06909	U	0.109	0.109	1.00	0.189	pCi/L	01/17/17 12:52	02/08/17 07:02	1
Carrier	%Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	69.5		40 - 110					01/17/17 12:52	02/08/17 07:02	1

Lab Sample ID: LCS 160-287992/2-A
Matrix: Water
Analysis Batch: 291519

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 287992

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	6.01	7.681		0.932	1.00	0.208	pCi/L	128	68 - 137
Carrier	%Yield	LCS Qualifier	Limits						
Ba Carrier	74.1		40 - 110						

Lab Sample ID: 400-132436-5 DU
Matrix: Water
Analysis Batch: 291519

Client Sample ID: AX00120 MW-21
Prep Type: Total/NA
Prep Batch: 287992

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.391		0.4643		0.183	1.00	0.192	pCi/L	0.21	1
Carrier	%Yield	DU Qualifier	Limits							
Ba Carrier	74.1		40 - 110							

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-287997/1-A
Matrix: Water
Analysis Batch: 290910

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 287997

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.08400	U	0.322	0.322	1.00	0.562	pCi/L	01/17/17 13:21	02/03/17 17:22	1
Carrier	%Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	69.5		40 - 110					01/17/17 13:21	02/03/17 17:22	1
Y Carrier	83.0		40 - 110					01/17/17 13:21	02/03/17 17:22	1

QC Sample Results

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

TestAmerica Job ID: 400-132436-1
 SDG: Gaston Ash Pond New Wells (3)

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

Lab Sample ID: LCS 160-287997/2-A
Matrix: Water
Analysis Batch: 290910

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 287997

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	13.9	15.54		1.73	1.00	0.484	pCi/L	112	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	74.1		40 - 110
Y Carrier	86.4		40 - 110

Lab Sample ID: 400-132436-5 DU
Matrix: Water
Analysis Batch: 290910

Client Sample ID: AX00120 MW-21
Prep Type: Total/NA
Prep Batch: 287997

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.719		0.7519		0.352	1.00	0.497	pCi/L	0.04	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	74.1		40 - 110
Y Carrier	84.1		40 - 110

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

Lab Sample ID: 400-132436-5 DU
Matrix: Water
Analysis Batch: 291720


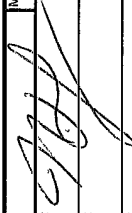
Client Sample ID: AX00120 MW-21
Prep Type: Total/NA

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Combined Radium 226 + 228	1.11		1.216		0.397	5.00	0.497	pCi/L	0.13	

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

Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information		Lab PM: Whitire, Cheyenne R		COC No: 400-56525-24537.1			
Sampler: Anthony Goggins		E-Mail: cheyenne.whitire@testamericainc.com		Page: 1 of 1			
Client Contact: Sarah Copeland		Phone: 400-132-136		Job #:			
Company: Alabama Power General Test Laboratory		Due Date Requested:		Preservation Codes:			
Address: 744 County Rd 87 GSC #8		TAT Requested (days): Routine		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:			
City: Calera		PO #: 205-664-6121 (Tel)		M - Hexane N - None O - ASN2O2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)			
State, Zip: AL 35040		WO #: sgcopelia@southemco.com		Special Instructions/Note:			
Phone: 205-664-6121 (Tel)		Project #: 40007143		MW-22 MW-22 Dup (Sample Duplicate) MW-21 MW-15R FB-1 (Field Blank) EB-1 (Equipment Blank)			
Email: sgcopelia@southemco.com		CCR		Total Number of Containers			
Site: Gaston Ash Pond New Wells (3)		SSON#:		MW-22 MW-22 Dup (Sample Duplicate) MW-21 MW-15R FB-1 (Field Blank) EB-1 (Equipment Blank)			
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Swab, Corrosive, Acid)	Field Filtered Sample (Yes or No)	Perform MS/MS (Yes or No)	Special Instructions/Note
AX00118	1/3/17	1338	G	Water	X	X	
AX00119	1/3/17	1338	G	Water	X	X	
AX00120	1/3/17	1428	G	Water	Y	X	
AX00121	1/3/17	1544	G	Water	X	X	
AX00122	1/3/17	1320	G	Water	X	X	
AX00123	1/3/17	1550	G	Water	X	X	
 400-132436 COC							
Possible Hazard Identification <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: 01/10/2017; 1300 Relinquished by: _____ Date/Time: _____ Relinquished by: _____ Date/Time: _____ Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Custody Seal No.: _____							
Received by:  Date/Time: 1/10/17 1530 Company: TA Received by: _____ Date/Time: _____ Company: _____ Received by: _____ Date/Time: _____ Company: _____ Cooler Temperature(s) °C and Other Remarks: 17.4°C, 17.6°C, IRC							

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-132436-1
SDG Number: Gaston Ash Pond New Wells (3)

Login Number: 132436

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	17.4°C, 17.6°C IR-6
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	



Certification Summary

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

TestAmerica Job ID: 400-132436-1
 SDG: Gaston Ash Pond New Wells (3)

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-17
Louisiana	NELAP	6	30976	06-30-17
Louisiana (DW)	NELAP Secondary AB	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	MO00054	06-30-17
California	State Program	9	2886	03-31-18 *
Connecticut	State Program	1	PH-0241	03-31-17 *
Florida	NELAP	4	E87689	06-30-17
Illinois	NELAP	5	200023	11-30-17
Iowa	State Program	7	373	02-01-18
Kansas	NELAP	7	E-10236	10-31-17
Kentucky (DW)	State Program	4	90125	12-31-17
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-17
Louisiana (DW)	NELAP	6	LA170011	12-31-17
Maryland	State Program	3	310	09-30-17
Missouri	State Program	7	780	06-30-17
Nevada	State Program	9	MO000542017-1	07-31-17
New Jersey	NELAP	2	MO002	06-30-17
New York	NELAP	2	11616	03-31-17 *
North Dakota	State Program	8	R207	06-30-17

* Certification renewal pending - certification considered valid.

Certification Summary

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

TestAmerica Job ID: 400-132436-1
SDG: Gaston Ash Pond New Wells (3)

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-17
Pennsylvania	NELAP	3	68-00540	02-28-17 *
South Carolina	State Program	4	85002001	06-30-17
Texas	NELAP	6	T104704193-16-10	07-31-17
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		P330-17-0028	02-02-20
Utah	NELAP	8	MO000542016-8	07-31-17
Virginia	NELAP	3	460230	06-14-17
Washington	State Program	10	C592	08-30-17
West Virginia DEP	State Program	3	381	08-31-17 *

* Certification renewal pending - certification considered valid.

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

 Alabama Power



Sample Group : WMWGASAP_1078
Project/Site : Gaston Ash Pond
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:

Supervision:



Anions

Gaston Ash Pond

WMWGASAP_1078

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 anions were outsourced to Test America, Pensacola. Listed below is the job narrative provided by Test America.

Job Narrative
400-134868-1
General Chemistry

Method(s) SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 346116 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 Cl- E: The following samples were diluted to bring the concentration of target analytes within the calibration range: AX05087 MW-22 (400-134868-10), AX05087 MW-22 (400-134868-10[MS]) and AX05087 MW-22 (400-134868-10[MSD]). Elevated reporting limits (RLs) are provided.

Method(s) SM 4500 SO4 E: The following samples were diluted to bring the concentration of target analytes within the calibration range: Sulfate. Elevated reporting limits (RLs) are provided.

Method(s) SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 346235 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 346632 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.



Metals ICP

Gaston Ash Pond

WMWGASAP_1078

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>
AX05078	20170404Kim	WMWGASAP_1078
AX05079	20170404Kim	WMWGASAP_1078
AX05080	20170404Kim	WMWGASAP_1078
AX05081	20170404Kim	WMWGASAP_1078
AX05082	20170404AKim	WMWGASAP_1078
AX05083	20170404AKim	WMWGASAP_1078
AX05084	20170404AKim	WMWGASAP_1078
AX05085	20170404AKim	WMWGASAP_1078
AX05086	20170404AKim	WMWGASAP_1078
AX05087	20170404AKim_20170609BK	WMWGASAP_1078
AX05088	20170404AKim	WMWGASAP_1078
AX05089	20170404AKim	WMWGASAP_1078
AX05090	20170404AKim	WMWGASAP_1078
AX05091	20170404AKim	WMWGASAP_1078
AX05092	20170404C,20170405&20170517A	WMWGASAP_1078
AX05093	20170404C,20170405&20170517A	WMWGASAP_1078
AX05094	20170404C,20170405&20170517A	WMWGASAP_1078
AX05095	20170404C,20170405&20170517A	WMWGASAP_1078
AX05096	20170404C,20170405&20170517A	WMWGASAP_1078
AX05097	20170404C,20170405&20170517A	WMWGASAP_1078
AX05098	20170404C,20170405&20170517A	WMWGASAP_1078
AX05099	20170404C,20170405&20170517A	WMWGASAP_1078
AX05100	20170404C,20170405&20170517A	WMWGASAP_1078
AX05101	20170404C,20170405&20170517A	WMWGASAP_1078
AX05102	20170404D, 20170405A & 20170517	WMWGASAP_1078
AX05103	20170404D, 20170405A & 20170517	WMWGASAP_1078
AX05104	20170404D, 20170405A & 20170517	WMWGASAP_1078
AX05105	20170404D, 20170405A & 20170517	WMWGASAP_1078
AX05106	20170404D, 20170405A & 20170517	WMWGASAP_1078



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. ICV concentration for Li was set to 0.2ppm.
- 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. CCV concentration for Li was set to 0.2ppm. An additional CCV was added between samples for monitoring Lithium due to possible matrix issues except in batches 20170517 and 20170517A.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes. An additional rinse was added between samples for monitoring Lithium due to possible matrix issues except in batches 20170517 and 20170517A.
- 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 read backs associated with EPA 200.7 were within acceptance criteria, with the exception of Lithium in batches 20170404C, 20170405, 20170404D and 20170405A, which had greater than 10% high standard error. Lithium was re-analyzed in batches 20170517 and 20170517A with acceptable results.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

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

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



<u>Analyte</u>	<u>Sample ID</u>
Calcium	AX05106
Calcium	AX05087

The concentrations of these analytes in the matrix spike, added before digestion, were less than 30 percent of the concentration of the sample causing inaccurate spike recovery information. The laboratory control sample indicates that the digestion and analysis were in control.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met except for:

<u>Analyte</u>	<u>Sample ID</u>
Lithium	AX05106

A post digestion dilution spike and serial dilutions were performed on AX05106. Precision passed, indicating a lack of significant matrix effect on the sample.

7. All samples were analyzed at x2 dilution due to possible matrix issues. The following samples were diluted due to analyzed sample concentrations over the high standard of the calibration curve.

Sample ID	Analyte	Dilution Factor
AX05087	Calcium	x10
AX05098	Calcium	x10
AX05099	Calcium	x10
AX05106	Calcium	x10
AX05106MS	Calcium	x10
AX05106MSD	Calcium	x10

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



Metals ICPMS

Gaston Ash Pond

WMWGASAP_1078

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>
AX05078	589208	WMWGASAP_1078
AX05079	589208	WMWGASAP_1078
AX05080	589208	WMWGASAP_1078
AX05081	589208	WMWGASAP_1078
AX05082	589208	WMWGASAP_1078
AX05083	589208	WMWGASAP_1078
AX05084	589208	WMWGASAP_1078
AX05085	589208	WMWGASAP_1078
AX05086	589208	WMWGASAP_1078
AX05087	589208	WMWGASAP_1078
AX05088	589209	WMWGASAP_1078
AX05089	589209	WMWGASAP_1078
AX05090	589209	WMWGASAP_1078
AX05091	589209	WMWGASAP_1078
AX05092	589209	WMWGASAP_1078
AX05093	589209	WMWGASAP_1078
AX05094	589209	WMWGASAP_1078
AX05095	589209	WMWGASAP_1078
AX05096	589209	WMWGASAP_1078
AX05097	589209	WMWGASAP_1078
AX05098	589210	WMWGASAP_1078
AX05099	589210	WMWGASAP_1078
AX05100	589210	WMWGASAP_1078
AX05101	589210	WMWGASAP_1078
AX05102	589210	WMWGASAP_1078
AX05103	589210	WMWGASAP_1078
AX05104	589210	WMWGASAP_1078
AX05105	589210	WMWGASAP_1078
AX05106	589210	WMWGASAP_1078



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, with the exception of:

<u>Analyte</u>	<u>Sample</u>
Molybdenum	AX05106

A post digestion spike and serial dilution were performed with failing results, indicating a matrix effect on the sample.

- 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 Ash Pond

WMWGASAP_1078

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>
AX05078	588877	WMWGASAP_1078
AX05079	588877	WMWGASAP_1078
AX05080	588877	WMWGASAP_1078
AX05081	588877	WMWGASAP_1078
AX05082	588877	WMWGASAP_1078
AX05083	588877	WMWGASAP_1078
AX05084	588877	WMWGASAP_1078
AX05085	588877	WMWGASAP_1078
AX05086	588877	WMWGASAP_1078
AX05087	588877	WMWGASAP_1078
AX05088	588878	WMWGASAP_1078
AX05089	588878	WMWGASAP_1078
AX05090	588878	WMWGASAP_1078
AX05091	588878	WMWGASAP_1078
AX05092	588878	WMWGASAP_1078
AX05093	588878	WMWGASAP_1078
AX05094	588878	WMWGASAP_1078
AX05095	588878	WMWGASAP_1078
AX05096	588878	WMWGASAP_1078
AX05097	588878	WMWGASAP_1078
AX05098	589168	WMWGASAP_1078
AX05099	589168	WMWGASAP_1078
AX05100	589168	WMWGASAP_1078
AX05101	589168	WMWGASAP_1078
AX05102	589168	WMWGASAP_1078
AX05103	589168	WMWGASAP_1078
AX05104	589168	WMWGASAP_1078
AX05105	589168	WMWGASAP_1078
AX05106	589168	WMWGASAP_1078



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 Ash Pond

WMWGASAP_1078

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>
AX05078	588976	WMWGASAP_1078
AX05079	588976	WMWGASAP_1078
AX05080	588976	WMWGASAP_1078
AX05081	588976	WMWGASAP_1078
AX05082	588976	WMWGASAP_1078
AX05083	588976	WMWGASAP_1078
AX05084	588976	WMWGASAP_1078
AX05085	588976	WMWGASAP_1078
AX05086	588879	WMWGASAP_1078
AX05087	588879	WMWGASAP_1078
AX05088	588976	WMWGASAP_1078
AX05089	588976	WMWGASAP_1078
AX05090	588977	WMWGASAP_1078
AX05091	588977	WMWGASAP_1078
AX05092	588977	WMWGASAP_1078
AX05093	588977	WMWGASAP_1078
AX05094	588977	WMWGASAP_1078
AX05095	588879	WMWGASAP_1078
AX05096	588879	WMWGASAP_1078
AX05097	588879	WMWGASAP_1078
AX05098	588977	WMWGASAP_1078
AX05099	588977	WMWGASAP_1078
AX05100	588977	WMWGASAP_1078
AX05101	588879	WMWGASAP_1078
AX05102	588977	WMWGASAP_1078
AX05103	588880	WMWGASAP_1078
AX05104	588880	WMWGASAP_1078
AX05105	588880	WMWGASAP_1078
AX05106	588880	WMWGASAP_1078



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 0.5 mg 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 2.5 mg and 200 mg residue with the exception of samples AX05079, AX05091, AX05097 and AX05103.
- Multiple final weights were taken for these batches, but only the last two consecutive weights of the samples were reported.

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: WMWGASAP
 Sample Date: 27-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AX05078

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	0.0301	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7		2	0.02	0.1	0.897	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7		2	0.1	0.5	36.8	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	J 0.000947	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/4/2017	EPA 200.7		2	0.01	0.05	J 0.0380	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	0.121	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/8/2017	SM 2540C		1		25	347	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E		1	0.60	2.00	27	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C		1	0.032	0.10	J 0.060	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E		10	14.0	50	130	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: WMWGASAP
 Sample Date: 27-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AX05078

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec
			MB	Limit					Limit	Rec	Limit	Prec	
AX05087	Selenium, Total	mg/L	0.0000719	0.0044	0.10	0.0907	0.0867	0.0955	0.085 to 0.115	90.7	70 to 130	4.45	20
AX05081	Calcium, Total	mg/L	0.00833	0.22	5.00	49.6	49.9	4.90	4.25 to 5.75	92.4	70 to 130	0.601	20
AX05087	Chromium, Total	mg/L	0.00000261	0.0044	0.10	0.0983	0.0941	0.0960	0.085 to 0.115	98.3	70 to 130	4.38	20
AX05087	Molybdenum, Total	mg/L	0.00000750	0.0044	0.10	0.176	0.168	0.100	0.085 to 0.115	114	70 to 130	5.07	20
AX05087	Beryllium, Total	mg/L	0.0000327	0.00132	0.10	0.0881	0.0827	0.0914	0.085 to 0.115	88.1	70 to 130	6.32	20
AX05087	Lead, Total	mg/L	0.0000327	0.0022	0.10	0.0921	0.0869	0.0933	0.085 to 0.115	92.1	70 to 130	5.76	20
AX05081	Boron, Total	mg/L	0.00109	0.044	1.00	1.00	1.00	0.967	0.85 to 1.15	100	70 to 130	0.0526	20
AX05081	Lithium, Total	mg/L	-0.0000906	0.022	0.20	0.216	0.220	0.201	0.17 to 0.23	108	70 to 130	1.52	20
AX05087	Mercury, Total by CVAA	mg/L	0.0000804	0.0005	0.004	0.00385	0.00388	0.00394	0.0034 to 0.0046	96.2	70 to 130	0.715	20
AX05087	Barium, Total	mg/L	-0.0000106	0.0044	0.10	0.141	0.134	0.0930	0.085 to 0.115	98.4	70 to 130	5.03	20
AX05087	Cobalt, Total	mg/L	-0.00000107	0.0044	0.10	0.0901	0.0861	0.0930	0.085 to 0.115	90.1	70 to 130	4.53	20
AX05087	Antimony, Total	mg/L	0.000104	0.00132	0.10	0.0940	0.0889	0.0918	0.085 to 0.115	93.3	70 to 130	5.56	20
AX05087	Arsenic, Total	mg/L	0.0000101	0.0022	0.10	0.0956	0.0911	0.0953	0.085 to 0.115	94.2	70 to 130	4.79	20
AX05087	Cadmium, Total	mg/L	0.000000749	0.00044	0.10	0.0916	0.0862	0.0913	0.085 to 0.115	91.6	70 to 130	6.05	20
AX05087	Thallium, Total	mg/L	0.0000312	0.00044	0.10	0.0961	0.0906	0.0921	0.085 to 0.115	96.1	70 to 130	5.90	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: WMWGASAP
 Sample Date: 27-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AX05078

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec		
			Limit	Limit			Duplicate	LFB	Limit	Limit		
AX05089	Solids, Dissolved	mg/L	2.00	25			287	45.0	40 to 60		0.692	5

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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: WMWGASAPFB
 Sample Date: 27-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX05079

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7	2		0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7	2		0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	J 0.000859	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/4/2017	EPA 200.7	2		0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/8/2017	SM 2540C	1			25	U Not Detected	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E	1		0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C	1		0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E	1		1.40	5.00	U <1.4	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: WMWGASAPFB
 Sample Date: 27-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX05079

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec
			MB	Limit					Limit	Rec	Limit	Prec	
AX05087	Selenium, Total	mg/L	0.0000719	0.0044	0.10	0.0907	0.0867	0.0955	0.085 to 0.115	90.7	70 to 130	4.45	20
AX05081	Calcium, Total	mg/L	0.00833	0.22	5.00	49.6	49.9	4.90	4.25 to 5.75	92.4	70 to 130	0.601	20
AX05087	Chromium, Total	mg/L	0.00000261	0.0044	0.10	0.0983	0.0941	0.0960	0.085 to 0.115	98.3	70 to 130	4.38	20
AX05087	Molybdenum, Total	mg/L	0.00000750	0.0044	0.10	0.176	0.168	0.100	0.085 to 0.115	114	70 to 130	5.07	20
AX05081	Boron, Total	mg/L	0.00109	0.044	1.00	1.00	1.00	0.967	0.85 to 1.15	100	70 to 130	0.0526	20
AX05081	Lithium, Total	mg/L	-0.0000906	0.022	0.20	0.216	0.220	0.201	0.17 to 0.23	108	70 to 130	1.52	20
AX05087	Mercury, Total by CVAA	mg/L	0.0000804	0.0005	0.004	0.00385	0.00388	0.00394	0.0034 to 0.0046	96.2	70 to 130	0.715	20
AX05087	Antimony, Total	mg/L	0.000104	0.00132	0.10	0.0940	0.0889	0.0918	0.085 to 0.115	93.3	70 to 130	5.56	20
AX05087	Arsenic, Total	mg/L	0.0000101	0.0022	0.10	0.0956	0.0911	0.0953	0.085 to 0.115	94.2	70 to 130	4.79	20
AX05087	Cadmium, Total	mg/L	0.000000749	0.00044	0.10	0.0916	0.0862	0.0913	0.085 to 0.115	91.6	70 to 130	6.05	20
AX05087	Thallium, Total	mg/L	0.0000312	0.00044	0.10	0.0961	0.0906	0.0921	0.085 to 0.115	96.1	70 to 130	5.90	20
AX05087	Barium, Total	mg/L	-0.0000106	0.0044	0.10	0.141	0.134	0.0930	0.085 to 0.115	98.4	70 to 130	5.03	20
AX05087	Cobalt, Total	mg/L	-0.00000107	0.0044	0.10	0.0901	0.0861	0.0930	0.085 to 0.115	90.1	70 to 130	4.53	20
AX05087	Beryllium, Total	mg/L	0.0000327	0.00132	0.10	0.0881	0.0827	0.0914	0.085 to 0.115	88.1	70 to 130	6.32	20
AX05087	Lead, Total	mg/L	0.0000327	0.0022	0.10	0.0921	0.0869	0.0933	0.085 to 0.115	92.1	70 to 130	5.76	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: WMWGASAPFB
 Sample Date: 27-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX05079

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05089	Solids, Dissolved	mg/L	2.00	25			287	45.0	40 to 60	0.692	5

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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: WMWGASAP
 Sample Date: 27-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AX05080

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	0.0593	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7		2	0.1	0.5	77.9	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	J 0.000760	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/4/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/8/2017	SM 2540C		1		25	339	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E		1	0.60	2.00	5.8	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C		1	0.032	0.10	0.12	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E		20	28.0	100	J 62	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: WMWGASAP
 Sample Date: 27-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AX05080

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX05081	Calcium, Total	mg/L	0.00833	0.22	5.00	49.6	49.9	4.90	4.25 to 5.75	92.4	70 to 130	0.601	20
AX05087	Selenium, Total	mg/L	0.0000719	0.0044	0.10	0.0907	0.0867	0.0955	0.085 to 0.115	90.7	70 to 130	4.45	20
AX05087	Chromium, Total	mg/L	0.00000261	0.0044	0.10	0.0983	0.0941	0.0960	0.085 to 0.115	98.3	70 to 130	4.38	20
AX05087	Molybdenum, Total	mg/L	0.00000750	0.0044	0.10	0.176	0.168	0.100	0.085 to 0.115	114	70 to 130	5.07	20
AX05087	Barium, Total	mg/L	-0.0000106	0.0044	0.10	0.141	0.134	0.0930	0.085 to 0.115	98.4	70 to 130	5.03	20
AX05087	Cobalt, Total	mg/L	-0.00000107	0.0044	0.10	0.0901	0.0861	0.0930	0.085 to 0.115	90.1	70 to 130	4.53	20
AX05087	Antimony, Total	mg/L	0.000104	0.00132	0.10	0.0940	0.0889	0.0918	0.085 to 0.115	93.3	70 to 130	5.56	20
AX05087	Arsenic, Total	mg/L	0.0000101	0.0022	0.10	0.0956	0.0911	0.0953	0.085 to 0.115	94.2	70 to 130	4.79	20
AX05087	Cadmium, Total	mg/L	0.000000749	0.00044	0.10	0.0916	0.0862	0.0913	0.085 to 0.115	91.6	70 to 130	6.05	20
AX05087	Thallium, Total	mg/L	0.0000312	0.00044	0.10	0.0961	0.0906	0.0921	0.085 to 0.115	96.1	70 to 130	5.90	20
AX05087	Beryllium, Total	mg/L	0.0000327	0.00132	0.10	0.0881	0.0827	0.0914	0.085 to 0.115	88.1	70 to 130	6.32	20
AX05087	Lead, Total	mg/L	0.0000327	0.0022	0.10	0.0921	0.0869	0.0933	0.085 to 0.115	92.1	70 to 130	5.76	20
AX05081	Boron, Total	mg/L	0.00109	0.044	1.00	1.00	1.00	0.967	0.85 to 1.15	100	70 to 130	0.0526	20
AX05081	Lithium, Total	mg/L	-0.0000906	0.022	0.20	0.216	0.220	0.201	0.17 to 0.23	108	70 to 130	1.52	20
AX05087	Mercury, Total by CVAA	mg/L	0.0000804	0.0005	0.004	0.00385	0.00388	0.00394	0.0034 to 0.0046	96.2	70 to 130	0.715	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: WMWGASAP
 Sample Date: 27-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AX05080

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05089	Solids, Dissolved	mg/L	2.00	25			287	45.0	40 to 60		0.692 5

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Expiration: June 30, 2018

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CC:

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

Certificate Of Analysis Alabama Power



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AX05081

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	0.0388	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7		2	0.1	0.5	45.0	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	J 0.000755	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/4/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/8/2017	SM 2540C		1		25	221	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E		1	0.60	2.00	6.1	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E		1	1.40	5.00	U <1.4	mg/L

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Comments: Test America Pensacola NELAP ID: E81010

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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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AX05081

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX05087	Selenium, Total	mg/L	0.0000719	0.0044	0.10	0.0907	0.0867	0.0955	0.085 to 0.115		90.7	70 to 130	4.45	20
AX05081	Calcium, Total	mg/L	0.00833	0.22	5.00	49.6	49.9	4.90	4.25 to 5.75		92.4	70 to 130	0.601	20
AX05087	Chromium, Total	mg/L	0.00000261	0.0044	0.10	0.0983	0.0941	0.0960	0.085 to 0.115		98.3	70 to 130	4.38	20
AX05087	Molybdenum, Total	mg/L	0.00000750	0.0044	0.10	0.176	0.168	0.100	0.085 to 0.115		114	70 to 130	5.07	20
AX05087	Antimony, Total	mg/L	0.000104	0.00132	0.10	0.0940	0.0889	0.0918	0.085 to 0.115		93.3	70 to 130	5.56	20
AX05087	Arsenic, Total	mg/L	0.0000101	0.0022	0.10	0.0956	0.0911	0.0953	0.085 to 0.115		94.2	70 to 130	4.79	20
AX05087	Cadmium, Total	mg/L	0.000000749	0.00044	0.10	0.0916	0.0862	0.0913	0.085 to 0.115		91.6	70 to 130	6.05	20
AX05087	Thallium, Total	mg/L	0.0000312	0.00044	0.10	0.0961	0.0906	0.0921	0.085 to 0.115		96.1	70 to 130	5.90	20
AX05081	Boron, Total	mg/L	0.00109	0.044	1.00	1.00	1.00	0.967	0.85 to 1.15		100	70 to 130	0.0526	20
AX05081	Lithium, Total	mg/L	-0.0000906	0.022	0.20	0.216	0.220	0.201	0.17 to 0.23		108	70 to 130	1.52	20
AX05087	Mercury, Total by CVAA	mg/L	0.0000804	0.0005	0.004	0.00385	0.00388	0.00394	0.0034 to 0.0046		96.2	70 to 130	0.715	20
AX05087	Barium, Total	mg/L	-0.0000106	0.0044	0.10	0.141	0.134	0.0930	0.085 to 0.115		98.4	70 to 130	5.03	20
AX05087	Cobalt, Total	mg/L	-0.00000107	0.0044	0.10	0.0901	0.0861	0.0930	0.085 to 0.115		90.1	70 to 130	4.53	20
AX05087	Beryllium, Total	mg/L	0.0000327	0.00132	0.10	0.0881	0.0827	0.0914	0.085 to 0.115		88.1	70 to 130	6.32	20
AX05087	Lead, Total	mg/L	0.0000327	0.0022	0.10	0.0921	0.0869	0.0933	0.085 to 0.115		92.1	70 to 130	5.76	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AX05081

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05089	Solids, Dissolved	mg/L	2.00	25			287	45.0	40 to 60		0.692 5

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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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AX05082

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	J 0.00220	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	0.0695	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7	2		0.02	0.1	0.336	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7	2		0.1	0.5	62.6	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	J 0.000648	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/4/2017	EPA 200.7	2		0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/8/2017	SM 2540C	1			25	353	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E	1		0.60	2.00	22	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C	1		0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E	10		14.0	50	86	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AX05082

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec
			MB	Limit					Limit	Rec	Limit	Prec	
AX05087	Selenium, Total	mg/L	0.0000719	0.0044	0.10	0.0907	0.0867	0.0955	0.085 to 0.115	90.7	70 to 130	4.45	20
AX05087	Mercury, Total by CVAA	mg/L	0.0000804	0.0005	0.004	0.00385	0.00388	0.00394	0.0034 to 0.0046	96.2	70 to 130	0.715	20
AX05091	Boron, Total	mg/L	0.000380	0.044	1.00	0.960	0.945	0.967	0.85 to 1.15	96.0	70 to 130	1.51	20
AX05087	Beryllium, Total	mg/L	0.0000327	0.00132	0.10	0.0881	0.0827	0.0914	0.085 to 0.115	88.1	70 to 130	6.32	20
AX05087	Lead, Total	mg/L	0.0000327	0.0022	0.10	0.0921	0.0869	0.0933	0.085 to 0.115	92.1	70 to 130	5.76	20
AX05087	Chromium, Total	mg/L	0.00000261	0.0044	0.10	0.0983	0.0941	0.0960	0.085 to 0.115	98.3	70 to 130	4.38	20
AX05087	Molybdenum, Total	mg/L	0.00000750	0.0044	0.10	0.176	0.168	0.100	0.085 to 0.115	114	70 to 130	5.07	20
AX05091	Calcium, Total	mg/L	0.0206	0.22	5.00	4.89	4.82	4.88	4.25 to 5.75	97.8	70 to 130	1.36	20
AX05087	Antimony, Total	mg/L	0.000104	0.00132	0.10	0.0940	0.0889	0.0918	0.085 to 0.115	93.3	70 to 130	5.56	20
AX05087	Arsenic, Total	mg/L	0.0000101	0.0022	0.10	0.0956	0.0911	0.0953	0.085 to 0.115	94.2	70 to 130	4.79	20
AX05087	Cadmium, Total	mg/L	0.000000749	0.00044	0.10	0.0916	0.0862	0.0913	0.085 to 0.115	91.6	70 to 130	6.05	20
AX05087	Thallium, Total	mg/L	0.0000312	0.00044	0.10	0.0961	0.0906	0.0921	0.085 to 0.115	96.1	70 to 130	5.90	20
AX05087	Barium, Total	mg/L	-0.0000106	0.0044	0.10	0.141	0.134	0.0930	0.085 to 0.115	98.4	70 to 130	5.03	20
AX05087	Cobalt, Total	mg/L	-0.00000107	0.0044	0.10	0.0901	0.0861	0.0930	0.085 to 0.115	90.1	70 to 130	4.53	20
AX05091	Lithium, Total	mg/L	-0.000109	0.022	0.20	0.190	0.185	0.198	0.17 to 0.23	94.9	70 to 130	2.27	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AX05082

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05089	Solids, Dissolved	mg/L	2.00	25			287	45.0	40 to 60		0.692 5

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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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AX05083

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	J 0.00989	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7		2	0.02	0.1	0.120	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7		2	0.1	0.5	35.4	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	J 0.000823	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/4/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/8/2017	SM 2540C		1		25	198	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E		1	0.60	2.00	6.7	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E		1	1.40	5.00	32	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AX05083

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX05087	Selenium, Total	mg/L	0.0000719	0.0044	0.10	0.0907	0.0867	0.0955	0.085 to 0.115		90.7	70 to 130	4.45	20
AX05091	Boron, Total	mg/L	0.000380	0.044	1.00	0.960	0.945	0.967	0.85 to 1.15		96.0	70 to 130	1.51	20
AX05087	Mercury, Total by CVAA	mg/L	0.0000804	0.0005	0.004	0.00385	0.00388	0.00394	0.0034 to 0.0046		96.2	70 to 130	0.715	20
AX05087	Chromium, Total	mg/L	0.00000261	0.0044	0.10	0.0983	0.0941	0.0960	0.085 to 0.115		98.3	70 to 130	4.38	20
AX05087	Molybdenum, Total	mg/L	0.00000750	0.0044	0.10	0.176	0.168	0.100	0.085 to 0.115		114	70 to 130	5.07	20
AX05091	Calcium, Total	mg/L	0.0206	0.22	5.00	4.89	4.82	4.88	4.25 to 5.75		97.8	70 to 130	1.36	20
AX05087	Barium, Total	mg/L	-0.0000106	0.0044	0.10	0.141	0.134	0.0930	0.085 to 0.115		98.4	70 to 130	5.03	20
AX05087	Cobalt, Total	mg/L	-0.00000107	0.0044	0.10	0.0901	0.0861	0.0930	0.085 to 0.115		90.1	70 to 130	4.53	20
AX05091	Lithium, Total	mg/L	-0.000109	0.022	0.20	0.190	0.185	0.198	0.17 to 0.23		94.9	70 to 130	2.27	20
AX05087	Antimony, Total	mg/L	0.000104	0.00132	0.10	0.0940	0.0889	0.0918	0.085 to 0.115		93.3	70 to 130	5.56	20
AX05087	Arsenic, Total	mg/L	0.0000101	0.0022	0.10	0.0956	0.0911	0.0953	0.085 to 0.115		94.2	70 to 130	4.79	20
AX05087	Cadmium, Total	mg/L	0.000000749	0.00044	0.10	0.0916	0.0862	0.0913	0.085 to 0.115		91.6	70 to 130	6.05	20
AX05087	Thallium, Total	mg/L	0.0000312	0.00044	0.10	0.0961	0.0906	0.0921	0.085 to 0.115		96.1	70 to 130	5.90	20
AX05087	Beryllium, Total	mg/L	0.0000327	0.00132	0.10	0.0881	0.0827	0.0914	0.085 to 0.115		88.1	70 to 130	6.32	20
AX05087	Lead, Total	mg/L	0.0000327	0.0022	0.10	0.0921	0.0869	0.0933	0.085 to 0.115		92.1	70 to 130	5.76	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AX05083

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05089	Solids, Dissolved	mg/L	2.00	25			287	45.0	40 to 60		0.692 5

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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  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-11 Dup

Laboratory ID Number: AX05084

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	J 0.00989	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7	2		0.02	0.1	0.117	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7	2		0.1	0.5	35.3	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	J 0.000781	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/4/2017	EPA 200.7	2		0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/8/2017	SM 2540C	1			25	190	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E	1		0.60	2.00	6.5	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C	1		0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E	1		1.40	5.00	32	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-11 Dup

Laboratory ID Number: AX05084

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX05087	Selenium, Total	mg/L	0.0000719	0.0044	0.10	0.0907	0.0867	0.0955	0.085 to 0.115		90.7	70 to 130	4.45	20
AX05091	Boron, Total	mg/L	0.000380	0.044	1.00	0.960	0.945	0.967	0.85 to 1.15		96.0	70 to 130	1.51	20
AX05087	Mercury, Total by CVAA	mg/L	0.0000804	0.0005	0.004	0.00385	0.00388	0.00394	0.0034 to 0.0046		96.2	70 to 130	0.715	20
AX05087	Chromium, Total	mg/L	0.00000261	0.0044	0.10	0.0983	0.0941	0.0960	0.085 to 0.115		98.3	70 to 130	4.38	20
AX05087	Molybdenum, Total	mg/L	0.00000750	0.0044	0.10	0.176	0.168	0.100	0.085 to 0.115		114	70 to 130	5.07	20
AX05091	Calcium, Total	mg/L	0.0206	0.22	5.00	4.89	4.82	4.88	4.25 to 5.75		97.8	70 to 130	1.36	20
AX05087	Beryllium, Total	mg/L	0.0000327	0.00132	0.10	0.0881	0.0827	0.0914	0.085 to 0.115		88.1	70 to 130	6.32	20
AX05087	Lead, Total	mg/L	0.0000327	0.0022	0.10	0.0921	0.0869	0.0933	0.085 to 0.115		92.1	70 to 130	5.76	20
AX05087	Barium, Total	mg/L	-0.0000106	0.0044	0.10	0.141	0.134	0.0930	0.085 to 0.115		98.4	70 to 130	5.03	20
AX05087	Cobalt, Total	mg/L	-0.00000107	0.0044	0.10	0.0901	0.0861	0.0930	0.085 to 0.115		90.1	70 to 130	4.53	20
AX05091	Lithium, Total	mg/L	-0.000109	0.022	0.20	0.190	0.185	0.198	0.17 to 0.23		94.9	70 to 130	2.27	20
AX05087	Antimony, Total	mg/L	0.000104	0.00132	0.10	0.0940	0.0889	0.0918	0.085 to 0.115		93.3	70 to 130	5.56	20
AX05087	Arsenic, Total	mg/L	0.0000101	0.0022	0.10	0.0956	0.0911	0.0953	0.085 to 0.115		94.2	70 to 130	4.79	20
AX05087	Cadmium, Total	mg/L	0.000000749	0.00044	0.10	0.0916	0.0862	0.0913	0.085 to 0.115		91.6	70 to 130	6.05	20
AX05087	Thallium, Total	mg/L	0.0000312	0.00044	0.10	0.0961	0.0906	0.0921	0.085 to 0.115		96.1	70 to 130	5.90	20

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

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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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-11 Dup

Laboratory ID Number: AX05084

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05089	Solids, Dissolved	mg/L	2.00	25			287	45.0	40 to 60		0.692 5

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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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AX05085

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	0.0148	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7		2	0.1	0.5	39.4	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	J 0.000753	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/4/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/8/2017	SM 2540C		1		25	180	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E		1	0.60	2.00	3.2	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E		1	1.40	5.00	J 3.7	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AX05085

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX05087	Selenium, Total	mg/L	0.0000719	0.0044	0.10	0.0907	0.0867	0.0955	0.085 to 0.115		90.7	70 to 130	4.45	20
AX05087	Mercury, Total by CVAA	mg/L	0.0000804	0.0005	0.004	0.00385	0.00388	0.00394	0.0034 to 0.0046		96.2	70 to 130	0.715	20
AX05091	Boron, Total	mg/L	0.000380	0.044	1.00	0.960	0.945	0.967	0.85 to 1.15		96.0	70 to 130	1.51	20
AX05087	Barium, Total	mg/L	-0.0000106	0.0044	0.10	0.141	0.134	0.0930	0.085 to 0.115		98.4	70 to 130	5.03	20
AX05087	Cobalt, Total	mg/L	-0.00000107	0.0044	0.10	0.0901	0.0861	0.0930	0.085 to 0.115		90.1	70 to 130	4.53	20
AX05091	Lithium, Total	mg/L	-0.000109	0.022	0.20	0.190	0.185	0.198	0.17 to 0.23		94.9	70 to 130	2.27	20
AX05087	Antimony, Total	mg/L	0.000104	0.00132	0.10	0.0940	0.0889	0.0918	0.085 to 0.115		93.3	70 to 130	5.56	20
AX05087	Arsenic, Total	mg/L	0.0000101	0.0022	0.10	0.0956	0.0911	0.0953	0.085 to 0.115		94.2	70 to 130	4.79	20
AX05087	Cadmium, Total	mg/L	0.000000749	0.00044	0.10	0.0916	0.0862	0.0913	0.085 to 0.115		91.6	70 to 130	6.05	20
AX05087	Thallium, Total	mg/L	0.0000312	0.00044	0.10	0.0961	0.0906	0.0921	0.085 to 0.115		96.1	70 to 130	5.90	20
AX05087	Chromium, Total	mg/L	0.00000261	0.0044	0.10	0.0983	0.0941	0.0960	0.085 to 0.115		98.3	70 to 130	4.38	20
AX05087	Molybdenum, Total	mg/L	0.00000750	0.0044	0.10	0.176	0.168	0.100	0.085 to 0.115		114	70 to 130	5.07	20
AX05091	Calcium, Total	mg/L	0.0206	0.22	5.00	4.89	4.82	4.88	4.25 to 5.75		97.8	70 to 130	1.36	20
AX05087	Beryllium, Total	mg/L	0.0000327	0.00132	0.10	0.0881	0.0827	0.0914	0.085 to 0.115		88.1	70 to 130	6.32	20
AX05087	Lead, Total	mg/L	0.0000327	0.0022	0.10	0.0921	0.0869	0.0933	0.085 to 0.115		92.1	70 to 130	5.76	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AX05085

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05089	Solids, Dissolved	mg/L	2.00	25			287	45.0	40 to 60		0.692 5

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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: WMWGASAP
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AX05086

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	0.0395	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7		2	0.02	0.1	2.24	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7		2	0.1	0.5	71.8	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	J 0.000689	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/4/2017	EPA 200.7		2	0.01	0.05	J 0.0426	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	0.344	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/7/2017	SM 2540C		1		25	452	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E		1	0.60	2.00	40	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E		15	21.0	75	160	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: WMWGASAP
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AX05086

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	
			MB	Limit					Limit	Rec	Limit	Prec		
AX05087	Selenium, Total	mg/L	0.0000719	0.0044	0.10	0.0907	0.0867	0.0955	0.085 to 0.115		90.7	70 to 130	4.45	20
AX05087	Mercury, Total by CVAA	mg/L	0.0000804	0.0005	0.004	0.00385	0.00388	0.00394	0.0034 to 0.0046		96.2	70 to 130	0.715	20
AX05091	Boron, Total	mg/L	0.000380	0.044	1.00	0.960	0.945	0.967	0.85 to 1.15		96.0	70 to 130	1.51	20
AX05087	Antimony, Total	mg/L	0.000104	0.00132	0.10	0.0940	0.0889	0.0918	0.085 to 0.115		93.3	70 to 130	5.56	20
AX05087	Arsenic, Total	mg/L	0.0000101	0.0022	0.10	0.0956	0.0911	0.0953	0.085 to 0.115		94.2	70 to 130	4.79	20
AX05087	Cadmium, Total	mg/L	0.000000749	0.00044	0.10	0.0916	0.0862	0.0913	0.085 to 0.115		91.6	70 to 130	6.05	20
AX05087	Thallium, Total	mg/L	0.0000312	0.00044	0.10	0.0961	0.0906	0.0921	0.085 to 0.115		96.1	70 to 130	5.90	20
AX05087	Chromium, Total	mg/L	0.00000261	0.0044	0.10	0.0983	0.0941	0.0960	0.085 to 0.115		98.3	70 to 130	4.38	20
AX05087	Molybdenum, Total	mg/L	0.00000750	0.0044	0.10	0.176	0.168	0.100	0.085 to 0.115		114	70 to 130	5.07	20
AX05091	Calcium, Total	mg/L	0.0206	0.22	5.00	4.89	4.82	4.88	4.25 to 5.75		97.8	70 to 130	1.36	20
AX05087	Barium, Total	mg/L	-0.0000106	0.0044	0.10	0.141	0.134	0.0930	0.085 to 0.115		98.4	70 to 130	5.03	20
AX05087	Cobalt, Total	mg/L	-0.00000107	0.0044	0.10	0.0901	0.0861	0.0930	0.085 to 0.115		90.1	70 to 130	4.53	20
AX05091	Lithium, Total	mg/L	-0.000109	0.022	0.20	0.190	0.185	0.198	0.17 to 0.23		94.9	70 to 130	2.27	20
AX05087	Beryllium, Total	mg/L	0.0000327	0.00132	0.10	0.0881	0.0827	0.0914	0.085 to 0.115		88.1	70 to 130	6.32	20
AX05087	Lead, Total	mg/L	0.0000327	0.0022	0.10	0.0921	0.0869	0.0933	0.085 to 0.115		92.1	70 to 130	5.76	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: WMWGASAP
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AX05086

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05096	Solids, Dissolved	mg/L	-4.0	25			162	55.0	40 to 60	4.52	5

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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: WMWGASAP
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AX05087

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	J 0.00135	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	0.0423	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7	2		0.02	0.1	1.88	mg/L
* Calcium, Total	HRG	6/9/2017	EPA 200.7	10		1.0	5.0	77.4	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	J 0.000678	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/4/2017	EPA 200.7	2		0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	0.0627	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/7/2017	SM 2540C	1			25	484	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E	2		1.20	4.0	56	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C	1		0.032	0.10	J 0.060	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E	10		14.0	50	170	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, 2018

Comments: Test America Pensacola NELAP ID: E81010
 Recovery for Calcium is out of spec.
 The spike amount was less than 30% of the sample amount.

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: WMWGASAP
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AX05087

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX05087	Selenium, Total	mg/L	0.0000719	0.0044	0.10	0.0907	0.0867	0.0955	0.085 to 0.115		90.7	70 to 130	4.45	20
AX05091	Boron, Total	mg/L	0.000380	0.044	1.00	0.960	0.945	0.967	0.85 to 1.15		96.0	70 to 130	1.51	20
AX05087	Mercury, Total by CVAA	mg/L	0.0000804	0.0005	0.004	0.00385	0.00388	0.00394	0.0034 to 0.0046		96.2	70 to 130	0.715	20
AX05087	Chromium, Total	mg/L	0.00000261	0.0044	0.10	0.0983	0.0941	0.0960	0.085 to 0.115		98.3	70 to 130	4.38	20
AX05087	Molybdenum, Total	mg/L	0.00000750	0.0044	0.10	0.176	0.168	0.100	0.085 to 0.115		114	70 to 130	5.07	20
AX05087	Antimony, Total	mg/L	0.000104	0.00132	0.10	0.0940	0.0889	0.0918	0.085 to 0.115		93.3	70 to 130	5.56	20
AX05087	Arsenic, Total	mg/L	0.0000101	0.0022	0.10	0.0956	0.0911	0.0953	0.085 to 0.115		94.2	70 to 130	4.79	20
AX05087	Cadmium, Total	mg/L	0.000000749	0.00044	0.10	0.0916	0.0862	0.0913	0.085 to 0.115		91.6	70 to 130	6.05	20
AX05087	Thallium, Total	mg/L	0.0000312	0.00044	0.10	0.0961	0.0906	0.0921	0.085 to 0.115		96.1	70 to 130	5.90	20
AX05087	Barium, Total	mg/L	-0.0000106	0.0044	0.10	0.141	0.134	0.0930	0.085 to 0.115		98.4	70 to 130	5.03	20
AX05087	Calcium, Total	mg/L	-0.0154	0.22	5.00	80.8	80.3	4.61	4.25 to 5.75		68.0	70 to 130	0.621	20
AX05087	Cobalt, Total	mg/L	-0.00000107	0.0044	0.10	0.0901	0.0861	0.0930	0.085 to 0.115		90.1	70 to 130	4.53	20
AX05091	Lithium, Total	mg/L	-0.000109	0.022	0.20	0.190	0.185	0.198	0.17 to 0.23		94.9	70 to 130	2.27	20
AX05087	Beryllium, Total	mg/L	0.0000327	0.00132	0.10	0.0881	0.0827	0.0914	0.085 to 0.115		88.1	70 to 130	6.32	20
AX05087	Lead, Total	mg/L	0.0000327	0.0022	0.10	0.0921	0.0869	0.0933	0.085 to 0.115		92.1	70 to 130	5.76	20

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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, 2018

Comments: Test America Pensacola NELAP ID: E81010
 Recovery for Calcium is out of spec.
 The spike amount was less than 30% of the sample amount.

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: WMWGASAP
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AX05087

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05096	Solids, Dissolved	mg/L	-4.0	25			162	55.0	40 to 60	4.52	5

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010
 Recovery for Calcium is out of spec.
 The spike amount was less than 30% of the sample amount.

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: WMWGASAP
 Sample Date: 27-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AX05088

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	J 0.00425	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	0.0407	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7	2		0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7	2		0.1	0.5	43.1	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	U Not Detected	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/4/2017	EPA 200.7	2		0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	0.0145	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/8/2017	SM 2540C	1			25	223	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E	1		0.60	2.00	12	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C	1		0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E	1		1.40	5.00	23	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: WMWGASAP
 Sample Date: 27-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AX05088

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX05091	Calcium, Total	mg/L	0.0206	0.22	5.00	4.89	4.82	4.88	4.25 to 5.75	97.8	70 to 130	1.36	20
AX05091	Boron, Total	mg/L	0.000380	0.044	1.00	0.960	0.945	0.967	0.85 to 1.15	96.0	70 to 130	1.51	20
AX05097	Molybdenum, Total	mg/L	0.00000750	0.0044	0.10	0.111	0.112	0.100	0.085 to 0.115	111	70 to 130	0.537	20
AX05097	Arsenic, Total	mg/L	0.0000101	0.0022	0.10	0.0952	0.0960	0.0953	0.085 to 0.115	95.2	70 to 130	0.837	20
AX05097	Beryllium, Total	mg/L	0.0000327	0.00132	0.10	0.0884	0.0894	0.0914	0.085 to 0.115	88.4	70 to 130	1.15	20
AX05097	Barium, Total	mg/L	-0.0000106	0.0044	0.10	0.0970	0.0974	0.0930	0.085 to 0.115	97.0	70 to 130	0.477	20
AX05097	Chromium, Total	mg/L	0.00000261	0.0044	0.10	0.103	0.103	0.0960	0.085 to 0.115	103	70 to 130	0.487	20
AX05097	Lead, Total	mg/L	0.0000327	0.0022	0.10	0.0935	0.0948	0.0933	0.085 to 0.115	93.5	70 to 130	1.38	20
AX05091	Lithium, Total	mg/L	-0.000109	0.022	0.20	0.190	0.185	0.198	0.17 to 0.23	94.9	70 to 130	2.27	20
AX05097	Antimony, Total	mg/L	0.000104	0.00132	0.10	0.0947	0.0948	0.0918	0.085 to 0.115	94.7	70 to 130	0.127	20
AX05097	Cobalt, Total	mg/L	-0.00000107	0.0044	0.10	0.0920	0.0935	0.0930	0.085 to 0.115	92.0	70 to 130	1.59	20
AX05097	Selenium, Total	mg/L	0.0000719	0.0044	0.10	0.0922	0.0946	0.0955	0.085 to 0.115	92.2	70 to 130	2.54	20
AX05097	Cadmium, Total	mg/L	0.000000749	0.00044	0.10	0.0947	0.0949	0.0913	0.085 to 0.115	94.7	70 to 130	0.168	20
AX05097	Mercury, Total by CVAA	mg/L	0.0000991	0.0005	0.004	0.00384	0.00391	0.00383	0.0034 to 0.0046	96.1	70 to 130	1.70	20
AX05097	Thallium, Total	mg/L	0.0000312	0.00044	0.10	0.0964	0.0980	0.0921	0.085 to 0.115	96.4	70 to 130	1.63	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: WMWGASAP
 Sample Date: 27-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AX05088

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec		
			Limit	Limit			Duplicate	LFB	Limit	Limit		
AX05089	Solids, Dissolved	mg/L	2.00	25			287	45.0	40 to 60		0.692	5

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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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AX05089

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	0.00766	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	0.0247	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7		2	0.1	0.5	55.3	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	J 0.000622	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/4/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	J 0.00869	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/8/2017	SM 2540C		1		25	291	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E		1	0.60	2.00	3.5	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C		1	0.032	0.10	J 0.070	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E		1	1.40	5.00	10	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AX05089

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX05091	Calcium, Total	mg/L	0.0206	0.22	5.00	4.89	4.82	4.88	4.25 to 5.75		97.8	70 to 130	1.36	20
AX05091	Boron, Total	mg/L	0.000380	0.044	1.00	0.960	0.945	0.967	0.85 to 1.15		96.0	70 to 130	1.51	20
AX05097	Molybdenum, Total	mg/L	0.00000750	0.0044	0.10	0.111	0.112	0.100	0.085 to 0.115		111	70 to 130	0.537	20
AX05097	Arsenic, Total	mg/L	0.0000101	0.0022	0.10	0.0952	0.0960	0.0953	0.085 to 0.115		95.2	70 to 130	0.837	20
AX05097	Beryllium, Total	mg/L	0.0000327	0.00132	0.10	0.0884	0.0894	0.0914	0.085 to 0.115		88.4	70 to 130	1.15	20
AX05097	Barium, Total	mg/L	-0.0000106	0.0044	0.10	0.0970	0.0974	0.0930	0.085 to 0.115		97.0	70 to 130	0.477	20
AX05097	Chromium, Total	mg/L	0.00000261	0.0044	0.10	0.103	0.103	0.0960	0.085 to 0.115		103	70 to 130	0.487	20
AX05097	Lead, Total	mg/L	0.0000327	0.0022	0.10	0.0935	0.0948	0.0933	0.085 to 0.115		93.5	70 to 130	1.38	20
AX05091	Lithium, Total	mg/L	-0.000109	0.022	0.20	0.190	0.185	0.198	0.17 to 0.23		94.9	70 to 130	2.27	20
AX05097	Antimony, Total	mg/L	0.000104	0.00132	0.10	0.0947	0.0948	0.0918	0.085 to 0.115		94.7	70 to 130	0.127	20
AX05097	Cobalt, Total	mg/L	-0.00000107	0.0044	0.10	0.0920	0.0935	0.0930	0.085 to 0.115		92.0	70 to 130	1.59	20
AX05097	Selenium, Total	mg/L	0.0000719	0.0044	0.10	0.0922	0.0946	0.0955	0.085 to 0.115		92.2	70 to 130	2.54	20
AX05097	Cadmium, Total	mg/L	0.000000749	0.00044	0.10	0.0947	0.0949	0.0913	0.085 to 0.115		94.7	70 to 130	0.168	20
AX05097	Mercury, Total by CVAA	mg/L	0.0000991	0.0005	0.004	0.00384	0.00391	0.00383	0.0034 to 0.0046		96.1	70 to 130	1.70	20
AX05097	Thallium, Total	mg/L	0.0000312	0.00044	0.10	0.0964	0.0980	0.0921	0.085 to 0.115		96.4	70 to 130	1.63	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AX05089

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
								Duplicate	LFB	Limit	Rec	Limit	Prec
AX05089	Solids, Dissolved	mg/L	2.00	25				287	45.0	40 to 60			0.692
													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, 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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AX05090

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	J 0.00404	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	0.111	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7		2	0.02	0.1	J 0.0210	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7		2	0.1	0.5	29.7	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	J 0.000662	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/4/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/8/2017	SM 2540C		1		25	203	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E		1	0.60	2.00	8.6	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C		1	0.032	0.10	0.11	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E		1	1.40	5.00	5.5	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AX05090

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec
			MB	Limit					Limit	Rec	Limit	Prec	
AX05097	Molybdenum, Total	mg/L	0.00000750	0.0044	0.10	0.111	0.112	0.100	0.085 to 0.115	111	70 to 130	0.537	20
AX05091	Calcium, Total	mg/L	0.0206	0.22	5.00	4.89	4.82	4.88	4.25 to 5.75	97.8	70 to 130	1.36	20
AX05091	Boron, Total	mg/L	0.000380	0.044	1.00	0.960	0.945	0.967	0.85 to 1.15	96.0	70 to 130	1.51	20
AX05097	Arsenic, Total	mg/L	0.0000101	0.0022	0.10	0.0952	0.0960	0.0953	0.085 to 0.115	95.2	70 to 130	0.837	20
AX05097	Beryllium, Total	mg/L	0.0000327	0.00132	0.10	0.0884	0.0894	0.0914	0.085 to 0.115	88.4	70 to 130	1.15	20
AX05097	Barium, Total	mg/L	-0.0000106	0.0044	0.10	0.0970	0.0974	0.0930	0.085 to 0.115	97.0	70 to 130	0.477	20
AX05097	Chromium, Total	mg/L	0.00000261	0.0044	0.10	0.103	0.103	0.0960	0.085 to 0.115	103	70 to 130	0.487	20
AX05097	Lead, Total	mg/L	0.0000327	0.0022	0.10	0.0935	0.0948	0.0933	0.085 to 0.115	93.5	70 to 130	1.38	20
AX05091	Lithium, Total	mg/L	-0.000109	0.022	0.20	0.190	0.185	0.198	0.17 to 0.23	94.9	70 to 130	2.27	20
AX05097	Antimony, Total	mg/L	0.000104	0.00132	0.10	0.0947	0.0948	0.0918	0.085 to 0.115	94.7	70 to 130	0.127	20
AX05097	Cobalt, Total	mg/L	-0.00000107	0.0044	0.10	0.0920	0.0935	0.0930	0.085 to 0.115	92.0	70 to 130	1.59	20
AX05097	Selenium, Total	mg/L	0.0000719	0.0044	0.10	0.0922	0.0946	0.0955	0.085 to 0.115	92.2	70 to 130	2.54	20
AX05097	Cadmium, Total	mg/L	0.000000749	0.00044	0.10	0.0947	0.0949	0.0913	0.085 to 0.115	94.7	70 to 130	0.168	20
AX05097	Mercury, Total by CVAA	mg/L	0.0000991	0.0005	0.004	0.00384	0.00391	0.00383	0.0034 to 0.0046	96.1	70 to 130	1.70	20
AX05097	Thallium, Total	mg/L	0.0000312	0.00044	0.10	0.0964	0.0980	0.0921	0.085 to 0.115	96.4	70 to 130	1.63	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AX05090

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Prec	
AX05102	Solids, Dissolved	mg/L	2.00	25			261	45.0	40 to 60	1.95	5

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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: WMWGASAPFB
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX05091

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7		2	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	J 0.000609	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	4/4/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/8/2017	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E		1	0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E		1	1.40	5.00	U <1.4	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: WMWGASAPFB
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX05091

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AX05091	Calcium, Total	mg/L	0.0206	0.22	5.00	4.89	4.82	4.88	4.25 to 5.75	97.8	70 to 130	1.36	20
AX05091	Boron, Total	mg/L	0.000380	0.044	1.00	0.960	0.945	0.967	0.85 to 1.15	96.0	70 to 130	1.51	20
AX05097	Molybdenum, Total	mg/L	0.00000750	0.0044	0.10	0.111	0.112	0.100	0.085 to 0.115	111	70 to 130	0.537	20
AX05097	Arsenic, Total	mg/L	0.0000101	0.0022	0.10	0.0952	0.0960	0.0953	0.085 to 0.115	95.2	70 to 130	0.837	20
AX05097	Beryllium, Total	mg/L	0.0000327	0.00132	0.10	0.0884	0.0894	0.0914	0.085 to 0.115	88.4	70 to 130	1.15	20
AX05097	Barium, Total	mg/L	-0.0000106	0.0044	0.10	0.0970	0.0974	0.0930	0.085 to 0.115	97.0	70 to 130	0.477	20
AX05097	Chromium, Total	mg/L	0.00000261	0.0044	0.10	0.103	0.103	0.0960	0.085 to 0.115	103	70 to 130	0.487	20
AX05097	Lead, Total	mg/L	0.0000327	0.0022	0.10	0.0935	0.0948	0.0933	0.085 to 0.115	93.5	70 to 130	1.38	20
AX05091	Lithium, Total	mg/L	-0.000109	0.022	0.20	0.190	0.185	0.198	0.17 to 0.23	94.9	70 to 130	2.27	20
AX05097	Antimony, Total	mg/L	0.000104	0.00132	0.10	0.0947	0.0948	0.0918	0.085 to 0.115	94.7	70 to 130	0.127	20
AX05097	Cobalt, Total	mg/L	-0.00000107	0.0044	0.10	0.0920	0.0935	0.0930	0.085 to 0.115	92.0	70 to 130	1.59	20
AX05097	Selenium, Total	mg/L	0.0000719	0.0044	0.10	0.0922	0.0946	0.0955	0.085 to 0.115	92.2	70 to 130	2.54	20
AX05097	Cadmium, Total	mg/L	0.000000749	0.00044	0.10	0.0947	0.0949	0.0913	0.085 to 0.115	94.7	70 to 130	0.168	20
AX05097	Mercury, Total by CVAA	mg/L	0.0000991	0.0005	0.004	0.00384	0.00391	0.00383	0.0034 to 0.0046	96.1	70 to 130	1.70	20
AX05097	Thallium, Total	mg/L	0.0000312	0.00044	0.10	0.0964	0.0980	0.0921	0.085 to 0.115	96.4	70 to 130	1.63	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: WMWGASAPFB
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX05091

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05102	Solids, Dissolved	mg/L	2.00	25			261	45.0	40 to 60	1.95	5

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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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AX05092

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	J 0.00232	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	0.0196	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7	2		0.02	0.1	J 0.0452	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7	2		0.1	0.5	51.4	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	J 0.000718	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2017	EPA 200.7	2		0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/8/2017	SM 2540C	1			25	290	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E	1		0.60	2.00	5.2	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C	1		0.032	0.10	J 0.070	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E	1		1.40	5.00	5.8	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AX05092

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec
			MB	Limit					Limit	Rec	Limit	Prec	
AX05097	Arsenic, Total	mg/L	0.0000101	0.0022	0.10	0.0952	0.0960	0.0953	0.085 to 0.115	95.2	70 to 130	0.837	20
AX05097	Beryllium, Total	mg/L	0.0000327	0.00132	0.10	0.0884	0.0894	0.0914	0.085 to 0.115	88.4	70 to 130	1.15	20
AX05097	Cadmium, Total	mg/L	0.000000749	0.00044	0.10	0.0947	0.0949	0.0913	0.085 to 0.115	94.7	70 to 130	0.168	20
AX05097	Mercury, Total by CVAA	mg/L	0.0000991	0.0005	0.004	0.00384	0.00391	0.00383	0.0034 to 0.0046	96.1	70 to 130	1.70	20
AX05097	Thallium, Total	mg/L	0.0000312	0.00044	0.10	0.0964	0.0980	0.0921	0.085 to 0.115	96.4	70 to 130	1.63	20
AX05097	Barium, Total	mg/L	-0.0000106	0.0044	0.10	0.0970	0.0974	0.0930	0.085 to 0.115	97.0	70 to 130	0.477	20
AX05097	Chromium, Total	mg/L	0.00000261	0.0044	0.10	0.103	0.103	0.0960	0.085 to 0.115	103	70 to 130	0.487	20
AX05097	Lead, Total	mg/L	0.0000327	0.0022	0.10	0.0935	0.0948	0.0933	0.085 to 0.115	93.5	70 to 130	1.38	20
AX05101	Calcium, Total	mg/L	0.00237	0.22	5.00	77.4	77.0	4.91	4.25 to 5.75	105	70 to 130	0.542	20
AX05097	Molybdenum, Total	mg/L	0.00000750	0.0044	0.10	0.111	0.112	0.100	0.085 to 0.115	111	70 to 130	0.537	20
AX05101	Boron, Total	mg/L	-0.00115	0.044	1.00	3.85	3.88	0.966	0.85 to 1.15	98.6	70 to 130	0.720	20
AX05097	Antimony, Total	mg/L	0.000104	0.00132	0.10	0.0947	0.0948	0.0918	0.085 to 0.115	94.7	70 to 130	0.127	20
AX05097	Cobalt, Total	mg/L	-0.00000107	0.0044	0.10	0.0920	0.0935	0.0930	0.085 to 0.115	92.0	70 to 130	1.59	20
AX05097	Selenium, Total	mg/L	0.0000719	0.0044	0.10	0.0922	0.0946	0.0955	0.085 to 0.115	92.2	70 to 130	2.54	20
AX05101	Lithium, Total	mg/L	-0.000203	0.022	0.20	0.776	0.767	0.192	0.17 to 0.23	104	70 to 130	1.25	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AX05092

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05102	Solids, Dissolved	mg/L	2.00	25			261	45.0	40 to 60	1.95	5

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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
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 FAX (205) 257-1654

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AX05093

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	0.0229	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7		2	0.02	0.1	0.364	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7		2	0.1	0.5	56.8	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/8/2017	SM 2540C		1		25	303	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E		1	0.60	2.00	27	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E		1	1.40	5.00	32	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, 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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AX05093

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec
			MB	Limit					Limit	Rec	Limit	Prec	
AX05097	Arsenic, Total	mg/L	0.0000101	0.0022	0.10	0.0952	0.0960	0.0953	0.085 to 0.115	95.2	70 to 130	0.837	20
AX05097	Beryllium, Total	mg/L	0.0000327	0.00132	0.10	0.0884	0.0894	0.0914	0.085 to 0.115	88.4	70 to 130	1.15	20
AX05097	Barium, Total	mg/L	-0.0000106	0.0044	0.10	0.0970	0.0974	0.0930	0.085 to 0.115	97.0	70 to 130	0.477	20
AX05097	Chromium, Total	mg/L	0.00000261	0.0044	0.10	0.103	0.103	0.0960	0.085 to 0.115	103	70 to 130	0.487	20
AX05097	Lead, Total	mg/L	0.0000327	0.0022	0.10	0.0935	0.0948	0.0933	0.085 to 0.115	93.5	70 to 130	1.38	20
AX05101	Calcium, Total	mg/L	0.00237	0.22	5.00	77.4	77.0	4.91	4.25 to 5.75	105	70 to 130	0.542	20
AX05097	Antimony, Total	mg/L	0.000104	0.00132	0.10	0.0947	0.0948	0.0918	0.085 to 0.115	94.7	70 to 130	0.127	20
AX05097	Cobalt, Total	mg/L	-0.00000107	0.0044	0.10	0.0920	0.0935	0.0930	0.085 to 0.115	92.0	70 to 130	1.59	20
AX05097	Selenium, Total	mg/L	0.0000719	0.0044	0.10	0.0922	0.0946	0.0955	0.085 to 0.115	92.2	70 to 130	2.54	20
AX05101	Lithium, Total	mg/L	-0.000203	0.022	0.20	0.776	0.767	0.192	0.17 to 0.23	104	70 to 130	1.25	20
AX05097	Molybdenum, Total	mg/L	0.00000750	0.0044	0.10	0.111	0.112	0.100	0.085 to 0.115	111	70 to 130	0.537	20
AX05101	Boron, Total	mg/L	-0.00115	0.044	1.00	3.85	3.88	0.966	0.85 to 1.15	98.6	70 to 130	0.720	20
AX05097	Cadmium, Total	mg/L	0.000000749	0.00044	0.10	0.0947	0.0949	0.0913	0.085 to 0.115	94.7	70 to 130	0.168	20
AX05097	Mercury, Total by CVAA	mg/L	0.0000991	0.0005	0.004	0.00384	0.00391	0.00383	0.0034 to 0.0046	96.1	70 to 130	1.70	20
AX05097	Thallium, Total	mg/L	0.0000312	0.00044	0.10	0.0964	0.0980	0.0921	0.085 to 0.115	96.4	70 to 130	1.63	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AX05093

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05102	Solids, Dissolved	mg/L	2.00	25			261	45.0	40 to 60	1.95	5

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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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-4 Dup

Laboratory ID Number: AX05094

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	0.0249	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7		2	0.02	0.1	0.365	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7		2	0.1	0.5	56.5	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/8/2017	SM 2540C		1		25	320	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E		1	0.60	2.00	27	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E		1	1.40	5.00	32	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-4 Dup

Laboratory ID Number: AX05094

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX05097	Arsenic, Total	mg/L	0.0000101	0.0022	0.10	0.0952	0.0960	0.0953	0.085 to 0.115		95.2	70 to 130	0.837	20
AX05097	Beryllium, Total	mg/L	0.0000327	0.00132	0.10	0.0884	0.0894	0.0914	0.085 to 0.115		88.4	70 to 130	1.15	20
AX05097	Cadmium, Total	mg/L	0.000000749	0.00044	0.10	0.0947	0.0949	0.0913	0.085 to 0.115		94.7	70 to 130	0.168	20
AX05097	Mercury, Total by CVAA	mg/L	0.0000991	0.0005	0.004	0.00384	0.00391	0.00383	0.0034 to 0.0046		96.1	70 to 130	1.70	20
AX05097	Thallium, Total	mg/L	0.0000312	0.00044	0.10	0.0964	0.0980	0.0921	0.085 to 0.115		96.4	70 to 130	1.63	20
AX05097	Barium, Total	mg/L	-0.0000106	0.0044	0.10	0.0970	0.0974	0.0930	0.085 to 0.115		97.0	70 to 130	0.477	20
AX05097	Chromium, Total	mg/L	0.00000261	0.0044	0.10	0.103	0.103	0.0960	0.085 to 0.115		103	70 to 130	0.487	20
AX05097	Lead, Total	mg/L	0.0000327	0.0022	0.10	0.0935	0.0948	0.0933	0.085 to 0.115		93.5	70 to 130	1.38	20
AX05101	Calcium, Total	mg/L	0.00237	0.22	5.00	77.4	77.0	4.91	4.25 to 5.75		105	70 to 130	0.542	20
AX05097	Molybdenum, Total	mg/L	0.00000750	0.0044	0.10	0.111	0.112	0.100	0.085 to 0.115		111	70 to 130	0.537	20
AX05101	Boron, Total	mg/L	-0.00115	0.044	1.00	3.85	3.88	0.966	0.85 to 1.15		98.6	70 to 130	0.720	20
AX05097	Antimony, Total	mg/L	0.000104	0.00132	0.10	0.0947	0.0948	0.0918	0.085 to 0.115		94.7	70 to 130	0.127	20
AX05097	Cobalt, Total	mg/L	-0.00000107	0.0044	0.10	0.0920	0.0935	0.0930	0.085 to 0.115		92.0	70 to 130	1.59	20
AX05097	Selenium, Total	mg/L	0.0000719	0.0044	0.10	0.0922	0.0946	0.0955	0.085 to 0.115		92.2	70 to 130	2.54	20
AX05101	Lithium, Total	mg/L	-0.000203	0.022	0.20	0.776	0.767	0.192	0.17 to 0.23		104	70 to 130	1.25	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-4 Dup

Laboratory ID Number: AX05094

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Limit
AX05102	Solids, Dissolved	mg/L	2.00	25				261	45.0	40 to 60			1.95 5

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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
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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: WMWGASAP
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AX05095

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	0.0282	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7		2	0.1	0.5	33.3	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	J 0.000620	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	J 0.000265	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/7/2017	SM 2540C		1		25	186	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E		1	0.60	2.00	3.4	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E		1	1.40	5.00	5.1	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: WMWGASAP
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AX05095

Sample	Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
				Limit	Spike				Limit	Rec	Limit	Prec		
AX05097	Molybdenum, Total	mg/L	0.00000750	0.0044	0.10	0.111	0.112	0.100	0.085 to 0.115	111	70 to 130	0.537	20	
AX05101	Boron, Total	mg/L	-0.00115	0.044	1.00	3.85	3.88	0.966	0.85 to 1.15	98.6	70 to 130	0.720	20	
AX05097	Arsenic, Total	mg/L	0.0000101	0.0022	0.10	0.0952	0.0960	0.0953	0.085 to 0.115	95.2	70 to 130	0.837	20	
AX05097	Beryllium, Total	mg/L	0.0000327	0.00132	0.10	0.0884	0.0894	0.0914	0.085 to 0.115	88.4	70 to 130	1.15	20	
AX05097	Cadmium, Total	mg/L	0.000000749	0.00044	0.10	0.0947	0.0949	0.0913	0.085 to 0.115	94.7	70 to 130	0.168	20	
AX05097	Mercury, Total by CVAA	mg/L	0.0000991	0.0005	0.004	0.00384	0.00391	0.00383	0.0034 to 0.0046	96.1	70 to 130	1.70	20	
AX05097	Thallium, Total	mg/L	0.0000312	0.00044	0.10	0.0964	0.0980	0.0921	0.085 to 0.115	96.4	70 to 130	1.63	20	
AX05097	Antimony, Total	mg/L	0.000104	0.00132	0.10	0.0947	0.0948	0.0918	0.085 to 0.115	94.7	70 to 130	0.127	20	
AX05097	Cobalt, Total	mg/L	-0.00000107	0.0044	0.10	0.0920	0.0935	0.0930	0.085 to 0.115	92.0	70 to 130	1.59	20	
AX05097	Selenium, Total	mg/L	0.0000719	0.0044	0.10	0.0922	0.0946	0.0955	0.085 to 0.115	92.2	70 to 130	2.54	20	
AX05101	Lithium, Total	mg/L	-0.000203	0.022	0.20	0.776	0.767	0.192	0.17 to 0.23	104	70 to 130	1.25	20	
AX05097	Barium, Total	mg/L	-0.0000106	0.0044	0.10	0.0970	0.0974	0.0930	0.085 to 0.115	97.0	70 to 130	0.477	20	
AX05097	Chromium, Total	mg/L	0.00000261	0.0044	0.10	0.103	0.103	0.0960	0.085 to 0.115	103	70 to 130	0.487	20	
AX05097	Lead, Total	mg/L	0.0000327	0.0022	0.10	0.0935	0.0948	0.0933	0.085 to 0.115	93.5	70 to 130	1.38	20	
AX05101	Calcium, Total	mg/L	0.00237	0.22	5.00	77.4	77.0	4.91	4.25 to 5.75	105	70 to 130	0.542	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: WMWGASAP
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AX05095

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05096	Solids, Dissolved	mg/L	-4.0	25			162	55.0	40 to 60	4.52	5

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Laboratory certification ID: E571114

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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: WMWGASAP
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AX05096

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	J 0.00869	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7		2	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	J 0.000613	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	J 0.00856	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/7/2017	SM 2540C		1		25	148	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E		1	0.60	2.00	2.3	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E		1	1.40	5.00	J 3.4	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, 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: WMWGASAP
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AX05096

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec
			MB	Limit					Limit	Rec	Limit	Prec	
AX05097	Arsenic, Total	mg/L	0.0000101	0.0022	0.10	0.0952	0.0960	0.0953	0.085 to 0.115	95.2	70 to 130	0.837	20
AX05097	Beryllium, Total	mg/L	0.0000327	0.00132	0.10	0.0884	0.0894	0.0914	0.085 to 0.115	88.4	70 to 130	1.15	20
AX05097	Cadmium, Total	mg/L	0.000000749	0.00044	0.10	0.0947	0.0949	0.0913	0.085 to 0.115	94.7	70 to 130	0.168	20
AX05097	Mercury, Total by CVAA	mg/L	0.0000991	0.0005	0.004	0.00384	0.00391	0.00383	0.0034 to 0.0046	96.1	70 to 130	1.70	20
AX05097	Thallium, Total	mg/L	0.0000312	0.00044	0.10	0.0964	0.0980	0.0921	0.085 to 0.115	96.4	70 to 130	1.63	20
AX05097	Molybdenum, Total	mg/L	0.00000750	0.0044	0.10	0.111	0.112	0.100	0.085 to 0.115	111	70 to 130	0.537	20
AX05101	Boron, Total	mg/L	-0.00115	0.044	1.00	3.85	3.88	0.966	0.85 to 1.15	98.6	70 to 130	0.720	20
AX05097	Barium, Total	mg/L	-0.0000106	0.0044	0.10	0.0970	0.0974	0.0930	0.085 to 0.115	97.0	70 to 130	0.477	20
AX05097	Chromium, Total	mg/L	0.00000261	0.0044	0.10	0.103	0.103	0.0960	0.085 to 0.115	103	70 to 130	0.487	20
AX05097	Lead, Total	mg/L	0.0000327	0.0022	0.10	0.0935	0.0948	0.0933	0.085 to 0.115	93.5	70 to 130	1.38	20
AX05101	Calcium, Total	mg/L	0.00237	0.22	5.00	77.4	77.0	4.91	4.25 to 5.75	105	70 to 130	0.542	20
AX05097	Antimony, Total	mg/L	0.000104	0.00132	0.10	0.0947	0.0948	0.0918	0.085 to 0.115	94.7	70 to 130	0.127	20
AX05097	Cobalt, Total	mg/L	-0.00000107	0.0044	0.10	0.0920	0.0935	0.0930	0.085 to 0.115	92.0	70 to 130	1.59	20
AX05097	Selenium, Total	mg/L	0.0000719	0.0044	0.10	0.0922	0.0946	0.0955	0.085 to 0.115	92.2	70 to 130	2.54	20
AX05101	Lithium, Total	mg/L	-0.000203	0.022	0.20	0.776	0.767	0.192	0.17 to 0.23	104	70 to 130	1.25	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: WMWGASAP
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AX05096

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05096	Solids, Dissolved	mg/L	-4.0	25			162	55.0	40 to 60	4.52	5

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Laboratory certification ID: E571114

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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: WMWGASAPEB
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AX05097

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7	2		0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7	2		0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	U Not Detected	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2017	EPA 200.7	2		0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/7/2017	SM 2540C	1			25	U Not Detected	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E	1		0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C	1		0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E	1		1.40	5.00	U <1.4	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: WMWGASPEB
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AX05097

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX05097	Cadmium, Total	mg/L	0.00000749	0.00044	0.10	0.0947	0.0949	0.0913	0.085 to 0.115		94.7	70 to 130	0.168	20
AX05097	Mercury, Total by CVAA	mg/L	0.0000991	0.0005	0.004	0.00384	0.00391	0.00383	0.0034 to 0.0046		96.1	70 to 130	1.70	20
AX05097	Thallium, Total	mg/L	0.0000312	0.00044	0.10	0.0964	0.0980	0.0921	0.085 to 0.115		96.4	70 to 130	1.63	20
AX05097	Arsenic, Total	mg/L	0.0000101	0.0022	0.10	0.0952	0.0960	0.0953	0.085 to 0.115		95.2	70 to 130	0.837	20
AX05097	Beryllium, Total	mg/L	0.0000327	0.00132	0.10	0.0884	0.0894	0.0914	0.085 to 0.115		88.4	70 to 130	1.15	20
AX05097	Molybdenum, Total	mg/L	0.00000750	0.0044	0.10	0.111	0.112	0.100	0.085 to 0.115		111	70 to 130	0.537	20
AX05101	Boron, Total	mg/L	-0.00115	0.044	1.00	3.85	3.88	0.966	0.85 to 1.15		98.6	70 to 130	0.720	20
AX05097	Barium, Total	mg/L	-0.0000106	0.0044	0.10	0.0970	0.0974	0.0930	0.085 to 0.115		97.0	70 to 130	0.477	20
AX05097	Chromium, Total	mg/L	0.00000261	0.0044	0.10	0.103	0.103	0.0960	0.085 to 0.115		103	70 to 130	0.487	20
AX05097	Lead, Total	mg/L	0.0000327	0.0022	0.10	0.0935	0.0948	0.0933	0.085 to 0.115		93.5	70 to 130	1.38	20
AX05101	Calcium, Total	mg/L	0.00237	0.22	5.00	77.4	77.0	4.91	4.25 to 5.75		105	70 to 130	0.542	20
AX05097	Antimony, Total	mg/L	0.000104	0.00132	0.10	0.0947	0.0948	0.0918	0.085 to 0.115		94.7	70 to 130	0.127	20
AX05097	Cobalt, Total	mg/L	-0.00000107	0.0044	0.10	0.0920	0.0935	0.0930	0.085 to 0.115		92.0	70 to 130	1.59	20
AX05097	Selenium, Total	mg/L	0.0000719	0.0044	0.10	0.0922	0.0946	0.0955	0.085 to 0.115		92.2	70 to 130	2.54	20
AX05101	Lithium, Total	mg/L	-0.000203	0.022	0.20	0.776	0.767	0.192	0.17 to 0.23		104	70 to 130	1.25	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: WMWGASAPEB
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AX05097

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05096	Solids, Dissolved	mg/L	-4.0	25			162	55.0	40 to 60	4.52	5

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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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AX05098

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	J 0.00259	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	0.0466	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7	2		0.02	0.1	1.29	mg/L
* Calcium, Total	HRG	4/5/2017	EPA 200.7	10		1.0	5	108	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	J 0.000728	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/10/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2017	EPA 200.7	2		0.01	0.05	J 0.0320	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	0.0209	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	J 0.000359	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/8/2017	SM 2540C	1			50	536	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E	1		0.60	2.00	12	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C	1		0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E	10		14.0	50	140	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AX05098

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX05106	Antimony, Total	mg/L	0.0000751	0.00132	0.10	0.0944	0.0968	0.0926	0.085 to 0.115	94.4	70 to 130	2.51	20	
AX05101	Boron, Total	mg/L	-0.00115	0.044	1.00	3.85	3.88	0.966	0.85 to 1.15	98.6	70 to 130	0.720	20	
AX05101	Lithium, Total	mg/L	-0.000203	0.022	0.20	0.776	0.767	0.192	0.17 to 0.23	104	70 to 130	1.25	20	
AX05106	Beryllium, Total	mg/L	0.0000414	0.00132	0.10	0.0880	0.0897	0.0883	0.085 to 0.115	88.0	70 to 130	1.94	20	
AX05106	Mercury, Total by CVAA	mg/L	0.000153	0.0005	0.004	0.00400	0.00400	0.00409	0.0034 to 0.0046	100	70 to 130	0.0675	20	
AX05106	Thallium, Total	mg/L	0.0000381	0.00044	0.10	0.0963	0.0988	0.0928	0.085 to 0.115	96.3	70 to 130	2.56	20	
AX05101	Calcium, Total	mg/L	0.00237	0.22	5.00	77.4	77.0	4.91	4.25 to 5.75	105	70 to 130	0.542	20	
AX05106	Arsenic, Total	mg/L	0.0000113	0.0022	0.10	0.0969	0.0987	0.0947	0.085 to 0.115	96.9	70 to 130	1.83	20	
AX05106	Cobalt, Total	mg/L	0.000000521	0.0044	0.10	0.0915	0.0933	0.0929	0.085 to 0.115	91.5	70 to 130	1.86	20	
AX05106	Barium, Total	mg/L	-0.00000845	0.0044	0.10	0.141	0.146	0.0939	0.085 to 0.115	115	70 to 130	3.47	20	
AX05106	Cadmium, Total	mg/L	0.000000893	0.00044	0.10	0.0931	0.0935	0.0916	0.085 to 0.115	93.1	70 to 130	0.469	20	
AX05106	Molybdenum, Total	mg/L	0.00000725	0.0044	0.1	0.181	0.187	0.104	0.085 to 0.115	181	70 to 130	3.26	20	
AX05106	Chromium, Total	mg/L	0.0000105	0.0044	0.10	0.1000	0.103	0.0970	0.085 to 0.115	100	70 to 130	2.84	20	
AX05106	Lead, Total	mg/L	0.0000411	0.0022	0.10	0.0929	0.0950	0.0937	0.085 to 0.115	92.9	70 to 130	2.25	20	
AX05106	Selenium, Total	mg/L	0.0000578	0.0044	0.10	0.0911	0.0929	0.0939	0.085 to 0.115	91.1	70 to 130	1.90	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AX05098

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05102	Solids, Dissolved	mg/L	2.00	25			261	45.0	40 to 60	1.95	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, 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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AX05099

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	J 0.00369	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	0.0676	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7	2		0.02	0.1	3.44	mg/L
* Calcium, Total	HRG	4/5/2017	EPA 200.7	10		1.0	5	150	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	J 0.000643	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/10/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2017	EPA 200.7	2		0.01	0.05	0.0991	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	0.767	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/8/2017	SM 2540C	1			50	930	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E	1		0.60	2.00	18	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C	1		0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E	20		28.0	100	560	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AX05099

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AX05106	Antimony, Total	mg/L	0.0000751	0.00132	0.10	0.0944	0.0968	0.0926	0.085 to 0.115		94.4	70 to 130		2.51	20
AX05101	Boron, Total	mg/L	-0.00115	0.044	1.00	3.85	3.88	0.966	0.85 to 1.15		98.6	70 to 130		0.720	20
AX05106	Mercury, Total by CVAA	mg/L	0.000153	0.0005	0.004	0.00400	0.00400	0.00409	0.0034 to 0.0046		100	70 to 130		0.0675	20
AX05106	Thallium, Total	mg/L	0.0000381	0.00044	0.10	0.0963	0.0988	0.0928	0.085 to 0.115		96.3	70 to 130		2.56	20
AX05101	Calcium, Total	mg/L	0.00237	0.22	5.00	77.4	77.0	4.91	4.25 to 5.75		105	70 to 130		0.542	20
AX05106	Arsenic, Total	mg/L	0.0000113	0.0022	0.10	0.0969	0.0987	0.0947	0.085 to 0.115		96.9	70 to 130		1.83	20
AX05106	Cobalt, Total	mg/L	0.000000521	0.0044	0.10	0.0915	0.0933	0.0929	0.085 to 0.115		91.5	70 to 130		1.86	20
AX05101	Lithium, Total	mg/L	-0.000203	0.022	0.20	0.776	0.767	0.192	0.17 to 0.23		104	70 to 130		1.25	20
AX05106	Beryllium, Total	mg/L	0.0000414	0.00132	0.10	0.0880	0.0897	0.0883	0.085 to 0.115		88.0	70 to 130		1.94	20
AX05106	Chromium, Total	mg/L	0.0000105	0.0044	0.10	0.1000	0.103	0.0970	0.085 to 0.115		100	70 to 130		2.84	20
AX05106	Lead, Total	mg/L	0.0000411	0.0022	0.10	0.0929	0.0950	0.0937	0.085 to 0.115		92.9	70 to 130		2.25	20
AX05106	Selenium, Total	mg/L	0.0000578	0.0044	0.10	0.0911	0.0929	0.0939	0.085 to 0.115		91.1	70 to 130		1.90	20
AX05106	Barium, Total	mg/L	-0.00000845	0.0044	0.10	0.141	0.146	0.0939	0.085 to 0.115		115	70 to 130		3.47	20
AX05106	Cadmium, Total	mg/L	0.000000893	0.00044	0.10	0.0931	0.0935	0.0916	0.085 to 0.115		93.1	70 to 130		0.469	20
AX05106	Molybdenum, Total	mg/L	0.00000725	0.0044	0.1	0.181	0.187	0.104	0.085 to 0.115		181	70 to 130		3.26	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AX05099

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05102	Solids, Dissolved	mg/L	2.00	25			261	45.0	40 to 60	1.95	5

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AX05100

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	0.0127	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	0.0897	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7		2	0.02	0.1	2.92	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7		2	0.1	0.5	73.1	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	J 0.000351	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	J 0.00129	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/10/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2017	EPA 200.7		2	0.01	0.05	0.562	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	2.60	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/8/2017	SM 2540C		1		25	434	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E		1	0.60	2.00	17	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C		1	0.032	0.10	0.22	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E		10	14.0	50	240	mg/L

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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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AX05100

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AX05106	Antimony, Total	mg/L	0.0000751	0.00132	0.10	0.0944	0.0968	0.0926	0.085 to 0.115		94.4	70 to 130		2.51	20
AX05101	Boron, Total	mg/L	-0.00115	0.044	1.00	3.85	3.88	0.966	0.85 to 1.15		98.6	70 to 130		0.720	20
AX05106	Mercury, Total by CVAA	mg/L	0.000153	0.0005	0.004	0.00400	0.00400	0.00409	0.0034 to 0.0046		100	70 to 130		0.0675	20
AX05106	Thallium, Total	mg/L	0.0000381	0.00044	0.10	0.0963	0.0988	0.0928	0.085 to 0.115		96.3	70 to 130		2.56	20
AX05106	Chromium, Total	mg/L	0.0000105	0.0044	0.10	0.1000	0.103	0.0970	0.085 to 0.115		100	70 to 130		2.84	20
AX05106	Lead, Total	mg/L	0.0000411	0.0022	0.10	0.0929	0.0950	0.0937	0.085 to 0.115		92.9	70 to 130		2.25	20
AX05106	Selenium, Total	mg/L	0.0000578	0.0044	0.10	0.0911	0.0929	0.0939	0.085 to 0.115		91.1	70 to 130		1.90	20
AX05106	Barium, Total	mg/L	-0.00000845	0.0044	0.10	0.141	0.146	0.0939	0.085 to 0.115		115	70 to 130		3.47	20
AX05106	Cadmium, Total	mg/L	0.000000893	0.00044	0.10	0.0931	0.0935	0.0916	0.085 to 0.115		93.1	70 to 130		0.469	20
AX05106	Molybdenum, Total	mg/L	0.00000725	0.0044	0.1	0.181	0.187	0.104	0.085 to 0.115		181	70 to 130		3.26	20
AX05101	Lithium, Total	mg/L	-0.000203	0.022	0.20	0.776	0.767	0.192	0.17 to 0.23		104	70 to 130		1.25	20
AX05106	Beryllium, Total	mg/L	0.0000414	0.00132	0.10	0.0880	0.0897	0.0883	0.085 to 0.115		88.0	70 to 130		1.94	20
AX05101	Calcium, Total	mg/L	0.00237	0.22	5.00	77.4	77.0	4.91	4.25 to 5.75		105	70 to 130		0.542	20
AX05106	Arsenic, Total	mg/L	0.0000113	0.0022	0.10	0.0969	0.0987	0.0947	0.085 to 0.115		96.9	70 to 130		1.83	20
AX05106	Cobalt, Total	mg/L	0.000000521	0.0044	0.10	0.0915	0.0933	0.0929	0.085 to 0.115		91.5	70 to 130		1.86	20

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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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AX05100

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05102	Solids, Dissolved	mg/L	2.00	25			261	45.0	40 to 60	1.95	5

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-17 Dup

Laboratory ID Number: AX05101

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	0.0128	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	0.0895	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7		2	0.02	0.1	2.87	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7		2	0.1	0.5	72.2	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	J 0.000257	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	J 0.00133	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/10/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2017	EPA 200.7		2	0.01	0.05	0.568	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	2.59	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/7/2017	SM 2540C		1		25	431	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E		1	0.60	2.00	16	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C		1	0.032	0.10	0.22	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E		10	14.0	50	240	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-17 Dup

Laboratory ID Number: AX05101

Sample	Analysis	Units	MB	MB			MS	MSD	LFB		Rec		Prec	Limit
				Limit	Spike	MS			Limit	Rec	Limit	Prec		
AX05106	Antimony, Total	mg/L	0.0000751	0.00132	0.10	0.0944	0.0968	0.0926	0.085 to 0.115	94.4	70 to 130	2.51	20	
AX05101	Boron, Total	mg/L	-0.00115	0.044	1.00	3.85	3.88	0.966	0.85 to 1.15	98.6	70 to 130	0.720	20	
AX05106	Mercury, Total by CVAA	mg/L	0.000153	0.0005	0.004	0.00400	0.00400	0.00409	0.0034 to 0.0046	100	70 to 130	0.0675	20	
AX05106	Thallium, Total	mg/L	0.0000381	0.00044	0.10	0.0963	0.0988	0.0928	0.085 to 0.115	96.3	70 to 130	2.56	20	
AX05106	Barium, Total	mg/L	-0.00000845	0.0044	0.10	0.141	0.146	0.0939	0.085 to 0.115	115	70 to 130	3.47	20	
AX05106	Cadmium, Total	mg/L	0.000000893	0.00044	0.10	0.0931	0.0935	0.0916	0.085 to 0.115	93.1	70 to 130	0.469	20	
AX05106	Molybdenum, Total	mg/L	0.00000725	0.0044	0.1	0.181	0.187	0.104	0.085 to 0.115	181	70 to 130	3.26	20	
AX05101	Lithium, Total	mg/L	-0.000203	0.022	0.20	0.776	0.767	0.192	0.17 to 0.23	104	70 to 130	1.25	20	
AX05106	Beryllium, Total	mg/L	0.0000414	0.00132	0.10	0.0880	0.0897	0.0883	0.085 to 0.115	88.0	70 to 130	1.94	20	
AX05106	Chromium, Total	mg/L	0.0000105	0.0044	0.10	0.1000	0.103	0.0970	0.085 to 0.115	100	70 to 130	2.84	20	
AX05106	Lead, Total	mg/L	0.0000411	0.0022	0.10	0.0929	0.0950	0.0937	0.085 to 0.115	92.9	70 to 130	2.25	20	
AX05106	Selenium, Total	mg/L	0.0000578	0.0044	0.10	0.0911	0.0929	0.0939	0.085 to 0.115	91.1	70 to 130	1.90	20	
AX05101	Calcium, Total	mg/L	0.00237	0.22	5.00	77.4	77.0	4.91	4.25 to 5.75	105	70 to 130	0.542	20	
AX05106	Arsenic, Total	mg/L	0.0000113	0.0022	0.10	0.0969	0.0987	0.0947	0.085 to 0.115	96.9	70 to 130	1.83	20	
AX05106	Cobalt, Total	mg/L	0.000000521	0.0044	0.10	0.0915	0.0933	0.0929	0.085 to 0.115	91.5	70 to 130	1.86	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-17 Dup

Laboratory ID Number: AX05101

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05096	Solids, Dissolved	mg/L	-4.0	25			162	55.0	40 to 60	4.52	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, 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
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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AX05102

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	J 0.00409	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	0.0315	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7	2		0.02	0.1	1.28	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7	2		0.1	0.5	41.8	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	J 0.000632	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/10/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2017	EPA 200.7	2		0.01	0.05	0.0766	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	0.368	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/8/2017	SM 2540C	1			25	251	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E	1		0.60	2.00	12	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C	1		0.032	0.10	0.10	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E	10		14.0	50	130	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AX05102

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB Limit	Rec		Prec	Prec Limit	
			MB	Limit					Rec	Limit			
AX05106	Lithium, Total	mg/L	-0.000213	0.022	0.20	0.177	0.225	0.194	0.17 to 0.23	88.4	70 to 130	24.2	20
AX05106	Antimony, Total	mg/L	0.0000751	0.00132	0.10	0.0944	0.0968	0.0926	0.085 to 0.115	94.4	70 to 130	2.51	20
AX05106	Beryllium, Total	mg/L	0.0000414	0.00132	0.10	0.0880	0.0897	0.0883	0.085 to 0.115	88.0	70 to 130	1.94	20
AX05106	Boron, Total	mg/L	-0.000572	0.044	1.00	2.81	2.85	0.966	0.85 to 1.15	97.1	70 to 130	1.34	20
AX05106	Mercury, Total by CVAA	mg/L	0.000153	0.0005	0.004	0.00400	0.00400	0.00409	0.0034 to 0.0046	100	70 to 130	0.0675	20
AX05106	Thallium, Total	mg/L	0.0000381	0.00044	0.10	0.0963	0.0988	0.0928	0.085 to 0.115	96.3	70 to 130	2.56	20
AX05106	Barium, Total	mg/L	-0.00000845	0.0044	0.10	0.141	0.146	0.0939	0.085 to 0.115	115	70 to 130	3.47	20
AX05106	Cadmium, Total	mg/L	0.000000893	0.00044	0.10	0.0931	0.0935	0.0916	0.085 to 0.115	93.1	70 to 130	0.469	20
AX05106	Calcium, Total	mg/L	-0.000159	0.22	5.00	96.1	91.1	4.92	4.25 to 5.75	-15.4	70 to 130	5.34	20
AX05106	Molybdenum, Total	mg/L	0.00000725	0.0044	0.1	0.181	0.187	0.104	0.085 to 0.115	181	70 to 130	3.26	20
AX05106	Chromium, Total	mg/L	0.0000105	0.0044	0.10	0.1000	0.103	0.0970	0.085 to 0.115	100	70 to 130	2.84	20
AX05106	Lead, Total	mg/L	0.0000411	0.0022	0.10	0.0929	0.0950	0.0937	0.085 to 0.115	92.9	70 to 130	2.25	20
AX05106	Selenium, Total	mg/L	0.0000578	0.0044	0.10	0.0911	0.0929	0.0939	0.085 to 0.115	91.1	70 to 130	1.90	20
AX05106	Arsenic, Total	mg/L	0.0000113	0.0022	0.10	0.0969	0.0987	0.0947	0.085 to 0.115	96.9	70 to 130	1.83	20
AX05106	Cobalt, Total	mg/L	0.000000521	0.0044	0.10	0.0915	0.0933	0.0929	0.085 to 0.115	91.5	70 to 130	1.86	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: WMWGASAP
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AX05102

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05102	Solids, Dissolved	mg/L	2.00	25			261	45.0	40 to 60	1.95	5

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAPFB
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX05103

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7		2	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/10/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/7/2017	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E		1	0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E		1	1.40	5.00	U <1.4	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
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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: WMWGASAPFB
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX05103

Sample	Analysis	Units	MB				LFB			Rec		Prec	
			MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	
AX05106	Lithium, Total	mg/L	-0.000213	0.022	0.20	0.177	0.225	0.194	0.17 to 0.23	88.4	70 to 130	24.2	20
AX05106	Antimony, Total	mg/L	0.0000751	0.00132	0.10	0.0944	0.0968	0.0926	0.085 to 0.115	94.4	70 to 130	2.51	20
AX05106	Beryllium, Total	mg/L	0.0000414	0.00132	0.10	0.0880	0.0897	0.0883	0.085 to 0.115	88.0	70 to 130	1.94	20
AX05106	Boron, Total	mg/L	-0.000572	0.044	1.00	2.81	2.85	0.966	0.85 to 1.15	97.1	70 to 130	1.34	20
AX05106	Mercury, Total by CVAA	mg/L	0.000153	0.0005	0.004	0.00400	0.00400	0.00409	0.0034 to 0.0046	100	70 to 130	0.0675	20
AX05106	Thallium, Total	mg/L	0.0000381	0.00044	0.10	0.0963	0.0988	0.0928	0.085 to 0.115	96.3	70 to 130	2.56	20
AX05106	Arsenic, Total	mg/L	0.0000113	0.0022	0.10	0.0969	0.0987	0.0947	0.085 to 0.115	96.9	70 to 130	1.83	20
AX05106	Cobalt, Total	mg/L	0.000000521	0.0044	0.10	0.0915	0.0933	0.0929	0.085 to 0.115	91.5	70 to 130	1.86	20
AX05106	Barium, Total	mg/L	-0.00000845	0.0044	0.10	0.141	0.146	0.0939	0.085 to 0.115	115	70 to 130	3.47	20
AX05106	Cadmium, Total	mg/L	0.000000893	0.00044	0.10	0.0931	0.0935	0.0916	0.085 to 0.115	93.1	70 to 130	0.469	20
AX05106	Calcium, Total	mg/L	-0.000159	0.22	5.00	96.1	91.1	4.92	4.25 to 5.75	-15.4	70 to 130	5.34	20
AX05106	Molybdenum, Total	mg/L	0.00000725	0.0044	0.1	0.181	0.187	0.104	0.085 to 0.115	181	70 to 130	3.26	20
AX05106	Chromium, Total	mg/L	0.0000105	0.0044	0.10	0.1000	0.103	0.0970	0.085 to 0.115	100	70 to 130	2.84	20
AX05106	Lead, Total	mg/L	0.0000411	0.0022	0.10	0.0929	0.0950	0.0937	0.085 to 0.115	92.9	70 to 130	2.25	20
AX05106	Selenium, Total	mg/L	0.0000578	0.0044	0.10	0.0911	0.0929	0.0939	0.085 to 0.115	91.1	70 to 130	1.90	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
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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: WMWGASAPFB
 Sample Date: 28-Feb-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX05103

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05106	Solids, Dissolved	mg/L	-4.0	25			458	55.0	40 to 60	3.07	5

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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
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 FAX (205) 257-1654

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AX05104

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	J 0.00348	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	0.0395	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7	2		0.02	0.1	1.47	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7	2		0.1	0.5	58.0	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	U Not Detected	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/10/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2017	EPA 200.7	2		0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	J 0.00593	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/7/2017	SM 2540C	1			25	346	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E	1		0.60	2.00	23	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C	1		0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E	10		14.0	50	140	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: WMWGASAP
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AX05104

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX05106	Lithium, Total	mg/L	-0.000213	0.022	0.20	0.177	0.225	0.194	0.17 to 0.23	88.4	70 to 130	24.2	20
AX05106	Antimony, Total	mg/L	0.0000751	0.00132	0.10	0.0944	0.0968	0.0926	0.085 to 0.115	94.4	70 to 130	2.51	20
AX05106	Beryllium, Total	mg/L	0.0000414	0.00132	0.10	0.0880	0.0897	0.0883	0.085 to 0.115	88.0	70 to 130	1.94	20
AX05106	Chromium, Total	mg/L	0.0000105	0.0044	0.10	0.1000	0.103	0.0970	0.085 to 0.115	100	70 to 130	2.84	20
AX05106	Lead, Total	mg/L	0.0000411	0.0022	0.10	0.0929	0.0950	0.0937	0.085 to 0.115	92.9	70 to 130	2.25	20
AX05106	Selenium, Total	mg/L	0.0000578	0.0044	0.10	0.0911	0.0929	0.0939	0.085 to 0.115	91.1	70 to 130	1.90	20
AX05106	Boron, Total	mg/L	-0.000572	0.044	1.00	2.81	2.85	0.966	0.85 to 1.15	97.1	70 to 130	1.34	20
AX05106	Mercury, Total by CVAA	mg/L	0.000153	0.0005	0.004	0.00400	0.00400	0.00409	0.0034 to 0.0046	100	70 to 130	0.0675	20
AX05106	Thallium, Total	mg/L	0.0000381	0.00044	0.10	0.0963	0.0988	0.0928	0.085 to 0.115	96.3	70 to 130	2.56	20
AX05106	Arsenic, Total	mg/L	0.0000113	0.0022	0.10	0.0969	0.0987	0.0947	0.085 to 0.115	96.9	70 to 130	1.83	20
AX05106	Cobalt, Total	mg/L	0.000000521	0.0044	0.10	0.0915	0.0933	0.0929	0.085 to 0.115	91.5	70 to 130	1.86	20
AX05106	Barium, Total	mg/L	-0.00000845	0.0044	0.10	0.141	0.146	0.0939	0.085 to 0.115	115	70 to 130	3.47	20
AX05106	Cadmium, Total	mg/L	0.000000893	0.00044	0.10	0.0931	0.0935	0.0916	0.085 to 0.115	93.1	70 to 130	0.469	20
AX05106	Calcium, Total	mg/L	-0.000159	0.22	5.00	96.1	91.1	4.92	4.25 to 5.75	-15.4	70 to 130	5.34	20
AX05106	Molybdenum, Total	mg/L	0.00000725	0.0044	0.1	0.181	0.187	0.104	0.085 to 0.115	181	70 to 130	3.26	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: WMWGASAP
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AX05104

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05106	Solids, Dissolved	mg/L	-4.0	25			458	55.0	40 to 60	3.07	5

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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: WMWGASAP
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AX05105

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	0.0212	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7		2	0.02	0.1	2.25	mg/L
* Calcium, Total	HRG	4/4/2017	EPA 200.7		2	0.1	0.5	58.4	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/10/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	0.0146	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/7/2017	SM 2540C		1		25	389	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E		1	0.60	2.00	29	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E		10	14.0	50	160	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: WMWGASAP
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AX05105

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX05106	Lithium, Total	mg/L	-0.000213	0.022	0.20	0.177	0.225	0.194	0.17 to 0.23	88.4	70 to 130	24.2	20
AX05106	Antimony, Total	mg/L	0.0000751	0.00132	0.10	0.0944	0.0968	0.0926	0.085 to 0.115	94.4	70 to 130	2.51	20
AX05106	Beryllium, Total	mg/L	0.0000414	0.00132	0.10	0.0880	0.0897	0.0883	0.085 to 0.115	88.0	70 to 130	1.94	20
AX05106	Boron, Total	mg/L	-0.000572	0.044	1.00	2.81	2.85	0.966	0.85 to 1.15	97.1	70 to 130	1.34	20
AX05106	Mercury, Total by CVAA	mg/L	0.000153	0.0005	0.004	0.00400	0.00400	0.00409	0.0034 to 0.0046	100	70 to 130	0.0675	20
AX05106	Thallium, Total	mg/L	0.0000381	0.00044	0.10	0.0963	0.0988	0.0928	0.085 to 0.115	96.3	70 to 130	2.56	20
AX05106	Barium, Total	mg/L	-0.00000845	0.0044	0.10	0.141	0.146	0.0939	0.085 to 0.115	115	70 to 130	3.47	20
AX05106	Cadmium, Total	mg/L	0.000000893	0.00044	0.10	0.0931	0.0935	0.0916	0.085 to 0.115	93.1	70 to 130	0.469	20
AX05106	Calcium, Total	mg/L	-0.000159	0.22	5.00	96.1	91.1	4.92	4.25 to 5.75	-15.4	70 to 130	5.34	20
AX05106	Molybdenum, Total	mg/L	0.00000725	0.0044	0.1	0.181	0.187	0.104	0.085 to 0.115	181	70 to 130	3.26	20
AX05106	Arsenic, Total	mg/L	0.0000113	0.0022	0.10	0.0969	0.0987	0.0947	0.085 to 0.115	96.9	70 to 130	1.83	20
AX05106	Cobalt, Total	mg/L	0.000000521	0.0044	0.10	0.0915	0.0933	0.0929	0.085 to 0.115	91.5	70 to 130	1.86	20
AX05106	Chromium, Total	mg/L	0.0000105	0.0044	0.10	0.1000	0.103	0.0970	0.085 to 0.115	100	70 to 130	2.84	20
AX05106	Lead, Total	mg/L	0.0000411	0.0022	0.10	0.0929	0.0950	0.0937	0.085 to 0.115	92.9	70 to 130	2.25	20
AX05106	Selenium, Total	mg/L	0.0000578	0.0044	0.10	0.0911	0.0929	0.0939	0.085 to 0.115	91.1	70 to 130	1.90	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: WMWGASAP
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AX05105

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec		
			Limit	Limit			Duplicate	LFB	Limit	Limit		
AX05106	Solids, Dissolved	mg/L	-4.0	25			458	55.0	40 to 60		3.07	5

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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: WMWGASAP
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AX05106

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	0.0261	mg/L
* Beryllium, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	4/4/2017	EPA 200.7	2		0.02	0.1	1.84	mg/L
* Calcium, Total	HRG	4/5/2017	EPA 200.7	10		1.0	5	96.8	mg/L
* Cadmium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
* Antimony, Total	JHK	3/13/2017	EPA 200.8	5		0.00060	0.0030	U Not Detected	mg/L
* Cobalt, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	3/10/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2017	EPA 200.7	2		0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/18/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	3/13/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	3/13/2017	EPA 200.8	5		0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	3/13/2017	EPA 200.8	5		0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	3/7/2017	SM 2540C	1			25	487	mg/L
* Chloride, Total, by Test America	SGC	3/28/2017	SM 4500 Cl_E	1		0.60	2.00	18	mg/L
* Fluoride, Total, by Test America	SGC	3/28/2017	SM 4500 F_C	1		0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	3/28/2017	SM 4500 SO4_E	10		14.0	50	200	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
 Recovery for Molybdenum is out of spec.
 A post digestion spike serial dilution indicate matrix effect on the sample.
 Precision for Lithium is out of spec.
 Post digestion spike and serial dilutions passed, indicating the matrix effect on the sample is not significant.
 Recovery for Calcium is out of spec.
 The spike amount is less than 30% the sample amount.

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: WMWGASAP
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AX05106

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX05106	Antimony, Total	mg/L	0.0000751	0.00132	0.10	0.0944	0.0968	0.0926	0.085 to 0.115	94.4	70 to 130	2.51	20
AX05106	Lithium, Total	mg/L	-0.000213	0.022	0.20	0.177	0.225	0.194	0.17 to 0.23	88.4	70 to 130	24.2	20
AX05106	Beryllium, Total	mg/L	0.0000414	0.00132	0.10	0.0880	0.0897	0.0883	0.085 to 0.115	88.0	70 to 130	1.94	20
AX05106	Arsenic, Total	mg/L	0.0000113	0.0022	0.10	0.0969	0.0987	0.0947	0.085 to 0.115	96.9	70 to 130	1.83	20
AX05106	Cobalt, Total	mg/L	0.000000521	0.0044	0.10	0.0915	0.0933	0.0929	0.085 to 0.115	91.5	70 to 130	1.86	20
AX05106	Boron, Total	mg/L	-0.000572	0.044	1.00	2.81	2.85	0.966	0.85 to 1.15	97.1	70 to 130	1.34	20
AX05106	Mercury, Total by CVAA	mg/L	0.000153	0.0005	0.004	0.00400	0.00400	0.00409	0.0034 to 0.0046	100	70 to 130	0.0675	20
AX05106	Thallium, Total	mg/L	0.0000381	0.00044	0.10	0.0963	0.0988	0.0928	0.085 to 0.115	96.3	70 to 130	2.56	20
AX05106	Chromium, Total	mg/L	0.0000105	0.0044	0.10	0.1000	0.103	0.0970	0.085 to 0.115	100	70 to 130	2.84	20
AX05106	Lead, Total	mg/L	0.0000411	0.0022	0.10	0.0929	0.0950	0.0937	0.085 to 0.115	92.9	70 to 130	2.25	20
AX05106	Selenium, Total	mg/L	0.0000578	0.0044	0.10	0.0911	0.0929	0.0939	0.085 to 0.115	91.1	70 to 130	1.90	20
AX05106	Barium, Total	mg/L	-0.00000845	0.0044	0.10	0.141	0.146	0.0939	0.085 to 0.115	115	70 to 130	3.47	20
AX05106	Cadmium, Total	mg/L	0.000000893	0.00044	0.10	0.0931	0.0935	0.0916	0.085 to 0.115	93.1	70 to 130	0.469	20
AX05106	Calcium, Total	mg/L	-0.000159	0.22	5.00	96.1	91.1	4.92	4.25 to 5.75	-15.4	70 to 130	5.34	20
AX05106	Molybdenum, Total	mg/L	0.00000725	0.0044	0.1	0.181	0.187	0.104	0.085 to 0.115	181	70 to 130	3.26	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
 Recovery for Molybdenum is out of spec.
 A post digestion spike serial dilution indicate matrix effect on the sample.
 Precision for Lithium is out of spec.
 Post digestion spike and serial dilutions passed, indicating the matrix effect on the sample is not significant.
 Recovery for Calcium is out of spec.
 The spike amount is less than 30% the sample amount.

Reported: 7/10/2017
 Version: 2.0

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: WMWGASAP
 Sample Date: 01-Mar-17
 Customer ID:
 Delivery Date: 01-Mar-17

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AX05106

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX05106	Solids, Dissolved	mg/L	-4.0	25			458	55.0	40 to 60	3.07	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, 2018

Comments: Test America Pensacola NELAP ID: E81010
 Recovery for Molybdenum is out of spec.
 A post digestion spike serial dilution indicate matrix effect on the sample.
 Precision for Lithium is out of spec.
 Post digestion spike and serial dilutions passed, indicating the matrix effect on the sample is not significant.

CC:

Definitions



Abbreviation	Description
DF	Dilution Factor
LFB	Lab Fortified Blank
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 03/01/2017 13:30

Requested Complete Date	<input type="text" value="Routine"/>	Results To	<input type="text" value="Dustin Brooks, Greg Dyer"/>
Site Representative	<input type="text" value="Byron Corina"/>	Requested By	<input type="text" value="Greg Dyer"/>
Collector	<input type="text" value="Anthony Goggins"/>	Location	<input type="text" value="Gaston Ash Pond"/>
Analysis Requested	<input type="text" value="Bottle 1 (500mL): Metals, Bottle 2 (250mL): Hg, Bottle 3 (500mL): TDS, Bottle 4 (250mL): Anions"/>		
Comments	<input type="text" value="Due to instrument issues, all anions were outsourced to Test America, Pensacola."/>		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-15R	02/27/2017	13:57	4	Groundwater		AX05078
FB-2	02/27/2017	13:37	4	Field Blank		AX05079
MW-14	02/27/2017	15:19	4	Groundwater		AX05080
MW-13	02/28/2017	09:42	4	Groundwater		AX05081
MW-12	02/28/2017	14:14	4	Groundwater		AX05082
MW-11	02/28/2017	16:14	4	Groundwater		AX05083
MW-11DUP	02/28/2017	16:14	4	Sample Duplicate		AX05084
MW-10	02/28/2017	17:15	4	Groundwater		AX05085
MW-5	03/01/2017	09:38	4	Groundwater		AX05086
MW-22	03/01/2017	10:45	4	Groundwater		AX05087

Relinquished By	Received By	Date/Time
	Sarah Copeland <small>Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o.ou, email=sgcopela@southerncco.com, c=US Date: 2017.03.02 09:36:12 -0600</small>	03/02/2017 09:36

SmarTroll ID	<input type="text" value="5151-26193-1-1"/>	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	<input type="text" value="3901-20009-2-1"/>	Cooler Temp
		<input type="text" value="0.6 degrees C"/>
		Thermometer ID
		<input type="text" value="5408-27568-2-2"/>
		pH Strip ID
		<input type="text" value="5521-28270-20-14"/>



Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

- Field Complete
- Lab Complete

Lab ETA 03/01/2017 15:30

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Jason Rouss	Location	Gaston Ash Pond
Analysis Requested	Bottle 1 (500mL): Metals, Bottle 2 (250mL): Hg, Bottle 3 (500mL): TDS, Bottle 4 (250mL): Anions		
Comments	Due to instrument issues, all anions were outsourced to Test America, Pensacola.		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-1	02/28/2017	10:30	4	Groundwater		AX05089
MW-19	02/27/2017	15:08	4	Groundwater		AX05088
MW-9	02/28/2017	12:20	4	Groundwater		AX05090
FB-3	02/28/2017	13:00	4	Field Blank		AX05091
MW-8	02/28/2017	14:13	4	Groundwater		AX05092
MW-4	02/28/2017	15:50	4	Groundwater		AX05093
MW-4 Dup	02/28/2017	15:50	4	Sample Duplicate		AX05094
MW-2	03/01/2017	10:30	4	Groundwater		AX05095
MW-3	03/01/2017	11:40	4	Groundwater		AX05096
EB-1	03/01/2017	12:30	4	Equipment Blank		AX05097

Relinquished By	Received By	Date/Time
	Sarah Copeland <small>Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o.ou, email=sgcopela@southerncco.com, c=US Date: 2017.03.02 09:58:15 -0600</small>	03/02/2017 09:58

SmarTroll ID	4696-23443-3-2	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	4677-23342-4-1	Cooler Temp
		0.5 degrees C
		Thermometer ID
		5408-27568-2-2
		pH Strip ID
		5521-28270-20-14



Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

- Field Complete
- Lab Complete

Lab ETA 03/01/2017 15:30

Requested Complete Date	<input type="text" value="Routine"/>	Results To	<input type="text" value="Dustin Brooks, Greg Dyer"/>
Site Representative	<input type="text" value="Byron Corina"/>	Requested By	<input type="text" value="Greg Dyer"/>
Collector	<input type="text" value="Ben Rothschild"/>	Location	<input type="text" value="Gaston Ash Pond"/>
Analysis Requested	<input type="text" value="Bottle 1 (500mL): Metals, Bottle 2 (250mL): Hg, Bottle 3 (500mL): TDS, Bottle 4 (250mL): Anions"/>		
Comments	<input type="text" value="Due to instrument issues, all anions were outsourced to Test America, Pensacola."/>		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-20	02/28/2017	11:54	4	Groundwater		AX05099
MW-18	02/28/2017	10:45	4	Groundwater		AX05098
MW-17	02/28/2017	13:40	4	Groundwater		AX05100
MW-17 DUP	02/28/2017	13:40	4	Sample Duplicate		AX05101
MW-16	02/28/2017	15:10	4	Groundwater		AX05102
FB-1	02/28/2017	15:35	4	Field Blank		AX05103
MW-21	03/01/2017	10:02	4	Groundwater		AX05104
MW-6	03/01/2017	11:03	4	Groundwater		AX05105
MW-7	03/01/2017	12:23	4	Groundwater		AX05106

Relinquished By	Received By	Date/Time
<i>Ben Rothschild</i>	Sarah Copeland <small>Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o.ou, email=sgcopela@southernco.com, c=US Date: 2017.03.02 10:04:49 -06'00'</small>	03/02/2017 10:04

SmarTroll ID <input type="text" value="4696-23441-1-1"/>	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID <input type="text" value="3901-20010-2-2"/>	Cooler Temp <input type="text" value="0.5 degrees C"/>
	Thermometer ID <input type="text" value="5408-27568-2-2"/>
	pH Strip ID <input type="text" value="5521-28270-20-14"/>

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: 400-134868-1

TestAmerica Sample Delivery Group: Gaston Ash Pond (6)

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:

3/24/2017 1:16:15 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

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

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

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Case Narrative

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

TestAmerica Job ID: 400-134868-1
SDG: Gaston Ash Pond (6)

Job ID: 400-134868-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-134868-1

General Chemistry

Method(s) SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 346116 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 Cl- E: The following samples were diluted to bring the concentration of target analytes within the calibration range: AX05087 MW-22 (400-134868-10), AX05087 MW-22 (400-134868-10[MS]) and AX05087 MW-22 (400-134868-10[MSD]). Elevated reporting limits (RLs) are provided.

Method(s) SM 4500 SO4 E: The following samples were diluted to bring the concentration of target analytes within the calibration range: Sulfate. Elevated reporting limits (RLs) are provided.

Method(s) SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 346235 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 346632 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.

Detection Summary

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

TestAmerica Job ID: 400-134868-1
SDG: Gaston Ash Pond (6)

Client Sample ID: AX05078 MW-15R

Lab Sample ID: 400-134868-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	27		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	130		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX05079 FB-2

Lab Sample ID: 400-134868-2

No Detections.

Client Sample ID: AX05080 MW-14

Lab Sample ID: 400-134868-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.8		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.12		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	62	J	100	28	mg/L	20		SM 4500 SO4 E	Total/NA

Client Sample ID: AX05081 MW-13

Lab Sample ID: 400-134868-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	6.1		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

Client Sample ID: AX05082 MW-12

Lab Sample ID: 400-134868-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	22		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	86		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX05083 MW-11

Lab Sample ID: 400-134868-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	6.7		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	32		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX05084 MW-11 DUP

Lab Sample ID: 400-134868-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	6.5		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	32		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX05085 MW-10

Lab Sample ID: 400-134868-8

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
Sulfate	3.7	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX05086 MW-5

Lab Sample ID: 400-134868-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	40		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	160		75	21	mg/L	15		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: 400-134868-1
SDG: Gaston Ash Pond (6)

Client Sample ID: AX05087 MW-22

Lab Sample ID: 400-134868-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	56	F1	4.0	1.2	mg/L	2		SM 4500 Cl- E	Total/NA
Fluoride	0.060	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	170	F1	50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX05088 MW-19

Lab Sample ID: 400-134868-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	12		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	23		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX05089 MW-1

Lab Sample ID: 400-134868-12

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	0.070	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	10		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX05090 MW-9

Lab Sample ID: 400-134868-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	8.6		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.11		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	5.5		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX05091 FB-3

Lab Sample ID: 400-134868-14

No Detections.

Client Sample ID: AX05092 MW-8

Lab Sample ID: 400-134868-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.2		2.0	0.60	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	5.8		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX05093 MW-4

Lab Sample ID: 400-134868-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	27		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	32		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX05094 MW-4 DUP

Lab Sample ID: 400-134868-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	27		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	32		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX05095 MW-2

Lab Sample ID: 400-134868-18

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

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: 400-134868-1
SDG: Gaston Ash Pond (6)

Client Sample ID: AX05095 MW-2 (Continued)

Lab Sample ID: 400-134868-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	5.1		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX05096 MW-3

Lab Sample ID: 400-134868-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.3		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	3.4	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX05097 EB-1

Lab Sample ID: 400-134868-20

No Detections.

Client Sample ID: AX05098 MW-18

Lab Sample ID: 400-134868-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	12		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	140		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX05099 MW-20

Lab Sample ID: 400-134868-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	18		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	560		100	28	mg/L	20		SM 4500 SO4 E	Total/NA

Client Sample ID: AX05100 MW-17

Lab Sample ID: 400-134868-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	17		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.22		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	240		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX05101 MW-17 DUP

Lab Sample ID: 400-134868-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	16		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.22		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	240		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX05102 MW-16

Lab Sample ID: 400-134868-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	12		2.0	0.60	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	130		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX05103 FB-1

Lab Sample ID: 400-134868-26

No Detections.

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: 400-134868-1
SDG: Gaston Ash Pond (6)

Client Sample ID: AX05104 MW-21

Lab Sample ID: 400-134868-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	23		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	140		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX05105 MW-6

Lab Sample ID: 400-134868-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	29		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	160		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX05106 MW-7

Lab Sample ID: 400-134868-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	18		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	200	F1	50	14	mg/L	10		SM 4500 SO4 E	Total/NA

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: 400-134868-1
SDG: Gaston Ash Pond (6)

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: 400-134868-1
SDG: Gaston Ash Pond (6)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-134868-1	AX05078 MW-15R	Water	02/27/17 13:57	03/08/17 12:34
400-134868-2	AX05079 FB-2	Water	02/27/17 13:37	03/08/17 12:34
400-134868-3	AX05080 MW-14	Water	02/27/17 15:19	03/08/17 12:34
400-134868-4	AX05081 MW-13	Water	02/28/17 09:42	03/08/17 12:34
400-134868-5	AX05082 MW-12	Water	02/28/17 14:14	03/08/17 12:34
400-134868-6	AX05083 MW-11	Water	02/28/17 16:14	03/08/17 12:34
400-134868-7	AX05084 MW-11 DUP	Water	02/28/17 16:14	03/08/17 12:34
400-134868-8	AX05085 MW-10	Water	02/28/17 17:15	03/08/17 12:34
400-134868-9	AX05086 MW-5	Water	03/01/17 09:38	03/08/17 12:34
400-134868-10	AX05087 MW-22	Water	03/01/17 10:45	03/08/17 12:34
400-134868-11	AX05088 MW-19	Water	02/27/17 15:08	03/08/17 12:34
400-134868-12	AX05089 MW-1	Water	02/28/17 10:30	03/08/17 12:34
400-134868-13	AX05090 MW-9	Water	02/28/17 12:20	03/08/17 12:34
400-134868-14	AX05091 FB-3	Water	02/28/17 13:00	03/08/17 12:34
400-134868-15	AX05092 MW-8	Water	02/28/17 14:13	03/08/17 12:34
400-134868-16	AX05093 MW-4	Water	02/28/17 15:50	03/08/17 12:34
400-134868-17	AX05094 MW-4 DUP	Water	02/28/17 15:50	03/08/17 12:34
400-134868-18	AX05095 MW-2	Water	03/01/17 10:30	03/08/17 12:34
400-134868-19	AX05096 MW-3	Water	03/01/17 11:40	03/08/17 12:34
400-134868-20	AX05097 EB-1	Water	03/01/17 12:30	03/08/17 12:34
400-134868-21	AX05098 MW-18	Water	02/28/17 10:45	03/08/17 12:34
400-134868-22	AX05099 MW-20	Water	02/28/17 11:54	03/08/17 12:34
400-134868-23	AX05100 MW-17	Water	02/28/17 13:40	03/08/17 12:34
400-134868-24	AX05101 MW-17 DUP	Water	02/28/17 13:40	03/08/17 12:34
400-134868-25	AX05102 MW-16	Water	02/28/17 15:10	03/08/17 12:34
400-134868-26	AX05103 FB-1	Water	02/28/17 15:35	03/08/17 12:34
400-134868-27	AX05104 MW-21	Water	03/01/17 10:02	03/08/17 12:34
400-134868-28	AX05105 MW-6	Water	03/01/17 11:03	03/08/17 12:34
400-134868-29	AX05106 MW-7	Water	03/01/17 12:23	03/08/17 12:34

Client Sample Results

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

TestAmerica Job ID: 400-134868-1
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05078 MW-15R

Lab Sample ID: 400-134868-1

Date Collected: 02/27/17 13:57

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27		2.0	0.60	mg/L			03/17/17 08:53	1
Fluoride	0.060	J	0.10	0.032	mg/L			03/15/17 18:02	1
Sulfate	130		50	14	mg/L			03/18/17 08:35	10

Client Sample ID: AX05079 FB-2

Lab Sample ID: 400-134868-2

Date Collected: 02/27/17 13:37

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			03/17/17 08:53	1
Fluoride	<0.032		0.10	0.032	mg/L			03/15/17 18:04	1
Sulfate	<1.4		5.0	1.4	mg/L			03/17/17 08:59	1

Client Sample ID: AX05080 MW-14

Lab Sample ID: 400-134868-3

Date Collected: 02/27/17 15:19

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.8		2.0	0.60	mg/L			03/17/17 08:53	1
Fluoride	0.12		0.10	0.032	mg/L			03/15/17 18:06	1
Sulfate	62	J	100	28	mg/L			03/17/17 09:55	20

Client Sample ID: AX05081 MW-13

Lab Sample ID: 400-134868-4

Date Collected: 02/28/17 09:42

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.1		2.0	0.60	mg/L			03/17/17 08:53	1
Fluoride	0.040	J	0.10	0.032	mg/L			03/15/17 18:08	1
Sulfate	<1.4		5.0	1.4	mg/L			03/18/17 08:01	1

Client Sample ID: AX05082 MW-12

Lab Sample ID: 400-134868-5

Date Collected: 02/28/17 14:14

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22		2.0	0.60	mg/L			03/17/17 08:56	1
Fluoride	<0.032		0.10	0.032	mg/L			03/15/17 18:10	1
Sulfate	86		50	14	mg/L			03/18/17 08:35	10

Client Sample Results

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

TestAmerica Job ID: 400-134868-1
SDG: Gaston Ash Pond (6)

Client Sample ID: AX05083 MW-11

Lab Sample ID: 400-134868-6

Date Collected: 02/28/17 16:14

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.7		2.0	0.60	mg/L			03/17/17 08:56	1
Fluoride	<0.032		0.10	0.032	mg/L			03/15/17 18:12	1
Sulfate	32		5.0	1.4	mg/L			03/18/17 08:01	1

Client Sample ID: AX05084 MW-11 DUP

Lab Sample ID: 400-134868-7

Date Collected: 02/28/17 16:14

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.5		2.0	0.60	mg/L			03/18/17 08:02	1
Fluoride	<0.032		0.10	0.032	mg/L			03/15/17 18:13	1
Sulfate	32		5.0	1.4	mg/L			03/18/17 08:01	1

Client Sample ID: AX05085 MW-10

Lab Sample ID: 400-134868-8

Date Collected: 02/28/17 17:15

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.2		2.0	0.60	mg/L			03/18/17 08:02	1
Fluoride	<0.032		0.10	0.032	mg/L			03/15/17 18:31	1
Sulfate	3.7	J	5.0	1.4	mg/L			03/18/17 08:01	1

Client Sample ID: AX05086 MW-5

Lab Sample ID: 400-134868-9

Date Collected: 03/01/17 09:38

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40		2.0	0.60	mg/L			03/18/17 08:02	1
Fluoride	0.040	J	0.10	0.032	mg/L			03/15/17 18:35	1
Sulfate	160		75	21	mg/L			03/18/17 08:35	15

Client Sample ID: AX05087 MW-22

Lab Sample ID: 400-134868-10

Date Collected: 03/01/17 10:45

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	56	F1	4.0	1.2	mg/L			03/18/17 09:26	2
Fluoride	0.060	J	0.10	0.032	mg/L			03/15/17 17:56	1
Sulfate	170	F1	50	14	mg/L			03/18/17 09:33	10

Client Sample ID: AX05088 MW-19

Lab Sample ID: 400-134868-11

Date Collected: 02/27/17 15:08

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		2.0	0.60	mg/L			03/17/17 10:00	1

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-134868-1
SDG: Gaston Ash Pond (6)

Client Sample ID: AX05088 MW-19

Lab Sample ID: 400-134868-11

Date Collected: 02/27/17 15:08

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			03/15/17 18:37	1
Sulfate	23		5.0	1.4	mg/L			03/17/17 09:50	1

Client Sample ID: AX05089 MW-1

Lab Sample ID: 400-134868-12

Date Collected: 02/28/17 10:30

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.5		2.0	0.60	mg/L			03/18/17 08:43	1
Fluoride	0.070	J	0.10	0.032	mg/L			03/15/17 18:39	1
Sulfate	10		5.0	1.4	mg/L			03/18/17 08:32	1

Client Sample ID: AX05090 MW-9

Lab Sample ID: 400-134868-13

Date Collected: 02/28/17 12:20

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.6		2.0	0.60	mg/L			03/18/17 08:43	1
Fluoride	0.11		0.10	0.032	mg/L			03/15/17 18:41	1
Sulfate	5.5		5.0	1.4	mg/L			03/18/17 08:32	1

Client Sample ID: AX05091 FB-3

Lab Sample ID: 400-134868-14

Date Collected: 02/28/17 13:00

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			03/18/17 08:43	1
Fluoride	<0.032		0.10	0.032	mg/L			03/15/17 18:44	1
Sulfate	<1.4		5.0	1.4	mg/L			03/18/17 08:32	1

Client Sample ID: AX05092 MW-8

Lab Sample ID: 400-134868-15

Date Collected: 02/28/17 14:13

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.2		2.0	0.60	mg/L			03/18/17 08:43	1
Fluoride	0.070	J	0.10	0.032	mg/L			03/15/17 18:46	1
Sulfate	5.8		5.0	1.4	mg/L			03/18/17 08:32	1

Client Sample ID: AX05093 MW-4

Lab Sample ID: 400-134868-16

Date Collected: 02/28/17 15:50

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27		2.0	0.60	mg/L			03/18/17 08:43	1
Fluoride	<0.032		0.10	0.032	mg/L			03/15/17 18:48	1

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-134868-1
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05093 MW-4

Lab Sample ID: 400-134868-16

Date Collected: 02/28/17 15:50

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	32		5.0	1.4	mg/L			03/18/17 08:32	1

Client Sample ID: AX05094 MW-4 DUP

Lab Sample ID: 400-134868-17

Date Collected: 02/28/17 15:50

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27		2.0	0.60	mg/L			03/18/17 08:43	1
Fluoride	<0.032		0.10	0.032	mg/L			03/16/17 12:51	1
Sulfate	32		5.0	1.4	mg/L			03/18/17 08:32	1

Client Sample ID: AX05095 MW-2

Lab Sample ID: 400-134868-18

Date Collected: 03/01/17 10:30

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.4		2.0	0.60	mg/L			03/18/17 08:43	1
Fluoride	<0.032		0.10	0.032	mg/L			03/16/17 12:53	1
Sulfate	5.1		5.0	1.4	mg/L			03/18/17 08:32	1

Client Sample ID: AX05096 MW-3

Lab Sample ID: 400-134868-19

Date Collected: 03/01/17 11:40

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.3		2.0	0.60	mg/L			03/18/17 08:43	1
Fluoride	<0.032		0.10	0.032	mg/L			03/16/17 12:55	1
Sulfate	3.4 J		5.0	1.4	mg/L			03/21/17 10:06	1

Client Sample ID: AX05097 EB-1

Lab Sample ID: 400-134868-20

Date Collected: 03/01/17 12:30

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			03/18/17 08:43	1
Fluoride	<0.032		0.10	0.032	mg/L			03/16/17 12:44	1
Sulfate	<1.4		5.0	1.4	mg/L			03/21/17 13:55	1

Client Sample ID: AX05098 MW-18

Lab Sample ID: 400-134868-21

Date Collected: 02/28/17 10:45

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		2.0	0.60	mg/L			03/18/17 08:44	1
Fluoride	0.040 J		0.10	0.032	mg/L			03/16/17 12:57	1
Sulfate	140		50	14	mg/L			03/21/17 10:10	10

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-134868-1
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05099 MW-20

Lab Sample ID: 400-134868-22

Date Collected: 02/28/17 11:54

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		2.0	0.60	mg/L			03/18/17 08:44	1
Fluoride	<0.032		0.10	0.032	mg/L			03/16/17 12:59	1
Sulfate	560		100	28	mg/L			03/21/17 10:10	20

Client Sample ID: AX05100 MW-17

Lab Sample ID: 400-134868-23

Date Collected: 02/28/17 13:40

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		2.0	0.60	mg/L			03/18/17 08:44	1
Fluoride	0.22		0.10	0.032	mg/L			03/16/17 13:02	1
Sulfate	240		50	14	mg/L			03/21/17 10:10	10

Client Sample ID: AX05101 MW-17 DUP

Lab Sample ID: 400-134868-24

Date Collected: 02/28/17 13:40

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16		2.0	0.60	mg/L			03/18/17 09:23	1
Fluoride	0.22		0.10	0.032	mg/L			03/16/17 13:04	1
Sulfate	240		50	14	mg/L			03/21/17 10:10	10

Client Sample ID: AX05102 MW-16

Lab Sample ID: 400-134868-25

Date Collected: 02/28/17 15:10

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		2.0	0.60	mg/L			03/18/17 09:23	1
Fluoride	0.10		0.10	0.032	mg/L			03/16/17 13:22	1
Sulfate	130		50	14	mg/L			03/21/17 10:46	10

Client Sample ID: AX05103 FB-1

Lab Sample ID: 400-134868-26

Date Collected: 02/28/17 15:35

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			03/18/17 09:23	1
Fluoride	<0.032		0.10	0.032	mg/L			03/16/17 13:33	1
Sulfate	<1.4		5.0	1.4	mg/L			03/21/17 09:32	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-1
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05104 MW-21

Lab Sample ID: 400-134868-27

Date Collected: 03/01/17 10:02

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23		2.0	0.60	mg/L			03/18/17 09:23	1
Fluoride	0.040	J	0.10	0.032	mg/L			03/16/17 13:35	1
Sulfate	140		50	14	mg/L			03/21/17 10:46	10

Client Sample ID: AX05105 MW-6

Lab Sample ID: 400-134868-28

Date Collected: 03/01/17 11:03

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29		2.0	0.60	mg/L			03/21/17 09:08	1
Fluoride	<0.032		0.10	0.032	mg/L			03/16/17 13:37	1
Sulfate	160		50	14	mg/L			03/21/17 10:46	10

Client Sample ID: AX05106 MW-7

Lab Sample ID: 400-134868-29

Date Collected: 03/01/17 12:23

Matrix: Water

Date Received: 03/08/17 12:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		2.0	0.60	mg/L			03/21/17 09:08	1
Fluoride	<0.032		0.10	0.032	mg/L			03/16/17 13:26	1
Sulfate	200	F1	50	14	mg/L			03/21/17 16:30	10

Definitions/Glossary

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

TestAmerica Job ID: 400-134868-1
SDG: Gaston Ash Pond (6)

Qualifiers

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
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.
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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 400-134868-1
SDG: Gaston Ash Pond (6)

Client Sample ID: AX05078 MW-15R

Lab Sample ID: 400-134868-1

Date Collected: 02/27/17 13:57

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346116	03/17/17 08:53	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	345924	03/15/17 18:02	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	346235	03/18/17 08:35	BJB	TAL PEN

Client Sample ID: AX05079 FB-2

Lab Sample ID: 400-134868-2

Date Collected: 02/27/17 13:37

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346116	03/17/17 08:53	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	345924	03/15/17 18:04	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	346115	03/17/17 08:59	BJB	TAL PEN

Client Sample ID: AX05080 MW-14

Lab Sample ID: 400-134868-3

Date Collected: 02/27/17 15:19

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346116	03/17/17 08:53	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	345924	03/15/17 18:06	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		20	346115	03/17/17 09:55	BJB	TAL PEN

Client Sample ID: AX05081 MW-13

Lab Sample ID: 400-134868-4

Date Collected: 02/28/17 09:42

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346116	03/17/17 08:53	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	345924	03/15/17 18:08	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	346235	03/18/17 08:01	BJB	TAL PEN

Client Sample ID: AX05082 MW-12

Lab Sample ID: 400-134868-5

Date Collected: 02/28/17 14:14

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346116	03/17/17 08:56	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	345924	03/15/17 18:10	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	346235	03/18/17 08:35	BJB	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-134868-1
SDG: Gaston Ash Pond (6)

Client Sample ID: AX05083 MW-11

Lab Sample ID: 400-134868-6

Date Collected: 02/28/17 16:14

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346116	03/17/17 08:56	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	345924	03/15/17 18:12	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	346235	03/18/17 08:01	BJB	TAL PEN

Client Sample ID: AX05084 MW-11 DUP

Lab Sample ID: 400-134868-7

Date Collected: 02/28/17 16:14

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346236	03/18/17 08:02	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	345924	03/15/17 18:13	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	346235	03/18/17 08:01	BJB	TAL PEN

Client Sample ID: AX05085 MW-10

Lab Sample ID: 400-134868-8

Date Collected: 02/28/17 17:15

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346236	03/18/17 08:02	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	345924	03/15/17 18:31	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	346235	03/18/17 08:01	BJB	TAL PEN

Client Sample ID: AX05086 MW-5

Lab Sample ID: 400-134868-9

Date Collected: 03/01/17 09:38

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346236	03/18/17 08:02	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	345924	03/15/17 18:35	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		15	346235	03/18/17 08:35	BJB	TAL PEN

Client Sample ID: AX05087 MW-22

Lab Sample ID: 400-134868-10

Date Collected: 03/01/17 10:45

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		2	346236	03/18/17 09:26	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	345924	03/15/17 17:56	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	346235	03/18/17 09:33	BJB	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-134868-1
SDG: Gaston Ash Pond (6)

Client Sample ID: AX05088 MW-19

Lab Sample ID: 400-134868-11

Date Collected: 02/27/17 15:08

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346116	03/17/17 10:00	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	345924	03/15/17 18:37	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	346115	03/17/17 09:50	BJB	TAL PEN

Client Sample ID: AX05089 MW-1

Lab Sample ID: 400-134868-12

Date Collected: 02/28/17 10:30

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346236	03/18/17 08:43	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	345924	03/15/17 18:39	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	346235	03/18/17 08:32	BJB	TAL PEN

Client Sample ID: AX05090 MW-9

Lab Sample ID: 400-134868-13

Date Collected: 02/28/17 12:20

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346236	03/18/17 08:43	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	345924	03/15/17 18:41	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	346235	03/18/17 08:32	BJB	TAL PEN

Client Sample ID: AX05091 FB-3

Lab Sample ID: 400-134868-14

Date Collected: 02/28/17 13:00

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346236	03/18/17 08:43	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	345924	03/15/17 18:44	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	346235	03/18/17 08:32	BJB	TAL PEN

Client Sample ID: AX05092 MW-8

Lab Sample ID: 400-134868-15

Date Collected: 02/28/17 14:13

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346236	03/18/17 08:43	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	345924	03/15/17 18:46	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	346235	03/18/17 08:32	BJB	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-134868-1
SDG: Gaston Ash Pond (6)

Client Sample ID: AX05093 MW-4

Lab Sample ID: 400-134868-16

Date Collected: 02/28/17 15:50

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346236	03/18/17 08:43	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	345924	03/15/17 18:48	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	346235	03/18/17 08:32	BJB	TAL PEN

Client Sample ID: AX05094 MW-4 DUP

Lab Sample ID: 400-134868-17

Date Collected: 02/28/17 15:50

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346236	03/18/17 08:43	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	346022	03/16/17 12:51	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	346235	03/18/17 08:32	BJB	TAL PEN

Client Sample ID: AX05095 MW-2

Lab Sample ID: 400-134868-18

Date Collected: 03/01/17 10:30

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346236	03/18/17 08:43	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	346022	03/16/17 12:53	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	346235	03/18/17 08:32	BJB	TAL PEN

Client Sample ID: AX05096 MW-3

Lab Sample ID: 400-134868-19

Date Collected: 03/01/17 11:40

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346236	03/18/17 08:43	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	346022	03/16/17 12:55	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	346564	03/21/17 10:06	BJB	TAL PEN

Client Sample ID: AX05097 EB-1

Lab Sample ID: 400-134868-20

Date Collected: 03/01/17 12:30

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346236	03/18/17 08:43	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	346022	03/16/17 12:44	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	346632	03/21/17 13:55	BJB	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-134868-1
SDG: Gaston Ash Pond (6)

Client Sample ID: AX05098 MW-18

Lab Sample ID: 400-134868-21

Date Collected: 02/28/17 10:45

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346236	03/18/17 08:44	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	346022	03/16/17 12:57	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	346564	03/21/17 10:10	BJB	TAL PEN

Client Sample ID: AX05099 MW-20

Lab Sample ID: 400-134868-22

Date Collected: 02/28/17 11:54

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346236	03/18/17 08:44	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	346022	03/16/17 12:59	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		20	346564	03/21/17 10:10	BJB	TAL PEN

Client Sample ID: AX05100 MW-17

Lab Sample ID: 400-134868-23

Date Collected: 02/28/17 13:40

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346236	03/18/17 08:44	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	346022	03/16/17 13:02	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	346564	03/21/17 10:10	BJB	TAL PEN

Client Sample ID: AX05101 MW-17 DUP

Lab Sample ID: 400-134868-24

Date Collected: 02/28/17 13:40

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346236	03/18/17 09:23	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	346022	03/16/17 13:04	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	346564	03/21/17 10:10	BJB	TAL PEN

Client Sample ID: AX05102 MW-16

Lab Sample ID: 400-134868-25

Date Collected: 02/28/17 15:10

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346236	03/18/17 09:23	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	346022	03/16/17 13:22	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	346564	03/21/17 10:46	BJB	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-134868-1
SDG: Gaston Ash Pond (6)

Client Sample ID: AX05103 FB-1

Lab Sample ID: 400-134868-26

Date Collected: 02/28/17 15:35

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346236	03/18/17 09:23	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	346022	03/16/17 13:33	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	346564	03/21/17 09:32	BJB	TAL PEN

Client Sample ID: AX05104 MW-21

Lab Sample ID: 400-134868-27

Date Collected: 03/01/17 10:02

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346236	03/18/17 09:23	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	346022	03/16/17 13:35	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	346564	03/21/17 10:46	BJB	TAL PEN

Client Sample ID: AX05105 MW-6

Lab Sample ID: 400-134868-28

Date Collected: 03/01/17 11:03

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346554	03/21/17 09:08	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	346022	03/16/17 13:37	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	346564	03/21/17 10:46	BJB	TAL PEN

Client Sample ID: AX05106 MW-7

Lab Sample ID: 400-134868-29

Date Collected: 03/01/17 12:23

Matrix: Water

Date Received: 03/08/17 12:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	346554	03/21/17 09:08	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	346022	03/16/17 13:26	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	346632	03/21/17 16:30	BJB	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: 400-134868-1
 SDG: Gaston Ash Pond (6)

General Chemistry

Analysis Batch: 345924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-134868-1	AX05078 MW-15R	Total/NA	Water	SM 4500 F C	
400-134868-2	AX05079 FB-2	Total/NA	Water	SM 4500 F C	
400-134868-3	AX05080 MW-14	Total/NA	Water	SM 4500 F C	
400-134868-4	AX05081 MW-13	Total/NA	Water	SM 4500 F C	
400-134868-5	AX05082 MW-12	Total/NA	Water	SM 4500 F C	
400-134868-6	AX05083 MW-11	Total/NA	Water	SM 4500 F C	
400-134868-7	AX05084 MW-11 DUP	Total/NA	Water	SM 4500 F C	
400-134868-8	AX05085 MW-10	Total/NA	Water	SM 4500 F C	
400-134868-9	AX05086 MW-5	Total/NA	Water	SM 4500 F C	
400-134868-10	AX05087 MW-22	Total/NA	Water	SM 4500 F C	
400-134868-11	AX05088 MW-19	Total/NA	Water	SM 4500 F C	
400-134868-12	AX05089 MW-1	Total/NA	Water	SM 4500 F C	
400-134868-13	AX05090 MW-9	Total/NA	Water	SM 4500 F C	
400-134868-14	AX05091 FB-3	Total/NA	Water	SM 4500 F C	
400-134868-15	AX05092 MW-8	Total/NA	Water	SM 4500 F C	
400-134868-16	AX05093 MW-4	Total/NA	Water	SM 4500 F C	
MB 400-345924/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-345924/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-134868-10 MS	AX05087 MW-22	Total/NA	Water	SM 4500 F C	
400-134868-10MSD	AX05087 MW-22	Total/NA	Water	SM 4500 F C	
400-134868-8 DU	AX05085 MW-10	Total/NA	Water	SM 4500 F C	

Analysis Batch: 346022

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-134868-17	AX05094 MW-4 DUP	Total/NA	Water	SM 4500 F C	
400-134868-18	AX05095 MW-2	Total/NA	Water	SM 4500 F C	
400-134868-19	AX05096 MW-3	Total/NA	Water	SM 4500 F C	
400-134868-20	AX05097 EB-1	Total/NA	Water	SM 4500 F C	
400-134868-21	AX05098 MW-18	Total/NA	Water	SM 4500 F C	
400-134868-22	AX05099 MW-20	Total/NA	Water	SM 4500 F C	
400-134868-23	AX05100 MW-17	Total/NA	Water	SM 4500 F C	
400-134868-24	AX05101 MW-17 DUP	Total/NA	Water	SM 4500 F C	
400-134868-25	AX05102 MW-16	Total/NA	Water	SM 4500 F C	
400-134868-26	AX05103 FB-1	Total/NA	Water	SM 4500 F C	
400-134868-27	AX05104 MW-21	Total/NA	Water	SM 4500 F C	
400-134868-28	AX05105 MW-6	Total/NA	Water	SM 4500 F C	
400-134868-29	AX05106 MW-7	Total/NA	Water	SM 4500 F C	
MB 400-346022/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-346022/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-134868-20 MS	AX05097 EB-1	Total/NA	Water	SM 4500 F C	
400-134868-20 MSD	AX05097 EB-1	Total/NA	Water	SM 4500 F C	
400-134868-29 MS	AX05106 MW-7	Total/NA	Water	SM 4500 F C	
400-134868-29 MSD	AX05106 MW-7	Total/NA	Water	SM 4500 F C	
400-134868-25 DU	AX05102 MW-16	Total/NA	Water	SM 4500 F C	

Analysis Batch: 346115

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-134868-2	AX05079 FB-2	Total/NA	Water	SM 4500 SO4 E	
400-134868-3	AX05080 MW-14	Total/NA	Water	SM 4500 SO4 E	
400-134868-11	AX05088 MW-19	Total/NA	Water	SM 4500 SO4 E	
MB 400-346115/6	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: 400-134868-1
 SDG: Gaston Ash Pond (6)

General Chemistry (Continued)

Analysis Batch: 346115 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-346115/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-346115/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 346116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-134868-1	AX05078 MW-15R	Total/NA	Water	SM 4500 Cl- E	
400-134868-2	AX05079 FB-2	Total/NA	Water	SM 4500 Cl- E	
400-134868-3	AX05080 MW-14	Total/NA	Water	SM 4500 Cl- E	
400-134868-4	AX05081 MW-13	Total/NA	Water	SM 4500 Cl- E	
400-134868-5	AX05082 MW-12	Total/NA	Water	SM 4500 Cl- E	
400-134868-6	AX05083 MW-11	Total/NA	Water	SM 4500 Cl- E	
400-134868-11	AX05088 MW-19	Total/NA	Water	SM 4500 Cl- E	
MB 400-346116/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-346116/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-346116/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-134505-B-6 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-134505-B-6 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 346235

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-134868-1	AX05078 MW-15R	Total/NA	Water	SM 4500 SO4 E	
400-134868-4	AX05081 MW-13	Total/NA	Water	SM 4500 SO4 E	
400-134868-5	AX05082 MW-12	Total/NA	Water	SM 4500 SO4 E	
400-134868-6	AX05083 MW-11	Total/NA	Water	SM 4500 SO4 E	
400-134868-7	AX05084 MW-11 DUP	Total/NA	Water	SM 4500 SO4 E	
400-134868-8	AX05085 MW-10	Total/NA	Water	SM 4500 SO4 E	
400-134868-9	AX05086 MW-5	Total/NA	Water	SM 4500 SO4 E	
400-134868-10	AX05087 MW-22	Total/NA	Water	SM 4500 SO4 E	
400-134868-12	AX05089 MW-1	Total/NA	Water	SM 4500 SO4 E	
400-134868-13	AX05090 MW-9	Total/NA	Water	SM 4500 SO4 E	
400-134868-14	AX05091 FB-3	Total/NA	Water	SM 4500 SO4 E	
400-134868-15	AX05092 MW-8	Total/NA	Water	SM 4500 SO4 E	
400-134868-16	AX05093 MW-4	Total/NA	Water	SM 4500 SO4 E	
400-134868-17	AX05094 MW-4 DUP	Total/NA	Water	SM 4500 SO4 E	
400-134868-18	AX05095 MW-2	Total/NA	Water	SM 4500 SO4 E	
MB 400-346235/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-346235/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-346235/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-134868-10 MS	AX05087 MW-22	Total/NA	Water	SM 4500 SO4 E	
400-134868-10MSD	AX05087 MW-22	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 346236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-134868-7	AX05084 MW-11 DUP	Total/NA	Water	SM 4500 Cl- E	
400-134868-8	AX05085 MW-10	Total/NA	Water	SM 4500 Cl- E	
400-134868-9	AX05086 MW-5	Total/NA	Water	SM 4500 Cl- E	
400-134868-10	AX05087 MW-22	Total/NA	Water	SM 4500 Cl- E	
400-134868-12	AX05089 MW-1	Total/NA	Water	SM 4500 Cl- E	
400-134868-13	AX05090 MW-9	Total/NA	Water	SM 4500 Cl- E	
400-134868-14	AX05091 FB-3	Total/NA	Water	SM 4500 Cl- E	
400-134868-15	AX05092 MW-8	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: 400-134868-1
 SDG: Gaston Ash Pond (6)

General Chemistry (Continued)

Analysis Batch: 346236 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-134868-16	AX05093 MW-4	Total/NA	Water	SM 4500 Cl- E	
400-134868-17	AX05094 MW-4 DUP	Total/NA	Water	SM 4500 Cl- E	
400-134868-18	AX05095 MW-2	Total/NA	Water	SM 4500 Cl- E	
400-134868-19	AX05096 MW-3	Total/NA	Water	SM 4500 Cl- E	
400-134868-20	AX05097 EB-1	Total/NA	Water	SM 4500 Cl- E	
400-134868-21	AX05098 MW-18	Total/NA	Water	SM 4500 Cl- E	
400-134868-22	AX05099 MW-20	Total/NA	Water	SM 4500 Cl- E	
400-134868-23	AX05100 MW-17	Total/NA	Water	SM 4500 Cl- E	
400-134868-24	AX05101 MW-17 DUP	Total/NA	Water	SM 4500 Cl- E	
400-134868-25	AX05102 MW-16	Total/NA	Water	SM 4500 Cl- E	
400-134868-26	AX05103 FB-1	Total/NA	Water	SM 4500 Cl- E	
400-134868-27	AX05104 MW-21	Total/NA	Water	SM 4500 Cl- E	
MB 400-346236/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-346236/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-346236/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-134868-10 MS	AX05087 MW-22	Total/NA	Water	SM 4500 Cl- E	
400-134868-10MSD	AX05087 MW-22	Total/NA	Water	SM 4500 Cl- E	
400-134868-20 MS	AX05097 EB-1	Total/NA	Water	SM 4500 Cl- E	
400-134868-20 MSD	AX05097 EB-1	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 346554

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-134868-28	AX05105 MW-6	Total/NA	Water	SM 4500 Cl- E	
400-134868-29	AX05106 MW-7	Total/NA	Water	SM 4500 Cl- E	
MB 400-346554/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-346554/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-346554/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-134868-29 MS	AX05106 MW-7	Total/NA	Water	SM 4500 Cl- E	
400-134868-29 MSD	AX05106 MW-7	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 346564

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-134868-19	AX05096 MW-3	Total/NA	Water	SM 4500 SO4 E	
400-134868-21	AX05098 MW-18	Total/NA	Water	SM 4500 SO4 E	
400-134868-22	AX05099 MW-20	Total/NA	Water	SM 4500 SO4 E	
400-134868-23	AX05100 MW-17	Total/NA	Water	SM 4500 SO4 E	
400-134868-24	AX05101 MW-17 DUP	Total/NA	Water	SM 4500 SO4 E	
400-134868-25	AX05102 MW-16	Total/NA	Water	SM 4500 SO4 E	
400-134868-26	AX05103 FB-1	Total/NA	Water	SM 4500 SO4 E	
400-134868-27	AX05104 MW-21	Total/NA	Water	SM 4500 SO4 E	
400-134868-28	AX05105 MW-6	Total/NA	Water	SM 4500 SO4 E	
MB 400-346564/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-346564/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-346564/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-134634-A-2 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-134634-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 346632

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-134868-20	AX05097 EB-1	Total/NA	Water	SM 4500 SO4 E	
400-134868-29	AX05106 MW-7	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: 400-134868-1
SDG: Gaston Ash Pond (6)

General Chemistry (Continued)

Analysis Batch: 346632 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-346632/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-346632/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-346632/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-134868-20 MS	AX05097 EB-1	Total/NA	Water	SM 4500 SO4 E	
400-134868-20 MSD	AX05097 EB-1	Total/NA	Water	SM 4500 SO4 E	
400-134868-29 MS	AX05106 MW-7	Total/NA	Water	SM 4500 SO4 E	
400-134868-29 MSD	AX05106 MW-7	Total/NA	Water	SM 4500 SO4 E	

QC Sample Results

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

TestAmerica Job ID: 400-134868-1
 SDG: Gaston Ash Pond (6)

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-346116/6
Matrix: Water
Analysis Batch: 346116

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			03/17/17 08:10	1

Lab Sample ID: LCS 400-346116/7
Matrix: Water
Analysis Batch: 346116

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 400-346116/3
Matrix: Water
Analysis Batch: 346116

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	2.34		mg/L		117	50 - 150

Lab Sample ID: 400-134505-B-6 MS
Matrix: Water
Analysis Batch: 346116

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	36	F1	10.0	41.7	F1	mg/L		59	73 - 120

Lab Sample ID: 400-134505-B-6 MSD
Matrix: Water
Analysis Batch: 346116

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	36	F1	10.0	41.4	F1	mg/L		57	73 - 120	1	8

Lab Sample ID: MB 400-346236/6
Matrix: Water
Analysis Batch: 346236

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			03/18/17 07:21	1

Lab Sample ID: LCS 400-346236/7
Matrix: Water
Analysis Batch: 346236

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 400-346236/3
Matrix: Water
Analysis Batch: 346236

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	2.13		mg/L		107	50 - 150

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-134868-1
 SDG: Gaston Ash Pond (6)

Lab Sample ID: 400-134868-10 MS
Matrix: Water
Analysis Batch: 346236

Client Sample ID: AX05087 MW-22
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	56	F1	20.0	64.5	F1	mg/L		43	73 - 120

Lab Sample ID: 400-134868-10MSD
Matrix: Water
Analysis Batch: 346236

Client Sample ID: AX05087 MW-22
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	56		140	65.0		mg/L					

Lab Sample ID: 400-134868-20 MS
Matrix: Water
Analysis Batch: 346236

Client Sample ID: AX05097 EB-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	EB Result	EB Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<0.60		10.0	11.6		mg/L		116	73 - 120

Lab Sample ID: 400-134868-20 MSD
Matrix: Water
Analysis Batch: 346236

Client Sample ID: AX05097 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
Chloride	<0.60		10.0	11.3		mg/L		113	73 - 120	3	8

Lab Sample ID: MB 400-346554/6
Matrix: Water
Analysis Batch: 346554

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			03/21/17 08:29	1

Lab Sample ID: LCS 400-346554/7
Matrix: Water
Analysis Batch: 346554

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	31.4		mg/L		105	90 - 110

Lab Sample ID: MRL 400-346554/3
Matrix: Water
Analysis Batch: 346554

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	2.09		mg/L		104	50 - 150

Lab Sample ID: 400-134868-29 MS
Matrix: Water
Analysis Batch: 346554

Client Sample ID: AX05106 MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	18		10.0	28.2		mg/L		102	73 - 120

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-134868-1
 SDG: Gaston Ash Pond (6)

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: 400-134868-29 MSD
Matrix: Water
Analysis Batch: 346554

Client Sample ID: AX05106 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	18		10.0	27.9		mg/L		99	73 - 120	1	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-345924/3
Matrix: Water
Analysis Batch: 345924

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			03/15/17 17:48	1

Lab Sample ID: LCS 400-345924/4
Matrix: Water
Analysis Batch: 345924

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	4.30		mg/L		108	90 - 110

Lab Sample ID: 400-134868-10 MS
Matrix: Water
Analysis Batch: 345924

Client Sample ID: AX05087 MW-22
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.060	J	1.00	1.17		mg/L		111	75 - 125

Lab Sample ID: 400-134868-10MSD
Matrix: Water
Analysis Batch: 345924

Client Sample ID: AX05087 MW-22
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.060	J	1.00	1.14		mg/L		108	75 - 125	3	4

Lab Sample ID: 400-134868-8 DU
Matrix: Water
Analysis Batch: 345924

Client Sample ID: AX05085 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

Lab Sample ID: MB 400-346022/3
Matrix: Water
Analysis Batch: 346022

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			03/16/17 12:35	1

QC Sample Results

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

TestAmerica Job ID: 400-134868-1
 SDG: Gaston Ash Pond (6)

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: LCS 400-346022/4
Matrix: Water
Analysis Batch: 346022

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	4.22		mg/L		106	90 - 110

Lab Sample ID: 400-134868-20 MS
Matrix: Water
Analysis Batch: 346022

Client Sample ID: AX05097 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

Lab Sample ID: 400-134868-20 MSD
Matrix: Water
Analysis Batch: 346022

Client Sample ID: AX05097 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	1.06		mg/L		106	75 - 125	2	4

Lab Sample ID: 400-134868-29 MS
Matrix: Water
Analysis Batch: 346022

Client Sample ID: AX05106 MW-7
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	1.06		mg/L		106	75 - 125

Lab Sample ID: 400-134868-29 MSD
Matrix: Water
Analysis Batch: 346022

Client Sample ID: AX05106 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
Fluoride	<0.032		1.00	1.06		mg/L		106	75 - 125	0	4

Lab Sample ID: 400-134868-25 DU
Matrix: Water
Analysis Batch: 346022

Client Sample ID: AX05102 MW-16
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	Prepared	Analyzed	RPD	RPD Limit
Fluoride	0.10		0.100		mg/L				0	4

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-346115/6
Matrix: Water
Analysis Batch: 346115

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			03/17/17 08:12	1

QC Sample Results

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

TestAmerica Job ID: 400-134868-1
 SDG: Gaston Ash Pond (6)

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: LCS 400-346115/7
Matrix: Water
Analysis Batch: 346115

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	13.9		mg/L		93	90 - 110

Lab Sample ID: MRL 400-346115/3
Matrix: Water
Analysis Batch: 346115

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	4.63	J	mg/L		93	50 - 150

Lab Sample ID: MB 400-346235/6
Matrix: Water
Analysis Batch: 346235

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			03/18/17 07:23	1

Lab Sample ID: LCS 400-346235/7
Matrix: Water
Analysis Batch: 346235

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 400-346235/3
Matrix: Water
Analysis Batch: 346235

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	5.14		mg/L		103	50 - 150

Lab Sample ID: 400-134868-10 MS
Matrix: Water
Analysis Batch: 346235

Client Sample ID: AX05087 MW-22
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	170	F1	100	185	F1	mg/L		12	77 - 128

Lab Sample ID: 400-134868-10MSD
Matrix: Water
Analysis Batch: 346235

Client Sample ID: AX05087 MW-22
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	170	F1	100	186	F1	mg/L		13	77 - 128	1	5

Lab Sample ID: MB 400-346564/6
Matrix: Water
Analysis Batch: 346564

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			03/21/17 08:31	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-134868-1
 SDG: Gaston Ash Pond (6)

Lab Sample ID: LCS 400-346564/7
Matrix: Water
Analysis Batch: 346564

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 400-346564/3
Matrix: Water
Analysis Batch: 346564

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	4.65	J	mg/L		93	50 - 150

Lab Sample ID: 400-134634-A-2 MS
Matrix: Water
Analysis Batch: 346564

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	19		10.0	30.8		mg/L		116	77 - 128

Lab Sample ID: 400-134634-A-2 MSD
Matrix: Water
Analysis Batch: 346564

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	19		10.0	30.9		mg/L		118	77 - 128	0	5

Lab Sample ID: MB 400-346632/6
Matrix: Water
Analysis Batch: 346632

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			03/21/17 12:37	1

Lab Sample ID: LCS 400-346632/7
Matrix: Water
Analysis Batch: 346632

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 400-346632/3
Matrix: Water
Analysis Batch: 346632

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	4.70	J	mg/L		94	50 - 150

Lab Sample ID: 400-134868-20 MS
Matrix: Water
Analysis Batch: 346632

Client Sample ID: AX05097 EB-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	EB Result	EB Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	<1.4		10.0	12.2		mg/L		122	77 - 128

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-134868-1
 SDG: Gaston Ash Pond (6)

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: 400-134868-20 MSD
Matrix: Water
Analysis Batch: 346632

Client Sample ID: AX05097 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
Sulfate	<1.4		10.0	12.5		mg/L		125	77 - 128	3	5

Lab Sample ID: 400-134868-29 MS
Matrix: Water
Analysis Batch: 346632

Client Sample ID: AX05106 MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	200	F1	100	205	F1	mg/L		8	77 - 128		

Lab Sample ID: 400-134868-29 MSD
Matrix: Water
Analysis Batch: 346632

Client Sample ID: AX05106 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
Sulfate	200	F1	100	203	F1	mg/L		7	77 - 128	1	5

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information		Lab PM: Whitnire, Chyenne R E-Mail: chyenne.whitnir@testamerica.com		Center Tracking No.: 400-5525-24537.1	
Company: Alabama Power General Test Laboratory		Sampler: Anthony Goggins		Page: Page 1 of 3	
Address: 744 County Rd 87 GSC #8		Phone:		Job #: 400-134968	
City: Callera	State, Zip: AL, 35040	Due Date Requested:		Preservation Codes:	
Phone: 205-664-6121(Tel)	PO #:	TAT Requested (days): RUSH (see email)		M-Hexane N-None O-Ash/02 P-NZSDAS Q-NZSDS R-NZSD3 S-H2SO4 T-TSP Dodecahydrate	
Email: sgoppela@southernco.com	WO #:	Project #: 40007143		F-MeOH G-Anticlor H-Ascorbic Acid I-Ice J-DI Water K-EDTA L-EDA Other:	
Project Name: CCR	SSOW#:	Sample Date		Special Instructions/Note:	
Site: Gaston Ash Pond (6)	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Hexane, MeOH, DMSO, etc)	Total Number of Containers	
	2/27/17	G	Water	1	MMW-16R
	2/27/17	G	Water		FB-2 (Field Blank)
	2/27/17	G	Water		MMW-14
	2/28/17	G	Water		MMW-13
	2/28/17	G	Water		MMW-12
	2/28/17	G	Water		MMW-11
	2/28/17	G	Water		MMW-11 Dup (Sample Duplicate)
	2/28/17	G	Water		MMW-10
	2/28/17	G	Water		MMW-5
	3/1/17	G	Water		MMW-22
	3/1/17	G	Water		
Possible Hazard Identification <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: Sarah Copeland Date/Time: 3/10/17 13:00 Company: APC					
Relinquished by: Relinquished by: Date/Time: Company:					
Relinquished by: Relinquished by: Date/Time: Company:					
Custody Seals Intact: A Yes A No Custody Seal No.: Cooler Temperature(s) °C and Other Remarks: 1.0°C 1.1°C IR-2					



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

Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information
 Sampler: Jason Rotts
 Lab Fax: Whitfire, Cheyenne R
 Client Contact: Sarah Copeland
 E-Mail: cheyenne.whitfire@testamericainc.com

Company: Alabama Power General Test Laboratory
 Address: 744 County Rd 87 GSC #8
 City: Calera
 State, Zip: AL, 35040
 Phone: 205-664-6121 (Tel)
 Email: sgcopela@southernco.com
 Project #: 40007143
 CCR
 Site: Gaston Ash Pond (6)

Due Date Requested:
 TAT Requested (days): RUSH (see email)
 PO #: _____
 IWO #: _____
 Project #: _____
 CCR: _____
 SSOIW: _____

Analysis Requested

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (W=Water, S=Soil, O=Other, etc.)	Preservation Code	Field Filtered (Y/N)	SM 4500 Cl-6	SM 4500 SO4-6	SM 4500 SO4-6 (1)	Field Number of Containers	Special Instructions/Note
AX05086	2/27/17	1508	G	Water		X	X	X	X	1	MW-19
AX05089	2/28/17	1030	G	Water		X	X	X	X	1	MW-1
AX05090	2/28/17	1220	G	Water		X	X	X	X	1	MW-9
AX05091	2/28/17	1300	G	Water		X	X	X	X	1	FB-3
AX05092	2/28/17	1413	G	Water		X	X	X	X	1	MW-8
AX05093	2/28/17	1550	G	Water		X	X	X	X	1	MW-4
AX05094	2/28/17	1550	G	Water		X	X	X	X	1	MW-4 Dip (Sample Duplicate)
AX05095	3/1/17	1030	G	Water		X	X	X	X	1	MW-2
AX05096	3/1/17	1140	G	Water		X	X	X	X	1	MW-3
AX05097	3/1/17	1230	G	Water		Y	X	X	X	1	EB-1 (Equipment Blank)

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by: _____
 Relinquished by: Sarah Copeland
 Date: 3/10/17 1300
 Company: APC

Relinquished by: _____
 Date/Time: _____
 Company: _____

Relinquished by: _____
 Date/Time: _____
 Company: _____

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

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

Special Instructions/QC Requirements:

Method of Shipment: _____
 Date/Time: 3/8/2017 12:34
 Company: TA
 Date/Time: _____
 Company: _____
 Date/Time: _____
 Company: _____

Cooler Temperature(s) °C and Other Remarks: 1.0°C 1.1°C 12-2



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

Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information
 Lab Pk: Whitmie, Chienne R.
 Sampler: Ben Rothschild
 Phone: chienne.whitmire@testamerica.com

Company: Alabama Power General Test Laboratory
 Address: 744 County Rd 87 GSC #8
 City: Calera
 State, Zip: AL, 35040
 Phone: 205-664-6121 (Tel)
 Email: sgcopella@southernco.com
 Project #: 40007143
 CCR
 Site: Gaston Ash Pond (S)

Analysis Requested
 Due Date Requested:
 (TAT Requested (days): RUSH (see email))
 PO #:
 WO #:
 Project #:
 CCR
 Site:

Preservation Codes:
 A - HCL
 B - NaOH
 C - Zn Acetate
 D - Nitric Acid
 E - H2SO4
 F - HNO3
 G - Amelohr
 H - Ascorbic Acid
 I - Ice
 J - DI Water
 K - EDTA
 L - EDA
 Other:
 M - Hexane
 N - None
 O - ASA/C2
 P - Na2O4S
 Q - Na2S2O8
 R - Na2S2O3
 S - H2SO4
 T - TSP Dodecahydrate
 U - Acetone
 V - MCAA
 W - pH 4.5
 Z - other (specify)

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Soil, Dewater, Synthetic, AM)	Preservation Code	Field Filtered Sample (Year/No)		Total Number of Containers		Special Instructions/Notes
						Y	N	X	N	
AX05098	2/28/17	1045	G	Water		X		X		MW-18
AX05099	2/28/17	1154	G	Water		X		X		MW-20
AX05100	2/28/17	1340	G	Water		X		X		MW-17
AX05101	2/28/17	1340	G	Water		X		X		MW-17 Dup (Sample Duplicate)
AX05102	2/28/17	1510	G	Water		X		X		MW-16
AX05103	2/28/17	1535	G	Water		X		X		FB-1 (Field Blank)
AX05104	3/1/17	1002	G	Water		X		X		MW-21
AX05105	3/1/17	1103	G	Water		X		X		MM-5
AX05106	3/1/17	1223	G	Water		Y		X		MW-7

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by:
 Relinquished by: Sarah Copeland
 Date/Time: 3/10/17 1300
 Company: APC

Relinquished by:
 Relinquished by: *[Signature]*
 Date/Time: 3/8/2017 12:34
 Company: TA

Relinquished by:
 Relinquished by:
 Date/Time:
 Company:

Custody Seals Intact: Custody Seal No.:
 A Yes A No 1.0°C 1.1°C 1P-2

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

Special Instructions/QC Requirements:

Method of Shipment:
 Date/Time: 3/8/2017 12:34
 Date/Time:
 Date/Time:
 Company: TA



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-134868-1
SDG Number: Gaston Ash Pond (6)

Login Number: 134868

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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.0°C, 1.1°C IR-2
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	



Certification Summary

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

TestAmerica Job ID: 400-134868-1
 SDG: Gaston Ash Pond (6)

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-17
Louisiana (DW)	NELAP Secondary AB	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17



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: 400-134868-2

TestAmerica Sample Delivery Group: Gaston Ash Pond (6)

Client Project/Site: CCR Plant Gaston

For:

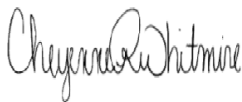
Alabama Power General Test Laboratory

744 County Rd 87

GSC #8

Calera, Alabama 35040

Attn: Sarah Copeland



Authorized for release by:

4/14/2017 11:50:24 AM

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: 400-134868-2
SDG: Gaston Ash Pond (6)

Job ID: 400-134868-2

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-134868-2

RAD

Method(s) 904.0, 9320: Radium-228 Prep Batch: 160-298036. The Laboratory Control Sample (LCS) spike recovery (146%) associated with the following samples is outside the upper QC limit of (56-140%) indicating a potential positive bias for that analytes : AX05154 EB-1 (400-134868-49), AX05155 MW-18 (400-134868-50), AX05155 MW-18 (400-134868-50[DUJ]), AX05156 MW-20 (400-134868-51), AX05157 MW-17 (400-134868-52), AX05158 MW-17 DUP (400-134868-53), AX05160 FB-1 (400-134868-55), AX05161 MW-21 (400-134868-56), AX05162 MW-6 (400-134868-57), AX05163 MW-7 (400-134868-58), (LCS 160-298036/2-A) and (MB 160-298036/1-A). This analyte was not observed above the requested limit in the associated samples; therefore the sample data was not adversely affected by this excursion. The data have been qualified and reported.

Method(s) 9320: Radium-228 Prep Batch: 160-301145. The radium-228 detection goal of 1.00 pCi/L was not met for the following samples due to a reduced aliquot attributed to insufficient sample available for re-analysis: AX05159 MW-16 (400-134868-54) and (MB 160-301145/1-A). (See Prep NCM: 160-107772) Analytical results are reported with the detection limit achieved.

Method(s) PrecSep_0: Radium 228 Prep Batch 160-298025. The following sample were reduced to 750 mL due to limited volume: AX05135 FB-2 (400-134868-30), AX05136 MW-15R (400-134868-31), AX05137 MW-14 (400-134868-32), AX05139 MW-12 (400-134868-34), AX05140 MW-11 (400-134868-35), AX05141 MW-11 DUP (400-134868-36), AX05142 MW-10 (400-134868-37), AX05143 MW-5 (400-134868-38), AX05144 MW-22 (400-134868-39), AX05145 MW-19 (400-134868-40), AX05146 MW-1 (400-134868-41), AX05147 MW-9 (400-134868-42), AX05148 FB-3 (400-134868-43), AX05149 MW-8 (400-134868-44), AX05150 MW-4 (400-134868-45), AX05151 MW-4 DUP (400-134868-46), AX05152 MW-2 (400-134868-47) and AX05153 MW-3 (400-134868-48).

Method(s) PrecSep_0: Radium 228 Prep Batch: 160-298036. The following samples were prepped at a reduced aliquot due to limited sample volume: AX05154 EB-1 (400-134868-49), AX05156 MW-20 (400-134868-51), AX05157 MW-17 (400-134868-52), AX05158 MW-17 DUP (400-134868-53), AX05159 MW-16 (400-134868-54), AX05160 FB-1 (400-134868-55), AX05161 MW-21 (400-134868-56), AX05162 MW-6 (400-134868-57) and AX05163 MW-7 (400-134868-58).

Method(s) PrecSep_0: Radium 228 Prep Batch 160-301145: Insufficient sample volume, due to re-analysis, was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 160-301145. A laboratory control sample/ laboratory control samples duplicate (LCS/LCSD) were prepared instead to demonstrate Batch Precision.

Method(s) PrecSep-21: Radium 226 Prep Batch 160-298020. The following sample were reduced to 750 mL due to limited volume: AX05135 FB-2 (400-134868-30), AX05136 MW-15R (400-134868-31), AX05137 MW-14 (400-134868-32), AX05139 MW-12 (400-134868-34), AX05140 MW-11 (400-134868-35), AX05141 MW-11 DUP (400-134868-36), AX05142 MW-10 (400-134868-37), AX05143 MW-5 (400-134868-38), AX05144 MW-22 (400-134868-39), AX05145 MW-19 (400-134868-40), AX05146 MW-1 (400-134868-41), AX05147 MW-9 (400-134868-42), AX05148 FB-3 (400-134868-43), AX05149 MW-8 (400-134868-44), AX05150 MW-4 (400-134868-45), AX05151 MW-4 DUP (400-134868-46), AX05152 MW-2 (400-134868-47) and AX05153 MW-3 (400-134868-48).

Method(s) PrecSep-21: Radium 226 Prep Batch: 160-298032. The following samples were prepped at a reduced aliquot due to limited sample volume: AX05154 EB-1 (400-134868-49), AX05156 MW-20 (400-134868-51), AX05157 MW-17 (400-134868-52), AX05158 MW-17 DUP (400-134868-53), AX05159 MW-16 (400-134868-54), AX05160 FB-1 (400-134868-55), AX05161 MW-21 (400-134868-56), AX05162 MW-6 (400-134868-57) and AX05163 MW-7 (400-134868-58).

Method Summary

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

TestAmerica Job ID: 400-134868-2
SDG: Gaston Ash Pond (6)

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: 400-134868-2
SDG: Gaston Ash Pond (6)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-134868-30	AX05135 FB-2	Water	02/27/17 13:37	03/09/17 16:00
400-134868-31	AX05136 MW-15R	Water	02/27/17 13:57	03/09/17 16:00
400-134868-32	AX05137 MW-14	Water	02/27/17 15:19	03/09/17 16:00
400-134868-33	AX05138 MW-13	Water	02/28/17 09:42	03/09/17 16:00
400-134868-34	AX05139 MW-12	Water	02/28/17 14:14	03/09/17 16:00
400-134868-35	AX05140 MW-11	Water	02/28/17 16:14	03/09/17 16:00
400-134868-36	AX05141 MW-11 DUP	Water	02/28/17 16:14	03/09/17 16:00
400-134868-37	AX05142 MW-10	Water	02/28/17 17:15	03/09/17 16:00
400-134868-38	AX05143 MW-5	Water	03/01/17 09:38	03/09/17 16:00
400-134868-39	AX05144 MW-22	Water	03/01/17 10:45	03/09/17 16:00
400-134868-40	AX05145 MW-19	Water	02/27/17 15:08	03/09/17 16:00
400-134868-41	AX05146 MW-1	Water	02/28/17 10:30	03/09/17 16:00
400-134868-42	AX05147 MW-9	Water	02/28/17 12:20	03/09/17 16:00
400-134868-43	AX05148 FB-3	Water	02/28/17 13:00	03/09/17 16:00
400-134868-44	AX05149 MW-8	Water	02/28/17 14:13	03/09/17 16:00
400-134868-45	AX05150 MW-4	Water	02/28/17 15:50	03/09/17 16:00
400-134868-46	AX05151 MW-4 DUP	Water	02/28/17 15:50	03/09/17 16:00
400-134868-47	AX05152 MW-2	Water	03/01/17 10:30	03/09/17 16:00
400-134868-48	AX05153 MW-3	Water	03/01/17 11:40	03/09/17 16:00
400-134868-49	AX05154 EB-1	Water	03/01/17 12:30	03/09/17 16:00
400-134868-50	AX05155 MW-18	Water	02/28/17 10:45	03/09/17 16:00
400-134868-51	AX05156 MW-20	Water	02/28/17 11:54	03/09/17 16:00
400-134868-52	AX05157 MW-17	Water	02/28/17 13:40	03/09/17 16:00
400-134868-53	AX05158 MW-17 DUP	Water	02/28/17 13:40	03/09/17 16:00
400-134868-54	AX05159 MW-16	Water	02/28/17 15:10	03/09/17 16:00
400-134868-55	AX05160 FB-1	Water	02/28/17 15:35	03/09/17 16:00
400-134868-56	AX05161 MW-21	Water	03/01/17 10:02	03/09/17 16:00
400-134868-57	AX05162 MW-6	Water	03/01/17 11:03	03/09/17 16:00
400-134868-58	AX05163 MW-7	Water	03/01/17 12:23	03/09/17 16:00

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05135 FB-2

Lab Sample ID: 400-134868-30

Date Collected: 02/27/17 13:37

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0257	U	0.0894	0.0894	1.00	0.169	pCi/L	03/16/17 13:41	04/07/17 06:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110					03/16/17 13:41	04/07/17 06:47	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0783	U	0.305	0.305	1.00	0.552	pCi/L	03/16/17 14:07	03/30/17 14:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110					03/16/17 14:07	03/30/17 14:52	1
Y Carrier	86.7		40 - 110					03/16/17 14:07	03/30/17 14:52	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0525	U	0.318	0.318	5.00	0.552	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05136 MW-15R

Lab Sample ID: 400-134868-31

Date Collected: 02/27/17 13:57

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0104	U	0.0726	0.0726	1.00	0.155	pCi/L	03/16/17 13:41	04/07/17 06:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		40 - 110					03/16/17 13:41	04/07/17 06:47	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.139	U	0.266	0.266	1.00	0.454	pCi/L	03/16/17 14:07	03/30/17 14:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		40 - 110					03/16/17 14:07	03/30/17 14:52	1
Y Carrier	86.4		40 - 110					03/16/17 14:07	03/30/17 14:52	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.129	U	0.276	0.276	5.00	0.454	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05137 MW-14

Lab Sample ID: 400-134868-32

Date Collected: 02/27/17 15:19

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.208		0.116	0.117	1.00	0.142	pCi/L	03/16/17 13:41	04/07/17 06:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		40 - 110					03/16/17 13:41	04/07/17 06:47	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.272	U	0.305	0.306	1.00	0.500	pCi/L	03/16/17 14:07	03/30/17 14:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		40 - 110					03/16/17 14:07	03/30/17 14:52	1
Y Carrier	83.7		40 - 110					03/16/17 14:07	03/30/17 14:52	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.479	U	0.326	0.327	5.00	0.500	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05138 MW-13

Lab Sample ID: 400-134868-33

Date Collected: 02/28/17 09:42

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.409		0.128	0.133	1.00	0.111	pCi/L	03/16/17 13:41	04/07/17 06:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		40 - 110					03/16/17 13:41	04/07/17 06:48	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.220	U	0.229	0.230	1.00	0.373	pCi/L	03/16/17 14:07	03/30/17 14:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		40 - 110					03/16/17 14:07	03/30/17 14:52	1
Y Carrier	84.9		40 - 110					03/16/17 14:07	03/30/17 14:52	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.629		0.262	0.266	5.00	0.373	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05139 MW-12

Lab Sample ID: 400-134868-34

Date Collected: 02/28/17 14:14

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.528		0.159	0.166	1.00	0.129	pCi/L	03/16/17 13:41	04/07/17 10:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110					03/16/17 13:41	04/07/17 10:18	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.560		0.318	0.322	1.00	0.478	pCi/L	03/16/17 14:07	03/30/17 14:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110					03/16/17 14:07	03/30/17 14:53	1
Y Carrier	83.4		40 - 110					03/16/17 14:07	03/30/17 14:53	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	1.09		0.356	0.362	5.00	0.478	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05140 MW-11

Lab Sample ID: 400-134868-35

Date Collected: 02/28/17 16:14

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0855	U	0.0926	0.0930	1.00	0.148	pCi/L	03/16/17 13:41	04/07/17 10:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110					03/16/17 13:41	04/07/17 10:19	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.465	U	0.338	0.341	1.00	0.532	pCi/L	03/16/17 14:07	03/30/17 14:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110					03/16/17 14:07	03/30/17 14:53	1
Y Carrier	86.4		40 - 110					03/16/17 14:07	03/30/17 14:53	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	0.551		0.350	0.353	5.00	0.532	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05141 MW-11 DUP

Lab Sample ID: 400-134868-36

Date Collected: 02/28/17 16:14

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0214	U	0.0524	0.0524	1.00	0.126	pCi/L	03/16/17 13:41	04/07/17 10:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					03/16/17 13:41	04/07/17 10:19	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	0.299	0.300	1.00	0.495	pCi/L	03/16/17 14:07	03/30/17 14:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					03/16/17 14:07	03/30/17 14:53	1
Y Carrier	87.5		40 - 110					03/16/17 14:07	03/30/17 14:53	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	0.219	U	0.303	0.304	5.00	0.495	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05142 MW-10

Lab Sample ID: 400-134868-37

Date Collected: 02/28/17 17:15

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0134	U	0.0719	0.0719	1.00	0.155	pCi/L	03/16/17 13:41	04/07/17 16:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.4		40 - 110					03/16/17 13:41	04/07/17 16:59	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.360	U	0.331	0.333	1.00	0.533	pCi/L	03/16/17 14:07	03/30/17 14:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.4		40 - 110					03/16/17 14:07	03/30/17 14:53	1
Y Carrier	83.4		40 - 110					03/16/17 14:07	03/30/17 14:53	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	0.346	U	0.339	0.340	5.00	0.533	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05143 MW-5

Lab Sample ID: 400-134868-38

Date Collected: 03/01/17 09:38

Matrix: Water

Date Received: 03/09/17 16:00

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		0.145	0.148	1.00	0.169	pCi/L	03/16/17 13:41	04/07/17 10:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					03/16/17 13:41	04/07/17 10:30	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.150	U	0.280	0.280	1.00	0.477	pCi/L	03/16/17 14:07	03/30/17 14:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					03/16/17 14:07	03/30/17 14:53	1
Y Carrier	83.4		40 - 110					03/16/17 14:07	03/30/17 14:53	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	0.477		0.315	0.317	5.00	0.477	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05144 MW-22

Lab Sample ID: 400-134868-39

Date Collected: 03/01/17 10:45

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.239		0.125	0.127	1.00	0.155	pCi/L	03/16/17 13:41	04/07/17 10:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					03/16/17 13:41	04/07/17 10:30	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.295	U	0.284	0.286	1.00	0.460	pCi/L	03/16/17 14:07	03/30/17 14:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					03/16/17 14:07	03/30/17 14:53	1
Y Carrier	87.1		40 - 110					03/16/17 14:07	03/30/17 14:53	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	0.534		0.311	0.313	5.00	0.460	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05145 MW-19

Lab Sample ID: 400-134868-40

Date Collected: 02/27/17 15:08

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.151		0.103	0.104	1.00	0.139	pCi/L	03/16/17 13:41	04/07/17 10:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					03/16/17 13:41	04/07/17 10:30	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.175	U	0.311	0.311	1.00	0.527	pCi/L	03/16/17 14:07	03/30/17 14:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					03/16/17 14:07	03/30/17 14:53	1
Y Carrier	81.9		40 - 110					03/16/17 14:07	03/30/17 14:53	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	0.326	U	0.328	0.328	5.00	0.527	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05146 MW-1

Lab Sample ID: 400-134868-41

Date Collected: 02/28/17 10:30

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.341		0.138	0.141	1.00	0.142	pCi/L	03/16/17 13:41	04/07/17 10:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					03/16/17 13:41	04/07/17 10:30	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	0.272	0.272	1.00	0.508	pCi/L	03/16/17 14:07	03/30/17 14:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					03/16/17 14:07	03/30/17 14:53	1
Y Carrier	84.1		40 - 110					03/16/17 14:07	03/30/17 14:53	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	0.232	U	0.305	0.307	5.00	0.508	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05147 MW-9

Lab Sample ID: 400-134868-42

Date Collected: 02/28/17 12:20

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.286		0.116	0.119	1.00	0.100	pCi/L	03/16/17 13:41	04/07/17 14:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.1		40 - 110					03/16/17 13:41	04/07/17 14:37	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.134	U	0.279	0.279	1.00	0.477	pCi/L	03/16/17 14:07	03/30/17 14:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.1		40 - 110					03/16/17 14:07	03/30/17 14:53	1
Y Carrier	87.1		40 - 110					03/16/17 14:07	03/30/17 14:53	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	0.420	U	0.302	0.303	5.00	0.477	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05148 FB-3

Lab Sample ID: 400-134868-43

Date Collected: 02/28/17 13:00

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0546	U	0.0765	0.0766	1.00	0.130	pCi/L	03/16/17 13:41	04/07/17 14:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					03/16/17 13:41	04/07/17 14:37	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.206	U	0.289	0.290	1.00	0.484	pCi/L	03/16/17 14:07	03/30/17 14:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					03/16/17 14:07	03/30/17 14:53	1
Y Carrier	84.9		40 - 110					03/16/17 14:07	03/30/17 14:53	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	0.261	U	0.299	0.300	5.00	0.484	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05149 MW-8

Lab Sample ID: 400-134868-44

Date Collected: 02/28/17 14:13

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00439	U	0.0861	0.0861	1.00	0.173	pCi/L	03/16/17 13:41	04/07/17 14:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					03/16/17 13:41	04/07/17 14:33	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.00847	U	0.277	0.277	1.00	0.499	pCi/L	03/16/17 14:07	03/30/17 14:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					03/16/17 14:07	03/30/17 14:53	1
Y Carrier	84.1		40 - 110					03/16/17 14:07	03/30/17 14:53	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	-0.00408	U	0.290	0.290	5.00	0.499	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05150 MW-4

Lab Sample ID: 400-134868-45

Date Collected: 02/28/17 15:50

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.186		0.115	0.116	1.00	0.154	pCi/L	03/16/17 13:41	04/07/17 14:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					03/16/17 13:41	04/07/17 14:33	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.181	U	0.252	0.253	1.00	0.422	pCi/L	03/16/17 14:07	03/30/17 14:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					03/16/17 14:07	03/30/17 14:53	1
Y Carrier	85.2		40 - 110					03/16/17 14:07	03/30/17 14:53	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	0.367	U	0.277	0.278	5.00	0.422	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05151 MW-4 DUP

Lab Sample ID: 400-134868-46

Date Collected: 02/28/17 15:50

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.242		0.119	0.121	1.00	0.137	pCi/L	03/16/17 13:41	04/07/17 14:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		40 - 110					03/16/17 13:41	04/07/17 14:33	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.432		0.273	0.276	1.00	0.414	pCi/L	03/16/17 14:07	03/30/17 14:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.3		40 - 110					03/16/17 14:07	03/30/17 14:53	1
Y Carrier	86.7		40 - 110					03/16/17 14:07	03/30/17 14:53	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	0.674		0.298	0.301	5.00	0.414	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05152 MW-2

Lab Sample ID: 400-134868-47

Date Collected: 03/01/17 10:30

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0514	U	0.0793	0.0795	1.00	0.137	pCi/L	03/16/17 13:41	04/07/17 14:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110					03/16/17 13:41	04/07/17 14:33	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.166	U	0.249	0.250	1.00	0.420	pCi/L	03/16/17 14:07	03/30/17 14:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110					03/16/17 14:07	03/30/17 14:53	1
Y Carrier	86.4		40 - 110					03/16/17 14:07	03/30/17 14:53	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	0.217	U	0.262	0.262	5.00	0.420	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05153 MW-3

Lab Sample ID: 400-134868-48

Date Collected: 03/01/17 11:40

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0126	U	0.0676	0.0676	1.00	0.146	pCi/L	03/16/17 13:41	04/07/17 14:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.1		40 - 110					03/16/17 13:41	04/07/17 14:38	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.111	U	0.289	0.289	1.00	0.499	pCi/L	03/16/17 14:07	03/30/17 14:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.1		40 - 110					03/16/17 14:07	03/30/17 14:54	1
Y Carrier	83.4		40 - 110					03/16/17 14:07	03/30/17 14:54	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	0.0981	U	0.297	0.297	5.00	0.499	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05154 EB-1

Lab Sample ID: 400-134868-49

Date Collected: 03/01/17 12:30

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0403	U	0.0754	0.0755	1.00	0.176	pCi/L	03/16/17 14:38	04/07/17 16:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					03/16/17 14:38	04/07/17 16:55	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.250	U*	0.284	0.285	1.00	0.466	pCi/L	03/16/17 15:16	03/31/17 10:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					03/16/17 15:16	03/31/17 10:39	1
Y Carrier	75.1		40 - 110					03/16/17 15:16	03/31/17 10:39	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	0.209	U	0.294	0.295	5.00	0.466	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05155 MW-18

Lab Sample ID: 400-134868-50

Date Collected: 02/28/17 10:45

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.466		0.138	0.145	1.00	0.124	pCi/L	03/16/17 14:38	04/07/17 16:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					03/16/17 14:38	04/07/17 16:55	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.261	U *	0.293	0.294	1.00	0.481	pCi/L	03/16/17 15:16	03/31/17 10:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					03/16/17 15:16	03/31/17 10:39	1
Y Carrier	77.4		40 - 110					03/16/17 15:16	03/31/17 10:39	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	0.727		0.324	0.327	5.00	0.481	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05156 MW-20

Lab Sample ID: 400-134868-51

Date Collected: 02/28/17 11:54

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	12.9		0.762	1.39	1.00	0.149	pCi/L	03/16/17 14:38	04/07/17 16:55	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					03/16/17 14:38	04/07/17 16:55	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.990	*	0.394	0.405	1.00	0.548	pCi/L	03/16/17 15:16	03/31/17 10:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					03/16/17 15:16	03/31/17 10:39	1
Y Carrier	72.9		40 - 110					03/16/17 15:16	03/31/17 10:39	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	13.9		0.858	1.45	5.00	0.548	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05157 MW-17

Lab Sample ID: 400-134868-52

Date Collected: 02/28/17 13:40

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.231		0.123	0.124	1.00	0.154	pCi/L	03/16/17 14:38	04/08/17 10:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					03/16/17 14:38	04/08/17 10:28	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.116	U*	0.323	0.323	1.00	0.560	pCi/L	03/16/17 15:16	03/31/17 10:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					03/16/17 15:16	03/31/17 10:40	1
Y Carrier	74.8		40 - 110					03/16/17 15:16	03/31/17 10:40	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	0.347	U	0.346	0.346	5.00	0.560	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05158 MW-17 DUP

Lab Sample ID: 400-134868-53

Date Collected: 02/28/17 13:40

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.254		0.113	0.115	1.00	0.124	pCi/L	03/16/17 14:38	04/08/17 10:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.1		40 - 110					03/16/17 14:38	04/08/17 10:29	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	*	0.352	0.359	1.00	0.504	pCi/L	03/16/17 15:16	03/31/17 10:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.1		40 - 110					03/16/17 15:16	03/31/17 10:40	1
Y Carrier	77.0		40 - 110					03/16/17 15:16	03/31/17 10:40	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		0.370	0.377	5.00	0.504	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05159 MW-16

Lab Sample ID: 400-134868-54

Date Collected: 02/28/17 15:10

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	2.39		0.313	0.380	1.00	0.138	pCi/L	03/16/17 14:38	04/08/17 10:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					03/16/17 14:38	04/08/17 10:29	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.22	U G	0.807	0.815	1.00	1.23	pCi/L	04/03/17 10:43	04/06/17 12:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.1		40 - 110					04/03/17 10:43	04/06/17 12:48	1
Y Carrier	89.7		40 - 110					04/03/17 10:43	04/06/17 12:48	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	3.61		0.866	0.899	5.00	1.23	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05160 FB-1

Lab Sample ID: 400-134868-55

Date Collected: 02/28/17 15:35

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0524	U	0.0874	0.0876	1.00	0.153	pCi/L	03/16/17 14:38	04/07/17 18:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					03/16/17 14:38	04/07/17 18:19	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.169	U *	0.292	0.293	1.00	0.551	pCi/L	03/16/17 15:16	03/31/17 10:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					03/16/17 15:16	03/31/17 10:40	1
Y Carrier	78.9		40 - 110					03/16/17 15:16	03/31/17 10:40	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	-0.116	U	0.305	0.306	5.00	0.551	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05161 MW-21

Lab Sample ID: 400-134868-56

Date Collected: 03/01/17 10:02

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.126	U	0.106	0.107	1.00	0.157	pCi/L	03/16/17 14:38	04/07/17 18:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					03/16/17 14:38	04/07/17 18:20	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.253	U*	0.313	0.314	1.00	0.518	pCi/L	03/16/17 15:16	03/31/17 10:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					03/16/17 15:16	03/31/17 10:40	1
Y Carrier	79.6		40 - 110					03/16/17 15:16	03/31/17 10:40	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	0.378	U	0.330	0.331	5.00	0.518	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05162 MW-6

Lab Sample ID: 400-134868-57

Date Collected: 03/01/17 11:03

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.163	U	0.127	0.128	1.00	0.187	pCi/L	03/16/17 14:38	04/07/17 18:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					03/16/17 14:38	04/07/17 18:19	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.00310	U*	0.298	0.298	1.00	0.536	pCi/L	03/16/17 15:16	03/31/17 10:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					03/16/17 15:16	03/31/17 10:40	1
Y Carrier	77.4		40 - 110					03/16/17 15:16	03/31/17 10:40	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	0.166	U	0.324	0.324	5.00	0.536	pCi/L		04/12/17 14:20	1

Client Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05163 MW-7

Lab Sample ID: 400-134868-58

Date Collected: 03/01/17 12:23

Matrix: Water

Date Received: 03/09/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.162		0.112	0.113	1.00	0.153	pCi/L	03/16/17 14:38	04/07/17 18:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					03/16/17 14:38	04/07/17 18:19	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0508	U *	0.325	0.325	1.00	0.575	pCi/L	03/16/17 15:16	03/31/17 10:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					03/16/17 15:16	03/31/17 10:40	1
Y Carrier	74.8		40 - 110					03/16/17 15:16	03/31/17 10:40	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	0.213	U	0.344	0.344	5.00	0.575	pCi/L		04/12/17 14:20	1

Definitions/Glossary

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

TestAmerica Job ID: 400-134868-2
SDG: Gaston Ash Pond (6)

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.
*	LCS or LCSD is outside acceptance limits.
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, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
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
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: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05135 FB-2

Lab Sample ID: 400-134868-30

Date Collected: 02/27/17 13:37

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298020	03/16/17 13:41	MBC	TAL SL
Total/NA	Analysis	9315		1	302163	04/07/17 06:47	RTM	TAL SL
Total/NA	Prep	PrecSep_0			298025	03/16/17 14:07	MBC	TAL SL
Total/NA	Analysis	9320		1	300765	03/30/17 14:52	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Client Sample ID: AX05136 MW-15R

Lab Sample ID: 400-134868-31

Date Collected: 02/27/17 13:57

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298020	03/16/17 13:41	MBC	TAL SL
Total/NA	Analysis	9315		1	302163	04/07/17 06:47	RTM	TAL SL
Total/NA	Prep	PrecSep_0			298025	03/16/17 14:07	MBC	TAL SL
Total/NA	Analysis	9320		1	300765	03/30/17 14:52	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Client Sample ID: AX05137 MW-14

Lab Sample ID: 400-134868-32

Date Collected: 02/27/17 15:19

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298020	03/16/17 13:41	MBC	TAL SL
Total/NA	Analysis	9315		1	302163	04/07/17 06:47	RTM	TAL SL
Total/NA	Prep	PrecSep_0			298025	03/16/17 14:07	MBC	TAL SL
Total/NA	Analysis	9320		1	300765	03/30/17 14:52	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Client Sample ID: AX05138 MW-13

Lab Sample ID: 400-134868-33

Date Collected: 02/28/17 09:42

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298020	03/16/17 13:41	MBC	TAL SL
Total/NA	Analysis	9315		1	302163	04/07/17 06:48	RTM	TAL SL
Total/NA	Prep	PrecSep_0			298025	03/16/17 14:07	MBC	TAL SL
Total/NA	Analysis	9320		1	300765	03/30/17 14:52	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05139 MW-12

Lab Sample ID: 400-134868-34

Date Collected: 02/28/17 14:14

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298020	03/16/17 13:41	MBC	TAL SL
Total/NA	Analysis	9315		1	302105	04/07/17 10:18	MLK	TAL SL
Total/NA	Prep	PrecSep_0			298025	03/16/17 14:07	MBC	TAL SL
Total/NA	Analysis	9320		1	300765	03/30/17 14:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Client Sample ID: AX05140 MW-11

Lab Sample ID: 400-134868-35

Date Collected: 02/28/17 16:14

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298020	03/16/17 13:41	MBC	TAL SL
Total/NA	Analysis	9315		1	302124	04/07/17 10:19	MLK	TAL SL
Total/NA	Prep	PrecSep_0			298025	03/16/17 14:07	MBC	TAL SL
Total/NA	Analysis	9320		1	300765	03/30/17 14:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Client Sample ID: AX05141 MW-11 DUP

Lab Sample ID: 400-134868-36

Date Collected: 02/28/17 16:14

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298020	03/16/17 13:41	MBC	TAL SL
Total/NA	Analysis	9315		1	302124	04/07/17 10:19	MLK	TAL SL
Total/NA	Prep	PrecSep_0			298025	03/16/17 14:07	MBC	TAL SL
Total/NA	Analysis	9320		1	300765	03/30/17 14:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Client Sample ID: AX05142 MW-10

Lab Sample ID: 400-134868-37

Date Collected: 02/28/17 17:15

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298020	03/16/17 13:41	MBC	TAL SL
Total/NA	Analysis	9315		1	302124	04/07/17 16:59	MLK	TAL SL
Total/NA	Prep	PrecSep_0			298025	03/16/17 14:07	MBC	TAL SL
Total/NA	Analysis	9320		1	300765	03/30/17 14:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05143 MW-5

Lab Sample ID: 400-134868-38

Date Collected: 03/01/17 09:38

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298020	03/16/17 13:41	MBC	TAL SL
Total/NA	Analysis	9315		1	302163	04/07/17 10:30	RTM	TAL SL
Total/NA	Prep	PrecSep_0			298025	03/16/17 14:07	MBC	TAL SL
Total/NA	Analysis	9320		1	300765	03/30/17 14:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Client Sample ID: AX05144 MW-22

Lab Sample ID: 400-134868-39

Date Collected: 03/01/17 10:45

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298020	03/16/17 13:41	MBC	TAL SL
Total/NA	Analysis	9315		1	302163	04/07/17 10:30	RTM	TAL SL
Total/NA	Prep	PrecSep_0			298025	03/16/17 14:07	MBC	TAL SL
Total/NA	Analysis	9320		1	300765	03/30/17 14:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Client Sample ID: AX05145 MW-19

Lab Sample ID: 400-134868-40

Date Collected: 02/27/17 15:08

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298020	03/16/17 13:41	MBC	TAL SL
Total/NA	Analysis	9315		1	302163	04/07/17 10:30	RTM	TAL SL
Total/NA	Prep	PrecSep_0			298025	03/16/17 14:07	MBC	TAL SL
Total/NA	Analysis	9320		1	300765	03/30/17 14:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Client Sample ID: AX05146 MW-1

Lab Sample ID: 400-134868-41

Date Collected: 02/28/17 10:30

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298020	03/16/17 13:41	MBC	TAL SL
Total/NA	Analysis	9315		1	302163	04/07/17 10:30	RTM	TAL SL
Total/NA	Prep	PrecSep_0			298025	03/16/17 14:07	MBC	TAL SL
Total/NA	Analysis	9320		1	300765	03/30/17 14:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05147 MW-9

Lab Sample ID: 400-134868-42

Date Collected: 02/28/17 12:20

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298020	03/16/17 13:41	MBC	TAL SL
Total/NA	Analysis	9315		1	302105	04/07/17 14:37	MLK	TAL SL
Total/NA	Prep	PrecSep_0			298025	03/16/17 14:07	MBC	TAL SL
Total/NA	Analysis	9320		1	300765	03/30/17 14:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Client Sample ID: AX05148 FB-3

Lab Sample ID: 400-134868-43

Date Collected: 02/28/17 13:00

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298020	03/16/17 13:41	MBC	TAL SL
Total/NA	Analysis	9315		1	302105	04/07/17 14:37	MLK	TAL SL
Total/NA	Prep	PrecSep_0			298025	03/16/17 14:07	MBC	TAL SL
Total/NA	Analysis	9320		1	300765	03/30/17 14:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Client Sample ID: AX05149 MW-8

Lab Sample ID: 400-134868-44

Date Collected: 02/28/17 14:13

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298020	03/16/17 13:41	MBC	TAL SL
Total/NA	Analysis	9315		1	302163	04/07/17 14:33	RTM	TAL SL
Total/NA	Prep	PrecSep_0			298025	03/16/17 14:07	MBC	TAL SL
Total/NA	Analysis	9320		1	300765	03/30/17 14:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Client Sample ID: AX05150 MW-4

Lab Sample ID: 400-134868-45

Date Collected: 02/28/17 15:50

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298020	03/16/17 13:41	MBC	TAL SL
Total/NA	Analysis	9315		1	302163	04/07/17 14:33	RTM	TAL SL
Total/NA	Prep	PrecSep_0			298025	03/16/17 14:07	MBC	TAL SL
Total/NA	Analysis	9320		1	300765	03/30/17 14:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05151 MW-4 DUP

Lab Sample ID: 400-134868-46

Date Collected: 02/28/17 15:50

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298020	03/16/17 13:41	MBC	TAL SL
Total/NA	Analysis	9315		1	302163	04/07/17 14:33	RTM	TAL SL
Total/NA	Prep	PrecSep_0			298025	03/16/17 14:07	MBC	TAL SL
Total/NA	Analysis	9320		1	300765	03/30/17 14:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Client Sample ID: AX05152 MW-2

Lab Sample ID: 400-134868-47

Date Collected: 03/01/17 10:30

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298020	03/16/17 13:41	MBC	TAL SL
Total/NA	Analysis	9315		1	302163	04/07/17 14:33	RTM	TAL SL
Total/NA	Prep	PrecSep_0			298025	03/16/17 14:07	MBC	TAL SL
Total/NA	Analysis	9320		1	300765	03/30/17 14:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Client Sample ID: AX05153 MW-3

Lab Sample ID: 400-134868-48

Date Collected: 03/01/17 11:40

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298020	03/16/17 13:41	MBC	TAL SL
Total/NA	Analysis	9315		1	302124	04/07/17 14:38	MLK	TAL SL
Total/NA	Prep	PrecSep_0			298025	03/16/17 14:07	MBC	TAL SL
Total/NA	Analysis	9320		1	300745	03/30/17 14:54	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Client Sample ID: AX05154 EB-1

Lab Sample ID: 400-134868-49

Date Collected: 03/01/17 12:30

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298032	03/16/17 14:38	BME	TAL SL
Total/NA	Analysis	9315		1	302163	04/07/17 16:55	RTM	TAL SL
Total/NA	Prep	PrecSep_0			298036	03/16/17 15:16	BME	TAL SL
Total/NA	Analysis	9320		1	300931	03/31/17 10:39	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Client Sample ID: AX05155 MW-18

Lab Sample ID: 400-134868-50

Date Collected: 02/28/17 10:45

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298032	03/16/17 14:38	BME	TAL SL
Total/NA	Analysis	9315		1	302163	04/07/17 16:55	RTM	TAL SL
Total/NA	Prep	PrecSep_0			298036	03/16/17 15:16	BME	TAL SL
Total/NA	Analysis	9320		1	300931	03/31/17 10:39	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Client Sample ID: AX05156 MW-20

Lab Sample ID: 400-134868-51

Date Collected: 02/28/17 11:54

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298032	03/16/17 14:38	BME	TAL SL
Total/NA	Analysis	9315		1	302163	04/07/17 16:55	RTM	TAL SL
Total/NA	Prep	PrecSep_0			298036	03/16/17 15:16	BME	TAL SL
Total/NA	Analysis	9320		1	300931	03/31/17 10:39	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Client Sample ID: AX05157 MW-17

Lab Sample ID: 400-134868-52

Date Collected: 02/28/17 13:40

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298032	03/16/17 14:38	BME	TAL SL
Total/NA	Analysis	9315		1	302146	04/08/17 10:28	RTM	TAL SL
Total/NA	Prep	PrecSep_0			298036	03/16/17 15:16	BME	TAL SL
Total/NA	Analysis	9320		1	300931	03/31/17 10:40	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Client Sample ID: AX05158 MW-17 DUP

Lab Sample ID: 400-134868-53

Date Collected: 02/28/17 13:40

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298032	03/16/17 14:38	BME	TAL SL
Total/NA	Analysis	9315		1	302146	04/08/17 10:29	RTM	TAL SL
Total/NA	Prep	PrecSep_0			298036	03/16/17 15:16	BME	TAL SL
Total/NA	Analysis	9320		1	300931	03/31/17 10:40	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-134868-2
SDG: Gaston Ash Pond (6)

Client Sample ID: AX05159 MW-16

Lab Sample ID: 400-134868-54

Date Collected: 02/28/17 15:10

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298032	03/16/17 14:38	BME	TAL SL
Total/NA	Analysis	9315		1	302146	04/08/17 10:29	RTM	TAL SL
Total/NA	Prep	PrecSep_0			301145	04/03/17 10:43	LDE	TAL SL
Total/NA	Analysis	9320		1	301679	04/06/17 12:48	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Client Sample ID: AX05160 FB-1

Lab Sample ID: 400-134868-55

Date Collected: 02/28/17 15:35

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298032	03/16/17 14:38	BME	TAL SL
Total/NA	Analysis	9315		1	302163	04/07/17 18:19	RTM	TAL SL
Total/NA	Prep	PrecSep_0			298036	03/16/17 15:16	BME	TAL SL
Total/NA	Analysis	9320		1	300931	03/31/17 10:40	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Client Sample ID: AX05161 MW-21

Lab Sample ID: 400-134868-56

Date Collected: 03/01/17 10:02

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298032	03/16/17 14:38	BME	TAL SL
Total/NA	Analysis	9315		1	302163	04/07/17 18:20	RTM	TAL SL
Total/NA	Prep	PrecSep_0			298036	03/16/17 15:16	BME	TAL SL
Total/NA	Analysis	9320		1	300931	03/31/17 10:40	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Client Sample ID: AX05162 MW-6

Lab Sample ID: 400-134868-57

Date Collected: 03/01/17 11:03

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298032	03/16/17 14:38	BME	TAL SL
Total/NA	Analysis	9315		1	302163	04/07/17 18:19	RTM	TAL SL
Total/NA	Prep	PrecSep_0			298036	03/16/17 15:16	BME	TAL SL
Total/NA	Analysis	9320		1	300931	03/31/17 10:40	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-134868-2
SDG: Gaston Ash Pond (6)

Client Sample ID: AX05163 MW-7

Lab Sample ID: 400-134868-58

Date Collected: 03/01/17 12:23

Matrix: Water

Date Received: 03/09/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			298032	03/16/17 14:38	BME	TAL SL
Total/NA	Analysis	9315		1	302163	04/07/17 18:19	RTM	TAL SL
Total/NA	Prep	PrecSep_0			298036	03/16/17 15:16	BME	TAL SL
Total/NA	Analysis	9320		1	300931	03/31/17 10:40	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	303294	04/12/17 14:20	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: 400-134868-2
 SDG: Gaston Ash Pond (6)

Rad

Prep Batch: 298020

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-134868-30	AX05135 FB-2	Total/NA	Water	PrecSep-21	
400-134868-31	AX05136 MW-15R	Total/NA	Water	PrecSep-21	
400-134868-32	AX05137 MW-14	Total/NA	Water	PrecSep-21	
400-134868-33	AX05138 MW-13	Total/NA	Water	PrecSep-21	
400-134868-34	AX05139 MW-12	Total/NA	Water	PrecSep-21	
400-134868-35	AX05140 MW-11	Total/NA	Water	PrecSep-21	
400-134868-36	AX05141 MW-11 DUP	Total/NA	Water	PrecSep-21	
400-134868-37	AX05142 MW-10	Total/NA	Water	PrecSep-21	
400-134868-38	AX05143 MW-5	Total/NA	Water	PrecSep-21	
400-134868-39	AX05144 MW-22	Total/NA	Water	PrecSep-21	
400-134868-40	AX05145 MW-19	Total/NA	Water	PrecSep-21	
400-134868-41	AX05146 MW-1	Total/NA	Water	PrecSep-21	
400-134868-42	AX05147 MW-9	Total/NA	Water	PrecSep-21	
400-134868-43	AX05148 FB-3	Total/NA	Water	PrecSep-21	
400-134868-44	AX05149 MW-8	Total/NA	Water	PrecSep-21	
400-134868-45	AX05150 MW-4	Total/NA	Water	PrecSep-21	
400-134868-46	AX05151 MW-4 DUP	Total/NA	Water	PrecSep-21	
400-134868-47	AX05152 MW-2	Total/NA	Water	PrecSep-21	
400-134868-48	AX05153 MW-3	Total/NA	Water	PrecSep-21	
MB 160-298020/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-298020/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-134868-33 DU	AX05138 MW-13	Total/NA	Water	PrecSep-21	

Prep Batch: 298025

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-134868-30	AX05135 FB-2	Total/NA	Water	PrecSep_0	
400-134868-31	AX05136 MW-15R	Total/NA	Water	PrecSep_0	
400-134868-32	AX05137 MW-14	Total/NA	Water	PrecSep_0	
400-134868-33	AX05138 MW-13	Total/NA	Water	PrecSep_0	
400-134868-34	AX05139 MW-12	Total/NA	Water	PrecSep_0	
400-134868-35	AX05140 MW-11	Total/NA	Water	PrecSep_0	
400-134868-36	AX05141 MW-11 DUP	Total/NA	Water	PrecSep_0	
400-134868-37	AX05142 MW-10	Total/NA	Water	PrecSep_0	
400-134868-38	AX05143 MW-5	Total/NA	Water	PrecSep_0	
400-134868-39	AX05144 MW-22	Total/NA	Water	PrecSep_0	
400-134868-40	AX05145 MW-19	Total/NA	Water	PrecSep_0	
400-134868-41	AX05146 MW-1	Total/NA	Water	PrecSep_0	
400-134868-42	AX05147 MW-9	Total/NA	Water	PrecSep_0	
400-134868-43	AX05148 FB-3	Total/NA	Water	PrecSep_0	
400-134868-44	AX05149 MW-8	Total/NA	Water	PrecSep_0	
400-134868-45	AX05150 MW-4	Total/NA	Water	PrecSep_0	
400-134868-46	AX05151 MW-4 DUP	Total/NA	Water	PrecSep_0	
400-134868-47	AX05152 MW-2	Total/NA	Water	PrecSep_0	
400-134868-48	AX05153 MW-3	Total/NA	Water	PrecSep_0	
MB 160-298025/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-298025/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-134868-33 DU	AX05138 MW-13	Total/NA	Water	PrecSep_0	

Prep Batch: 298032

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-134868-49	AX05154 EB-1	Total/NA	Water	PrecSep-21	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Rad (Continued)

Prep Batch: 298032 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-134868-50	AX05155 MW-18	Total/NA	Water	PrecSep-21	
400-134868-51	AX05156 MW-20	Total/NA	Water	PrecSep-21	
400-134868-52	AX05157 MW-17	Total/NA	Water	PrecSep-21	
400-134868-53	AX05158 MW-17 DUP	Total/NA	Water	PrecSep-21	
400-134868-54	AX05159 MW-16	Total/NA	Water	PrecSep-21	
400-134868-55	AX05160 FB-1	Total/NA	Water	PrecSep-21	
400-134868-56	AX05161 MW-21	Total/NA	Water	PrecSep-21	
400-134868-57	AX05162 MW-6	Total/NA	Water	PrecSep-21	
400-134868-58	AX05163 MW-7	Total/NA	Water	PrecSep-21	
MB 160-298032/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-298032/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-134868-50 DU	AX05155 MW-18	Total/NA	Water	PrecSep-21	

Prep Batch: 298036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-134868-49	AX05154 EB-1	Total/NA	Water	PrecSep_0	
400-134868-50	AX05155 MW-18	Total/NA	Water	PrecSep_0	
400-134868-51	AX05156 MW-20	Total/NA	Water	PrecSep_0	
400-134868-52	AX05157 MW-17	Total/NA	Water	PrecSep_0	
400-134868-53	AX05158 MW-17 DUP	Total/NA	Water	PrecSep_0	
400-134868-55	AX05160 FB-1	Total/NA	Water	PrecSep_0	
400-134868-56	AX05161 MW-21	Total/NA	Water	PrecSep_0	
400-134868-57	AX05162 MW-6	Total/NA	Water	PrecSep_0	
400-134868-58	AX05163 MW-7	Total/NA	Water	PrecSep_0	
MB 160-298036/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-298036/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-134868-50 DU	AX05155 MW-18	Total/NA	Water	PrecSep_0	

Prep Batch: 301145

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-134868-54	AX05159 MW-16	Total/NA	Water	PrecSep_0	
MB 160-301145/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-301145/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-301145/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-298020/1-A

Matrix: Water

Analysis Batch: 302124

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 298020

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.05750	U	0.0885	0.0886	1.00	0.152	pCi/L	03/16/17 13:41	04/07/17 06:45	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		Prepared	Analyzed					
Ba Carrier	93.5		40 - 110	03/16/17 13:41	04/07/17 06:45	1				

Lab Sample ID: LCS 160-298020/2-A

Matrix: Water

Analysis Batch: 302124

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 298020

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	15.2	13.47		1.41	1.00	0.127	pCi/L	89	68 - 137
Carrier	LCS LCS		Limits			Prepared	Analyzed	Dil Fac	
Ba Carrier	%Yield	Qualifier		Prepared	Analyzed				
Ba Carrier	96.5		40 - 110	03/16/17 13:41	04/07/17 06:45	1			

Lab Sample ID: 400-134868-33 DU

Matrix: Water

Analysis Batch: 302105

Client Sample ID: AX05138 MW-13

Prep Type: Total/NA

Prep Batch: 298020

Analyte	Sample Sample		DU	DU	Total	RL	MDC	Unit	RER	RER
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					Limit
Radium-226	0.409		0.5985		0.151	1.00	0.0772	pCi/L	0.67	1
Carrier	DU DU		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		Prepared	Analyzed					
Ba Carrier	94.4		40 - 110	03/16/17 14:38	04/07/17 16:53	1				

Lab Sample ID: MB 160-298032/1-A

Matrix: Water

Analysis Batch: 302105

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 298032

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.1545		0.0940	0.0950	1.00	0.108	pCi/L	03/16/17 14:38	04/07/17 16:53	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		Prepared	Analyzed					
Ba Carrier	91.7		40 - 110	03/16/17 14:38	04/07/17 16:53	1				

Lab Sample ID: LCS 160-298032/2-A

Matrix: Water

Analysis Batch: 302105

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 298032

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	15.2	13.42		1.47	1.00	0.165	pCi/L	89	68 - 137

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

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

Lab Sample ID: LCS 160-298032/2-A
Matrix: Water
Analysis Batch: 302105

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 298032

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	73.7		40 - 110

Lab Sample ID: 400-134868-50 DU
Matrix: Water
Analysis Batch: 302163

Client Sample ID: AX05155 MW-18
Prep Type: Total/NA
Prep Batch: 298032

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.466		0.6027		0.164	1.00	0.115	pCi/L	0.44	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	87.6		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-298025/1-A
Matrix: Water
Analysis Batch: 300765

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 298025

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.6243		0.307	0.312	1.00	0.446	pCi/L	03/16/17 14:07	03/30/17 14:52	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		40 - 110	03/16/17 14:07	03/30/17 14:52	1
Y Carrier	87.5		40 - 110	03/16/17 14:07	03/30/17 14:52	1

Lab Sample ID: LCS 160-298025/2-A
Matrix: Water
Analysis Batch: 300765

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 298025

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	18.2	18.82		2.02	1.00	0.465	pCi/L	103	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	96.5		40 - 110
Y Carrier	86.0		40 - 110

Lab Sample ID: 400-134868-33 DU
Matrix: Water
Analysis Batch: 300765

Client Sample ID: AX05138 MW-13
Prep Type: Total/NA
Prep Batch: 298025

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.220	U	0.2055	U	0.221	1.00	0.360	pCi/L	0.03	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

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

Lab Sample ID: 400-134868-33 DU
Matrix: Water
Analysis Batch: 300765

Client Sample ID: AX05138 MW-13
Prep Type: Total/NA
Prep Batch: 298025

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	94.4		40 - 110
Y Carrier	86.7		40 - 110

Lab Sample ID: MB 160-298036/1-A
Matrix: Water
Analysis Batch: 300931

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 298036

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.5939		0.349	0.353	1.00	0.525	pCi/L	03/16/17 15:16	03/31/17 10:39	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	91.7		40 - 110	03/16/17 15:16	03/31/17 10:39	1
Y Carrier	72.9		40 - 110	03/16/17 15:16	03/31/17 10:39	1

Lab Sample ID: LCS 160-298036/2-A
Matrix: Water
Analysis Batch: 300931

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 298036

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	18.2	26.51	*	2.87	1.00	0.691	pCi/L	146	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	73.7		40 - 110
Y Carrier	72.9		40 - 110

Lab Sample ID: 400-134868-50 DU
Matrix: Water
Analysis Batch: 300931

Client Sample ID: AX05155 MW-18
Prep Type: Total/NA
Prep Batch: 298036

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.261	U *	0.5289	*	0.281	1.00	0.409	pCi/L	0.47	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	87.6		40 - 110
Y Carrier	77.0		40 - 110

Lab Sample ID: MB 160-301145/1-A
Matrix: Water
Analysis Batch: 301679

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 301145

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2461	U G	0.799	0.799	1.00	1.39	pCi/L	04/03/17 10:43	04/06/17 12:47	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-134868-2
 SDG: Gaston Ash Pond (6)

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

Lab Sample ID: MB 160-301145/1-A
Matrix: Water
Analysis Batch: 301679

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 301145

Carrier	MB %Yield	MB Qualifier	Limits
Ba Carrier	100		40 - 110
Y Carrier	88.2		40 - 110

Prepared	Analyzed	Dil Fac
04/03/17 10:43	04/06/17 12:47	1
04/03/17 10:43	04/06/17 12:47	1

Lab Sample ID: LCS 160-301145/2-A
Matrix: Water
Analysis Batch: 301679

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 301145

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	54.5	60.12		6.38	1.00	1.39	pCi/L	110	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	98.5		40 - 110
Y Carrier	88.2		40 - 110

Lab Sample ID: LCSD 160-301145/3-A
Matrix: Water
Analysis Batch: 301679

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 301145

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	54.5	55.50		5.91	1.00	1.20	pCi/L	102	56 - 140	0.38	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	101		40 - 110
Y Carrier	89.0		40 - 110

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

Lab Sample ID: 400-134868-33 DU
Matrix: Water
Analysis Batch: 303294

Client Sample ID: AX05138 MW-13
Prep Type: Total/NA

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Combined Radium 226 + 228	0.629		0.8040		0.268	5.00	0.360	pCi/L	0.33	

Lab Sample ID: 400-134868-50 DU
Matrix: Water
Analysis Batch: 303294

Client Sample ID: AX05155 MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Combined Radium 226 + 228	0.727		1.132		0.325	5.00	0.409	pCi/L	0.62	

TestAmerica Pensacola

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

Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information		Lab PHL: Whitmire, Cheyenne R		Carrier Tracking No(s):	
Client Contact: Sarah Copeland		E-Mail: cheyenne.whitmire@testamericainc.com		COC No: 400-56625-24537.1	
Company: Alabama Power General Test Laboratory		Due Date Requested:		Page: Page 1 of 3	
Address: 744 County Rd 87 GSC #8		TAI Requested (days): Routine		Job #: 400-134868	
City: Calera		PO #:		Preservation Codes:	
State, Zip: AL, 35040		WO #:		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NeHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O8 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)	
Phone: 205-664-6121 (Tel)		Project #:		Other:	
Email: sgcopela@southernco.com		CCR			
Site: Gaston Ash Pond (6)		SSOW#:			
Sample Identification		Sample Date		Sample Time	
AX05135		2/27/17		1337	
AX05136		2/27/17		1357	
AX05137		2/27/17		1519	
AX05138		2/28/17		0942	
AX05139		2/28/17		1414	
AX05140		2/28/17		1614	
AX05141		2/28/17		1614	
AX05142		2/28/17		1715	
AX05143		3/1/17		0938	
AX05144		3/1/17		1045	
Possible Hazard Identification		<input type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable	
Deliverable Requested: I, II, III, IV, Other (specify)		<input type="checkbox"/> Skin Irritant		<input type="checkbox"/> Unknown	
Empty Kit Relinquished by: Sarah Copeland		Date: 03/10/2017: 1250		Company: APC	
Relinquished by:		Date/Time:		Date/Time:	
Relinquished by:		Date/Time:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:	
Analysis Requested		9316_Ra226_9320_Ra228_Ra226Ra228_GFPc		400-134868 COC	
Total Number of Containers		Field Filtered Sample (Yes or No)		Perform MS (MS/Yes or No)	
FB-2 (Field Blank)		D		X	
MW-15R		X		X	
MW-14		X		X	
MW-13		Y		X	
MW-12		X		X	
MW-11		X		X	
MW-11 Dup (Sample Duplicate)		X		X	
MW-10		X		X	
MW-5		X		X	
MW-22		X		X	
Special Instructions/Note:		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: <i>Sarah Copeland</i>		Date/Time: 3/9/2017 16:00	
		Received by:		Date/Time:	
		Received by:		Date/Time:	

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 Pensacola, FL 32514
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Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information		Sampler: Jason Rouss		Lab PM: Whitmire, Cheyenne R		Carrier Tracking No(s):		COC No: 400-56525-24537.1	
Client Contact: Sarah Copeland		Phone:		E-Mail: cheyenne.whitmire@testamericainc.com		Page 2 of 3		Job #: 200-134868	
Company: Alabama Power General Test Laboratory		Address: 744 County Rd 87 GSC #8		City: Calera		State, Zip: AL, 35040		Phone: 205-664-6121 (Tel)	
Email: sgcopela@southemco.com		Project #: 40007143		Site: Gaston Ash Pond (6)		Due Date Requested:		Analysis Requested	
CCR		SOW#:		TAT Requested (days):		Routine		Preservation Codes:	
Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=water, BT=Tissue, P=air)		A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Arschlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Sample Identification		Field Filtered Sample (Yes or No)		Performance/SP (Yes or No)		Total Number of Containers		Special Instructions/Note:	
AX05145	2/27/17	1508	G	Water	X	X	MW-19		
AX05146	2/28/17	1030	G	Water	X	X	MW-1		
AX05147	2/28/17	1220	G	Water	X	X	MW-9		
AX05148	2/28/17	1300	G	Water	X	X	FB-3 (Field Blank)		
AX05149	2/28/17	1413	G	Water	X	X	MW-8		
AX05150	2/28/17	1550	G	Water	X	X	MW-4		
AX05151	2/28/17	1550	G	Water	X	X	MW-4 Dup (Sample Duplicate)		
AX05152	3/1/17	1030	G	Water	X	X	MW-2		
AX05153	3/1/17	1140	G	Water	X	X	MW-3		
AX05154	3/1/17	1230	G	Water	X	X	EB-1 (Equipment Blank)		
Possible Hazard Identification <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/QC Requirements:									
Empty Kit Relinquished by:		Date:		Time:		Method of Shipment:		Date/Time:	
Relinquished by: Sarah Copeland		Date/Time: 03/10/2017: 1250		Company: APC		Received by: <i>[Signature]</i>		Date/Time: 3/10/17 16:00	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Relinquished by:		Date/Time:		Company:		Received by:		Date/Time:	
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Company: APC		Company: APC	

TestAmerica Pensacola
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Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information		Lab P/M: Whitmire, Cheyenne R		Carrier Tracking No(s):	
Client Contact: Sarah Copeland		E-Mail: cheyenne.whitmire@testamericainc.com		COC No: 400-56625-24537.1	
Company: Alabama Power General Test Laboratory		Due Date Requested:		Page: 3 of 3	
Address: 744 County Rd 87 GSC #8		TAT Requested (days):		Job #: 400-134968	
City: Calera		Routine		Preservation Codes:	
State, Zip: AL, 35040		PO #:		A - HCl	
Phone: 205-664-6121 (Tel)		WO #:		M - Hexane	
Email: sgcopela@southernco.com		Project #:		N - None	
CCR		40007143		O - Ash/AlO2	
Site: Gaston Ash Pond (6)		SSOW#:		P - Na2SO4S	
				Q - Na2SO3	
				R - NaHSO4	
				S - H2SO4	
				T - TSP Dodecahydrate	
				U - Acetone	
				V - NCA	
				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 (W=Water, S=solid, O=soil, BT=BT, F=Fluoride, Ac=Acid)	Field Filtered Sample (Yes or No)	Form (MS/SP/MS/SP/MS/SP)	9315_Ra226, 9320_Ra226, Ra226Ra228_GFPc	D	X	Y	X	Total Number of Containers	Special Instructions/Note:
AX05165	2/28/17	1045	G	Water								1	MMW-18
AX05166	2/28/17	1154	G	Water								1	MMW-20
AX05167	2/28/17	1340	G	Water								1	MMW-17
AX05168	2/28/17	1340	G	Water								1	MMW-17 Dup (Sample Duplicate)
AX05169	2/28/17	1510	G	Water								1	MMW-16
AX05160	2/28/17	1535	G	Water								1	FB-1 (Field Blank)
AX05161	3/1/17	1002	G	Water								1	MMW-21
AX05162	3/1/17	1103	G	Water								1	MMW-6
AX05163	3/1/17	1223	G	Water								1	MMW-7

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Poison B Unknown Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by: _____ Date: _____ Time: _____

Relinquished by: Sarah Copeland Date/Time: 03/10/2017, 1250

Relinquished by: _____ Date/Time: _____

Relinquished by: _____ Date/Time: _____

Custody Seals Intact: _____ Custody Seal No.: _____

Δ Yes Δ No

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Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-134868-2
SDG Number: Gaston Ash Pond (6)

Login Number: 134868

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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.0°C, 1.1°C IR-2
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: 400-134868-2
 SDG: Gaston Ash Pond (6)

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	06-30-17
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-17
Louisiana (DW)	NELAP Secondary AB	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17

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	06-30-17
California	State Program	9	2886	03-31-18 *
Connecticut	State Program	1	PH-0241	03-31-17 *
Florida	NELAP	4	E87689	06-30-17
Illinois	NELAP	5	200023	11-30-17
Iowa	State Program	7	373	02-01-18
Kansas	NELAP	7	E-10236	10-31-17
Kentucky (DW)	State Program	4	90125	12-31-17
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-17
Louisiana (DW)	NELAP	6	LA170011	12-31-17
Maryland	State Program	3	310	09-30-17
Missouri	State Program	7	780	06-30-17
Nevada	State Program	9	MO000542017-1	07-31-17
New Jersey	NELAP	2	MO002	06-30-17 *
New York	NELAP	2	11616	03-31-17 *

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

TestAmerica Pensacola

Accreditation/Certification Summary

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

TestAmerica Job ID: 400-134868-2
SDG: Gaston Ash Pond (6)

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
North Dakota	State Program	8	R207	06-30-17
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-17
Pennsylvania	NELAP	3	68-00540	02-28-18
South Carolina	State Program	4	85002001	06-30-17
Texas	NELAP	6	T104704193-16-10	07-31-17
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		P330-17-0028	02-02-20
Utah	NELAP	8	MO000542016-8	07-31-17
Virginia	NELAP	3	460230	06-14-17
Washington	State Program	10	C592	08-30-17
West Virginia DEP	State Program	3	381	08-31-17 *

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



Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

- Field Complete
- Lab Complete

Lab ETA 03/01/2017 15:30

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Jason Rouss	Location	Gaston Ash Pond
Analysis Requested	Bottle 1 (1L): Radiological		
Comments	Radium does not require temperature preservation.		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-19R	02/27/2017	15:08	1	Groundwater		AX05145
MW-1R	02/28/2017	10:30	1	Groundwater		AX05146
MW-9R	02/28/2017	12:20	1	Groundwater		AX05147
FB-3R	02/28/2017	13:00	1	Field Blank		AX05148
MW-8R	02/28/2017	14:13	1	Groundwater		AX05149
MW-4R	02/28/2017	15:50	1	Groundwater		AX05150
MW4R Dup	02/28/2017	15:50	1	Sample Duplicate		AX05151
MW-2R	03/01/2017	10:30	1	Groundwater		AX05152
MW-3R	03/01/2017	11:40	1	Groundwater		AX05153
EB-1R	03/01/2017	12:30	1	Equipment Blank		AX05154

Relinquished By	Received By	Date/Time
	Sarah Copeland <small>Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o.ou, email=sgcopela@southernmco.com, c=US Date: 2017.03.02 09:51:06 -0600</small>	03/02/2017 09:51

SmarTroll ID	4696-23443-3-2	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	4677-23342-4-1	
Cooler Temp	NA	
Thermometer ID	NA	
pH Strip ID	5521-28270-20-14	



Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Field Complete
 Lab Complete

Lab ETA 03/01/2017 15:30

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Ben Rothschild	Location	Gaston Ash Pond
Analysis Requested	Bottle 1 (1L): Radiological		
Comments	Radium duplicate collected at MW-18R Radium does not require temperature preservation.		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-18R	02/28/2017	10:45	3	Groundwater		AX05155
MW-20R	02/28/2017	11:54	1	Groundwater		AX05156
MW-17R	02/28/2017	13:40	1	Groundwater		AX05157
MY-17R DUP	02/28/2017	13:40	1	Sample Duplicate		AX05158
MW-16R	02/28/2017	15:10	1	Groundwater		AX05159
FB-1R	02/28/2017	15:35	1	Field Blank		AX05160
MW-21R	03/01/2017	10:02	1	Groundwater		AX05161
MW-6R	03/01/2017	11:03	1	Groundwater		AX05162
MW-7R	03/01/2017	12:23	1	Groundwater		AX05163

Relinquished By	Received By	Date/Time
<i>Ben Rothschild</i>	Sarah Copeland <small>Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o.ou, email=sgcopela@southernco.com, c=US Date: 2017.03.02 09:54:57 -0600</small>	03/02/2017 09:55

SmarTroll ID	4696-23441-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	3901-20010-2-2	Cooler Temp
		Thermometer ID
		pH Strip ID
		NA
		NA
		5521-28270-20-14



Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

- Field Complete
- Lab Complete

Lab ETA 03/01/2017 13:30

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Gaston Ash Pond

Analysis Requested	Bottle 1 (1L): Radiological
Comments	Radium duplicate 2 collected MW-13 Radium does not require temperature preservation.

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
FB-2R	02/27/2017	13:37	1	Field Blank		AX05135
MW-15RR	02/27/2017	13:57	1	Groundwater		AX05136
MW-14R	02/27/2017	15:19	1	Groundwater		AX05137
MW-13R	02/28/2017	09:42	3	Groundwater		AX05138
MW-12R	02/28/2017	14:14	1	Groundwater		AX05139
MW-11R	02/28/2017	16:14	1	Groundwater		AX05140
MW-11RDUP	02/28/2017	16:14	1	Sample Duplicate		AX05141
MW-10R	02/28/2017	17:15	1	Groundwater		AX05142
MW-5R	03/01/2017	09:38	1	Groundwater		AX05143
MW-22R	03/01/2017	10:45	1	Groundwater		AX05144

Relinquished By	Received By	Date/Time
	Sarah Copeland <small>Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o.ou, email=sgcopela@southernmco.com, c=US Date: 2017.03.02 10:01:46 -06'00'</small>	03/02/2017 10:01

SmarTroll ID	5151-26193-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	3901-20009-2-1	Cooler Temp
		NA
		Thermometer ID
		NA
		pH Strip ID
		5521-28270-20-14

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

 Alabama Power



Sample Group : WMWGASAP_1096
Project/Site : Gaston Ash Pond
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:

Supervision:



Anions

Gaston Ash Pond

WMWGASAP_1096

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 anions were outsourced to Test America, Pensacola for analysis. Listed below is the job narrative provided by Test America.

Job Narrative

400-138488-1

General Chemistry

Method(s) SM 4500 F C: The sample duplicate precision for the following sample associated with batch 356861 was outside control limits. Both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL. (400-138488-A-26 DU).

Method(s) SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 355580 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 Cl- E: The native sample, matrix spike, and matrix spike duplicate (MS/MSD) associated with analytical batch 355580 were performed at the same dilution. Due to the additional level of analyte present in the spiked samples, the concentration of Chloride in the MS/MSD was above the instrument calibration range. The data have been reported and qualified.

Method(s) SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 355480 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 matrix spike / matrix spike duplicate (MS/MSD) precision for analytical batch 355741 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 355805 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: AX12075 MW-15R (400-138488-2), AX12085 MW-20 (400-138488-12), AX12086 MW-18 (400-138488-13), AX12087 MW-17 (400-138488-14), AX12088 MW-16 (400-138488-15), AX12091 MW-5 (400-138488-18), AX12092 MW-5 DUP (400-138488-19), (400-138488-A-18 MS), (400-138488-A-18 MSD), AX12093 MW-22 (400-138488-20), AX12093 MW-22 (400-138488-20[MS]), AX12093 MW-22 (400-138488-20[MSD]), AX12094 MW-21 (400-138488-21), AX12095 MW-21 DUP (400-138488-22), AX12096 MW-6 (400-138488-23) and AX12097 MW-7 (400-138488-24). Elevated reporting limits (RLs) are provided.

Method(s) SM 4500 SO4 E: The closing CCV that brackets the following samples shows on the raw data, but not in TALS. CCV: 16.30 CCB: .2062. (400-138437-C-4).

Comments

Report was revised to rerun AX12091 MW-5 (400-138488-18) and AX12092 MW-5 DUP (400-138488-19) to verify dilutions.



Metals ICP

Gaston Ash Pond

WMWGASAP_1096

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>
AX12074	20170607AK_20170622A	WMWGASAP_1096
AX12075	20170607AK_20170622A	WMWGASAP_1096
AX12076	20170607AK_20170622A	WMWGASAP_1096
AX12077	20170607AK_20170622A	WMWGASAP_1096
AX12078	20170607AK_20170622A	WMWGASAP_1096
AX12079	20170607AK_20170622A	WMWGASAP_1096
AX12080	20170607AK_20170622A	WMWGASAP_1096
AX12081	20170607AK_20170622A	WMWGASAP_1096
AX12082	20170607AK_20170622A	WMWGASAP_1096
AX12083	20170607AK_20170622A	WMWGASAP_1096
AX12084	20170607BK_20170626	WMWGASAP_1096
AX12085	20170607BK_20170626	WMWGASAP_1096
AX12086	20170607BK_20170626	WMWGASAP_1096
AX12087	20170607BK_20170626	WMWGASAP_1096
AX12088	20170607BK_20170626	WMWGASAP_1096
AX12089	20170607BK_20170626	WMWGASAP_1096
AX12090	20170607BK_20170626	WMWGASAP_1096
AX12091	20170607BK_20170626	WMWGASAP_1096
AX12092	20170607BK_20170626	WMWGASAP_1096
AX12093	20170607BK_20170626	WMWGASAP_1096
AX12094	20170607CK_20170622B	WMWGASAP_1096
AX12095	20170607CK_20170622B	WMWGASAP_1096
AX12096	20170607CK_20170622B	WMWGASAP_1096
AX12097	20170607CK_20170622B	WMWGASAP_1096
AX12098	20170607CK_20170622B	WMWGASAP_1096
AX12099	20170607CK_20170622B	WMWGASAP_1096
AX12100	20170607CK_20170622B	WMWGASAP_1096
AX12101	20170607CK_20170622B	WMWGASAP_1096
AX12102	20170607CK_20170622B	WMWGASAP_1096



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 with the exception of an additional 0.2ppm standard for Lithium in batches 20170607AK, 20170607BK and 20170607CK. All corresponding batch samples were re-analyzed in batches 20170622A, 20170626 and 20170622B, respectively, with passing criteria.
- 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 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>
AX12085	Calcium	x10
AX12086	Calcium	x10
AX12097	Calcium	x10

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



Metals ICPMS

Gaston Ash Pond

WMWGASAP_1096

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>
AX12074	595300	WMWGASAP_1096
AX12075	595300	WMWGASAP_1096
AX12076	595300	WMWGASAP_1096
AX12077	595300	WMWGASAP_1096
AX12078	595300	WMWGASAP_1096
AX12079	595300	WMWGASAP_1096
AX12080	595300	WMWGASAP_1096
AX12081	595300	WMWGASAP_1096
AX12082	595300	WMWGASAP_1096
AX12083	595300	WMWGASAP_1096
AX12084	595301	WMWGASAP_1096
AX12085	595301	WMWGASAP_1096
AX12086	595301	WMWGASAP_1096
AX12087	595301	WMWGASAP_1096
AX12088	595301	WMWGASAP_1096
AX12089	595301	WMWGASAP_1096
AX12090	595301	WMWGASAP_1096
AX12091	595301	WMWGASAP_1096
AX12092	595301	WMWGASAP_1096
AX12093	595301	WMWGASAP_1096
AX12094	595302	WMWGASAP_1096
AX12095	595302	WMWGASAP_1096
AX12096	595302	WMWGASAP_1096
AX12097	595302	WMWGASAP_1096
AX12098	595302	WMWGASAP_1096
AX12099	595302	WMWGASAP_1096
AX12100	595302	WMWGASAP_1096
AX12101	595302	WMWGASAP_1096
AX12102	595302	WMWGASAP_1096



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 Ash Pond

WMWGASAP_1096

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>
AX12074	595790	WMWGASAP_1096
AX12075	595790	WMWGASAP_1096
AX12076	595790	WMWGASAP_1096
AX12077	595790	WMWGASAP_1096
AX12078	595790	WMWGASAP_1096
AX12079	595790	WMWGASAP_1096
AX12080	595790	WMWGASAP_1096
AX12081	595790	WMWGASAP_1096
AX12082	595790	WMWGASAP_1096
AX12083	595790	WMWGASAP_1096
AX12084	595791	WMWGASAP_1096
AX12085	595791	WMWGASAP_1096
AX12086	595791	WMWGASAP_1096
AX12087	595791	WMWGASAP_1096
AX12088	595791	WMWGASAP_1096
AX12089	595791	WMWGASAP_1096
AX12090	595791	WMWGASAP_1096
AX12091	595791	WMWGASAP_1096
AX12092	595791	WMWGASAP_1096
AX12093	595791	WMWGASAP_1096
AX12094	595792	WMWGASAP_1096
AX12095	595792	WMWGASAP_1096
AX12096	595792	WMWGASAP_1096
AX12097	595792	WMWGASAP_1096
AX12098	595792	WMWGASAP_1096
AX12099	595792	WMWGASAP_1096
AX12100	595792	WMWGASAP_1096
AX12101	595792	WMWGASAP_1096
AX12102	595792	WMWGASAP_1096



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 Ash Pond

WMWGASAP_1096

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>
AX12074	595213	WMWGASAP_1096
AX12075	595213	WMWGASAP_1096
AX12076	595213	WMWGASAP_1096
AX12077	595213	WMWGASAP_1096
AX12078	595213	WMWGASAP_1096
AX12079	595213	WMWGASAP_1096
AX12080	595213	WMWGASAP_1096
AX12081	595399	WMWGASAP_1096
AX12082	595399	WMWGASAP_1096
AX12083	595399	WMWGASAP_1096
AX12084	595399	WMWGASAP_1096
AX12085	595399	WMWGASAP_1096
AX12086	595399	WMWGASAP_1096
AX12087	595399	WMWGASAP_1096
AX12088	595399	WMWGASAP_1096
AX12089	595213	WMWGASAP_1096
AX12090	595213	WMWGASAP_1096
AX12091	595399	WMWGASAP_1096
AX12092	595399	WMWGASAP_1096
AX12093	595400	WMWGASAP_1096
AX12094	595400	WMWGASAP_1096
AX12095	595400	WMWGASAP_1096
AX12096	595400	WMWGASAP_1096
AX12097	595400	WMWGASAP_1096
AX12098	595400	WMWGASAP_1096
AX12099	595400	WMWGASAP_1096
AX12100	595400	WMWGASAP_1096
AX12101	595400	WMWGASAP_1096
AX12102	595400	WMWGASAP_1096



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 0.5 mg 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 2.5 mg and 200 mg residue with the exception of AX12080, AX12084, AX12098 and AX12102 which did not meet the 2.5mg requirement.

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: WMWGASAP
 Sample Date: 22-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AX12074

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	J 0.00252	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0271	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	41.9	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/22/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0122	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/30/2017	SM 2540C		1		25	219	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	12	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		1	1.40	5.00	26	mg/L

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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, 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: WMWGASAP
 Sample Date: 22-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AX12074

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec
			Limit	MB					Limit	Rec	Limit	Prec	
AX12083	Boron, Total	mg/L	0.00120	0.044	1.00	1.08	1.10	0.936	0.85 to 1.15	96.7	70 to 130	1.55	20
AX12083	Molybdenum, Total	mg/L	0.0000148	0.0044	0.10	0.0939	0.0992	0.0976	0.085 to 0.115	93.9	70 to 130	5.46	20
AX12083	Thallium, Total	mg/L	0.0000320	0.00044	0.10	0.102	0.102	0.0982	0.085 to 0.115	102	70 to 130	0.369	20
AX12083	Antimony, Total	mg/L	0.0000418	0.00132	0.10	0.0877	0.0918	0.0962	0.085 to 0.115	87.7	70 to 130	4.58	20
AX12083	Arsenic, Total	mg/L	0.0000171	0.0022	0.10	0.0977	0.104	0.103	0.085 to 0.115	96.2	70 to 130	5.89	20
AX12083	Barium, Total	mg/L	0.00000635	0.0044	0.10	0.107	0.112	0.0910	0.085 to 0.115	84.0	70 to 130	4.61	20
AX12083	Beryllium, Total	mg/L	0.0000328	0.00132	0.10	0.103	0.105	0.103	0.085 to 0.115	103	70 to 130	1.13	20
AX12083	Chromium, Total	mg/L	0.0000389	0.0044	0.10	0.0977	0.104	0.0961	0.085 to 0.115	97.7	70 to 130	6.34	20
AX12083	Cobalt, Total	mg/L	0.0000113	0.0044	0.10	0.0996	0.104	0.0970	0.085 to 0.115	99.6	70 to 130	4.71	20
AX12083	Lead, Total	mg/L	0.0000316	0.0022	0.10	0.103	0.104	0.0980	0.085 to 0.115	103	70 to 130	0.945	20
AX12083	Selenium, Total	mg/L	0.0000304	0.0044	0.10	0.0913	0.0957	0.0994	0.085 to 0.115	91.3	70 to 130	4.74	20
AX12083	Cadmium, Total	mg/L	0.0000122	0.00044	0.10	0.0901	0.0957	0.101	0.085 to 0.115	90.1	70 to 130	6.00	20
AX12083	Calcium, Total	mg/L	0.00271	0.22	5.00	55.8	55.8	4.58	4.25 to 5.75	101	70 to 130	0.0039420	
AX12083	Lithium, Total	mg/L	-0.0000392	0.022	0.20	0.194	0.198	0.179	0.17 to 0.23	97.1	70 to 130	2.09	20
AX12083	Mercury, Total by CVAA	mg/L	0.0000347	0.0005	0.004	0.00375	0.00365	0.00370	0.0034 to 0.0046	93.8	70 to 130	2.89	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: WMWGASAP
 Sample Date: 22-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AX12074

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12090	Solids, Dissolved	mg/L	-6.0	25			182	49.0	40 to 60	0.817	5

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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: WMWGASAP
 Sample Date: 22-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AX12075

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0274	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	0.892	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	36.9	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/22/2017	EPA 200.7		2	0.010	0.05	J 0.0451	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.117	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/30/2017	SM 2540C		1		25	348	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	28	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	J 0.070	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		20	28.0	100	120	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.

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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: WMWGASAP
 Sample Date: 22-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AX12075

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AX12083	Thallium, Total	mg/L	0.0000320	0.00044	0.10	0.102	0.102	0.0982	0.085 to 0.115		102	70 to 130		0.369	20
AX12083	Boron, Total	mg/L	0.00120	0.044	1.00	1.08	1.10	0.936	0.85 to 1.15		96.7	70 to 130		1.55	20
AX12083	Molybdenum, Total	mg/L	0.0000148	0.0044	0.10	0.0939	0.0992	0.0976	0.085 to 0.115		93.9	70 to 130		5.46	20
AX12083	Antimony, Total	mg/L	0.0000418	0.00132	0.10	0.0877	0.0918	0.0962	0.085 to 0.115		87.7	70 to 130		4.58	20
AX12083	Arsenic, Total	mg/L	0.0000171	0.0022	0.10	0.0977	0.104	0.103	0.085 to 0.115		96.2	70 to 130		5.89	20
AX12083	Lithium, Total	mg/L	-0.0000392	0.022	0.20	0.194	0.198	0.179	0.17 to 0.23		97.1	70 to 130		2.09	20
AX12083	Mercury, Total by CVAA	mg/L	0.0000347	0.0005	0.004	0.00375	0.00365	0.00370	0.0034 to 0.0046		93.8	70 to 130		2.89	20
AX12083	Cadmium, Total	mg/L	0.0000122	0.00044	0.10	0.0901	0.0957	0.101	0.085 to 0.115		90.1	70 to 130		6.00	20
AX12083	Calcium, Total	mg/L	0.00271	0.22	5.00	55.8	55.8	4.58	4.25 to 5.75		101	70 to 130		0.0039420	
AX12083	Barium, Total	mg/L	0.00000635	0.0044	0.10	0.107	0.112	0.0910	0.085 to 0.115		84.0	70 to 130		4.61	20
AX12083	Beryllium, Total	mg/L	0.0000328	0.00132	0.10	0.103	0.105	0.103	0.085 to 0.115		103	70 to 130		1.13	20
AX12083	Chromium, Total	mg/L	0.0000389	0.0044	0.10	0.0977	0.104	0.0961	0.085 to 0.115		97.7	70 to 130		6.34	20
AX12083	Cobalt, Total	mg/L	0.0000113	0.0044	0.10	0.0996	0.104	0.0970	0.085 to 0.115		99.6	70 to 130		4.71	20
AX12083	Lead, Total	mg/L	0.0000316	0.0022	0.10	0.103	0.104	0.0980	0.085 to 0.115		103	70 to 130		0.945	20
AX12083	Selenium, Total	mg/L	0.0000304	0.0044	0.10	0.0913	0.0957	0.0994	0.085 to 0.115		91.3	70 to 130		4.74	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: WMWGASAP
 Sample Date: 22-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AX12075

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Prec	
AX12090	Solids, Dissolved	mg/L	-6.0	25			182	49.0	40 to 60	0.817	5

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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  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AX12076

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	0.00528	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0187	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	55.7	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/22/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0132	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/30/2017	SM 2540C		1		25	260	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	3.7	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	J 0.080	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		1	1.40	5.00	16	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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AX12076

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX12083	Boron, Total	mg/L	0.00120	0.044	1.00	1.08	1.10	0.936	0.85 to 1.15	96.7	70 to 130	1.55	20
AX12083	Thallium, Total	mg/L	0.0000320	0.00044	0.10	0.102	0.102	0.0982	0.085 to 0.115	102	70 to 130	0.369	20
AX12083	Molybdenum, Total	mg/L	0.0000148	0.0044	0.10	0.0939	0.0992	0.0976	0.085 to 0.115	93.9	70 to 130	5.46	20
AX12083	Antimony, Total	mg/L	0.0000418	0.00132	0.10	0.0877	0.0918	0.0962	0.085 to 0.115	87.7	70 to 130	4.58	20
AX12083	Arsenic, Total	mg/L	0.0000171	0.0022	0.10	0.0977	0.104	0.103	0.085 to 0.115	96.2	70 to 130	5.89	20
AX12083	Cobalt, Total	mg/L	0.0000113	0.0044	0.10	0.0996	0.104	0.0970	0.085 to 0.115	99.6	70 to 130	4.71	20
AX12083	Lead, Total	mg/L	0.0000316	0.0022	0.10	0.103	0.104	0.0980	0.085 to 0.115	103	70 to 130	0.945	20
AX12083	Selenium, Total	mg/L	0.0000304	0.0044	0.10	0.0913	0.0957	0.0994	0.085 to 0.115	91.3	70 to 130	4.74	20
AX12083	Cadmium, Total	mg/L	0.0000122	0.00044	0.10	0.0901	0.0957	0.101	0.085 to 0.115	90.1	70 to 130	6.00	20
AX12083	Calcium, Total	mg/L	0.00271	0.22	5.00	55.8	55.8	4.58	4.25 to 5.75	101	70 to 130	0.0039420	
AX12083	Barium, Total	mg/L	0.00000635	0.0044	0.10	0.107	0.112	0.0910	0.085 to 0.115	84.0	70 to 130	4.61	20
AX12083	Beryllium, Total	mg/L	0.0000328	0.00132	0.10	0.103	0.105	0.103	0.085 to 0.115	103	70 to 130	1.13	20
AX12083	Chromium, Total	mg/L	0.0000389	0.0044	0.10	0.0977	0.104	0.0961	0.085 to 0.115	97.7	70 to 130	6.34	20
AX12083	Lithium, Total	mg/L	-0.0000392	0.022	0.20	0.194	0.198	0.179	0.17 to 0.23	97.1	70 to 130	2.09	20
AX12083	Mercury, Total by CVAA	mg/L	0.0000347	0.0005	0.004	0.00375	0.00365	0.00370	0.0034 to 0.0046	93.8	70 to 130	2.89	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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AX12076

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12090	Solids, Dissolved	mg/L	-6.0	25			182	49.0	40 to 60	0.817	5

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Laboratory certification ID: E571114

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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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AX12077

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0187	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	32.7	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/22/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	J 0.000239	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/30/2017	SM 2540C		1		25	158	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	2.4	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		1	1.40	5.00	J 2.3	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.

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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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AX12077

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AX12083	Thallium, Total	mg/L	0.0000320	0.00044	0.10	0.102	0.102	0.0982	0.085 to 0.115		102	70 to 130		0.369	20
AX12083	Boron, Total	mg/L	0.00120	0.044	1.00	1.08	1.10	0.936	0.85 to 1.15		96.7	70 to 130		1.55	20
AX12083	Molybdenum, Total	mg/L	0.0000148	0.0044	0.10	0.0939	0.0992	0.0976	0.085 to 0.115		93.9	70 to 130		5.46	20
AX12083	Antimony, Total	mg/L	0.0000418	0.00132	0.10	0.0877	0.0918	0.0962	0.085 to 0.115		87.7	70 to 130		4.58	20
AX12083	Arsenic, Total	mg/L	0.0000171	0.0022	0.10	0.0977	0.104	0.103	0.085 to 0.115		96.2	70 to 130		5.89	20
AX12083	Lithium, Total	mg/L	-0.0000392	0.022	0.20	0.194	0.198	0.179	0.17 to 0.23		97.1	70 to 130		2.09	20
AX12083	Mercury, Total by CVAA	mg/L	0.0000347	0.0005	0.004	0.00375	0.00365	0.00370	0.0034 to 0.0046		93.8	70 to 130		2.89	20
AX12083	Cobalt, Total	mg/L	0.0000113	0.0044	0.10	0.0996	0.104	0.0970	0.085 to 0.115		99.6	70 to 130		4.71	20
AX12083	Lead, Total	mg/L	0.0000316	0.0022	0.10	0.103	0.104	0.0980	0.085 to 0.115		103	70 to 130		0.945	20
AX12083	Selenium, Total	mg/L	0.0000304	0.0044	0.10	0.0913	0.0957	0.0994	0.085 to 0.115		91.3	70 to 130		4.74	20
AX12083	Cadmium, Total	mg/L	0.0000122	0.00044	0.10	0.0901	0.0957	0.101	0.085 to 0.115		90.1	70 to 130		6.00	20
AX12083	Calcium, Total	mg/L	0.00271	0.22	5.00	55.8	55.8	4.58	4.25 to 5.75		101	70 to 130		0.0039420	
AX12083	Barium, Total	mg/L	0.00000635	0.0044	0.10	0.107	0.112	0.0910	0.085 to 0.115		84.0	70 to 130		4.61	20
AX12083	Beryllium, Total	mg/L	0.0000328	0.00132	0.10	0.103	0.105	0.103	0.085 to 0.115		103	70 to 130		1.13	20
AX12083	Chromium, Total	mg/L	0.0000389	0.0044	0.10	0.0977	0.104	0.0961	0.085 to 0.115		97.7	70 to 130		6.34	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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AX12077

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12090	Solids, Dissolved	mg/L	-6.0	25			182	49.0	40 to 60	0.817	5

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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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AX12078

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	J 0.00658	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	30.1	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/22/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	J 0.00689	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/30/2017	SM 2540C		1		25	141	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	2.2	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		1	1.40	5.00	J 2.0	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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AX12078

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX12083	Boron, Total	mg/L	0.00120	0.044	1.00	1.08	1.10	0.936	0.85 to 1.15	96.7	70 to 130	1.55	20
AX12083	Thallium, Total	mg/L	0.0000320	0.00044	0.10	0.102	0.102	0.0982	0.085 to 0.115	102	70 to 130	0.369	20
AX12083	Molybdenum, Total	mg/L	0.0000148	0.0044	0.10	0.0939	0.0992	0.0976	0.085 to 0.115	93.9	70 to 130	5.46	20
AX12083	Antimony, Total	mg/L	0.0000418	0.00132	0.10	0.0877	0.0918	0.0962	0.085 to 0.115	87.7	70 to 130	4.58	20
AX12083	Arsenic, Total	mg/L	0.0000171	0.0022	0.10	0.0977	0.104	0.103	0.085 to 0.115	96.2	70 to 130	5.89	20
AX12083	Cobalt, Total	mg/L	0.0000113	0.0044	0.10	0.0996	0.104	0.0970	0.085 to 0.115	99.6	70 to 130	4.71	20
AX12083	Lead, Total	mg/L	0.0000316	0.0022	0.10	0.103	0.104	0.0980	0.085 to 0.115	103	70 to 130	0.945	20
AX12083	Selenium, Total	mg/L	0.0000304	0.0044	0.10	0.0913	0.0957	0.0994	0.085 to 0.115	91.3	70 to 130	4.74	20
AX12083	Cadmium, Total	mg/L	0.0000122	0.00044	0.10	0.0901	0.0957	0.101	0.085 to 0.115	90.1	70 to 130	6.00	20
AX12083	Calcium, Total	mg/L	0.00271	0.22	5.00	55.8	55.8	4.58	4.25 to 5.75	101	70 to 130	0.0039420	
AX12083	Barium, Total	mg/L	0.00000635	0.0044	0.10	0.107	0.112	0.0910	0.085 to 0.115	84.0	70 to 130	4.61	20
AX12083	Beryllium, Total	mg/L	0.0000328	0.00132	0.10	0.103	0.105	0.103	0.085 to 0.115	103	70 to 130	1.13	20
AX12083	Chromium, Total	mg/L	0.0000389	0.0044	0.10	0.0977	0.104	0.0961	0.085 to 0.115	97.7	70 to 130	6.34	20
AX12083	Lithium, Total	mg/L	-0.0000392	0.022	0.20	0.194	0.198	0.179	0.17 to 0.23	97.1	70 to 130	2.09	20
AX12083	Mercury, Total by CVAA	mg/L	0.0000347	0.0005	0.004	0.00375	0.00365	0.00370	0.0034 to 0.0046	93.8	70 to 130	2.89	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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AX12078

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12090	Solids, Dissolved	mg/L	-6.0	25			182	49.0	40 to 60		0.817 5

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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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AX12079

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	J 0.00161	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0914	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	30.4	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/22/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	J 0.00364	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/30/2017	SM 2540C		1		25	199	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	9.3	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	0.11	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		1	1.40	5.00	18	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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AX12079

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX12083	Boron, Total	mg/L	0.00120	0.044	1.00	1.08	1.10	0.936	0.85 to 1.15	96.7	70 to 130	1.55	20
AX12083	Thallium, Total	mg/L	0.0000320	0.00044	0.10	0.102	0.102	0.0982	0.085 to 0.115	102	70 to 130	0.369	20
AX12083	Molybdenum, Total	mg/L	0.0000148	0.0044	0.10	0.0939	0.0992	0.0976	0.085 to 0.115	93.9	70 to 130	5.46	20
AX12083	Antimony, Total	mg/L	0.0000418	0.00132	0.10	0.0877	0.0918	0.0962	0.085 to 0.115	87.7	70 to 130	4.58	20
AX12083	Arsenic, Total	mg/L	0.0000171	0.0022	0.10	0.0977	0.104	0.103	0.085 to 0.115	96.2	70 to 130	5.89	20
AX12083	Barium, Total	mg/L	0.00000635	0.0044	0.10	0.107	0.112	0.0910	0.085 to 0.115	84.0	70 to 130	4.61	20
AX12083	Beryllium, Total	mg/L	0.0000328	0.00132	0.10	0.103	0.105	0.103	0.085 to 0.115	103	70 to 130	1.13	20
AX12083	Chromium, Total	mg/L	0.0000389	0.0044	0.10	0.0977	0.104	0.0961	0.085 to 0.115	97.7	70 to 130	6.34	20
AX12083	Lithium, Total	mg/L	-0.0000392	0.022	0.20	0.194	0.198	0.179	0.17 to 0.23	97.1	70 to 130	2.09	20
AX12083	Mercury, Total by CVAA	mg/L	0.0000347	0.0005	0.004	0.00375	0.00365	0.00370	0.0034 to 0.0046	93.8	70 to 130	2.89	20
AX12083	Cadmium, Total	mg/L	0.0000122	0.00044	0.10	0.0901	0.0957	0.101	0.085 to 0.115	90.1	70 to 130	6.00	20
AX12083	Calcium, Total	mg/L	0.00271	0.22	5.00	55.8	55.8	4.58	4.25 to 5.75	101	70 to 130	0.0039420	
AX12083	Cobalt, Total	mg/L	0.0000113	0.0044	0.10	0.0996	0.104	0.0970	0.085 to 0.115	99.6	70 to 130	4.71	20
AX12083	Lead, Total	mg/L	0.0000316	0.0022	0.10	0.103	0.104	0.0980	0.085 to 0.115	103	70 to 130	0.945	20
AX12083	Selenium, Total	mg/L	0.0000304	0.0044	0.10	0.0913	0.0957	0.0994	0.085 to 0.115	91.3	70 to 130	4.74	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, 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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AX12079

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12090	Solids, Dissolved	mg/L	-6.0	25			182	49.0	40 to 60	0.817	5

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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: WMWGASAPFB
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX12080

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/22/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/30/2017	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		1	1.40	5.00	U <1.4	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: WMWGASAPFB
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX12080

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX12083	Boron, Total	mg/L	0.00120	0.044	1.00	1.08	1.10	0.936	0.85 to 1.15	96.7	70 to 130	1.55	20
AX12083	Thallium, Total	mg/L	0.0000320	0.00044	0.10	0.102	0.102	0.0982	0.085 to 0.115	102	70 to 130	0.369	20
AX12083	Molybdenum, Total	mg/L	0.0000148	0.0044	0.10	0.0939	0.0992	0.0976	0.085 to 0.115	93.9	70 to 130	5.46	20
AX12083	Antimony, Total	mg/L	0.0000418	0.00132	0.10	0.0877	0.0918	0.0962	0.085 to 0.115	87.7	70 to 130	4.58	20
AX12083	Arsenic, Total	mg/L	0.0000171	0.0022	0.10	0.0977	0.104	0.103	0.085 to 0.115	96.2	70 to 130	5.89	20
AX12083	Barium, Total	mg/L	0.00000635	0.0044	0.10	0.107	0.112	0.0910	0.085 to 0.115	84.0	70 to 130	4.61	20
AX12083	Beryllium, Total	mg/L	0.0000328	0.00132	0.10	0.103	0.105	0.103	0.085 to 0.115	103	70 to 130	1.13	20
AX12083	Chromium, Total	mg/L	0.0000389	0.0044	0.10	0.0977	0.104	0.0961	0.085 to 0.115	97.7	70 to 130	6.34	20
AX12083	Cobalt, Total	mg/L	0.0000113	0.0044	0.10	0.0996	0.104	0.0970	0.085 to 0.115	99.6	70 to 130	4.71	20
AX12083	Lead, Total	mg/L	0.0000316	0.0022	0.10	0.103	0.104	0.0980	0.085 to 0.115	103	70 to 130	0.945	20
AX12083	Selenium, Total	mg/L	0.0000304	0.0044	0.10	0.0913	0.0957	0.0994	0.085 to 0.115	91.3	70 to 130	4.74	20
AX12083	Cadmium, Total	mg/L	0.0000122	0.00044	0.10	0.0901	0.0957	0.101	0.085 to 0.115	90.1	70 to 130	6.00	20
AX12083	Calcium, Total	mg/L	0.00271	0.22	5.00	55.8	55.8	4.58	4.25 to 5.75	101	70 to 130	0.0039420	
AX12083	Lithium, Total	mg/L	-0.0000392	0.022	0.20	0.194	0.198	0.179	0.17 to 0.23	97.1	70 to 130	2.09	20
AX12083	Mercury, Total by CVAA	mg/L	0.0000347	0.0005	0.004	0.00375	0.00365	0.00370	0.0034 to 0.0046	93.8	70 to 130	2.89	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: WMWGASAPFB
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX12080

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12090	Solids, Dissolved	mg/L	-6.0	25			182	49.0	40 to 60	0.817	5

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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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AX12081

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0202	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	0.352	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	55.5	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/22/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/31/2017	SM 2540C		1		25	312	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	28	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		1	1.40	5.00	30	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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AX12081

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AX12083	Boron, Total	mg/L	0.00120	0.044	1.00	1.08	1.10	0.936	0.85 to 1.15	96.7	70 to 130	1.55	20
AX12083	Thallium, Total	mg/L	0.0000320	0.00044	0.10	0.102	0.102	0.0982	0.085 to 0.115	102	70 to 130	0.369	20
AX12083	Molybdenum, Total	mg/L	0.0000148	0.0044	0.10	0.0939	0.0992	0.0976	0.085 to 0.115	93.9	70 to 130	5.46	20
AX12083	Antimony, Total	mg/L	0.0000418	0.00132	0.10	0.0877	0.0918	0.0962	0.085 to 0.115	87.7	70 to 130	4.58	20
AX12083	Arsenic, Total	mg/L	0.0000171	0.0022	0.10	0.0977	0.104	0.103	0.085 to 0.115	96.2	70 to 130	5.89	20
AX12083	Lithium, Total	mg/L	-0.0000392	0.022	0.20	0.194	0.198	0.179	0.17 to 0.23	97.1	70 to 130	2.09	20
AX12083	Mercury, Total by CVAA	mg/L	0.0000347	0.0005	0.004	0.00375	0.00365	0.00370	0.0034 to 0.0046	93.8	70 to 130	2.89	20
AX12083	Cobalt, Total	mg/L	0.0000113	0.0044	0.10	0.0996	0.104	0.0970	0.085 to 0.115	99.6	70 to 130	4.71	20
AX12083	Lead, Total	mg/L	0.0000316	0.0022	0.10	0.103	0.104	0.0980	0.085 to 0.115	103	70 to 130	0.945	20
AX12083	Selenium, Total	mg/L	0.0000304	0.0044	0.10	0.0913	0.0957	0.0994	0.085 to 0.115	91.3	70 to 130	4.74	20
AX12083	Barium, Total	mg/L	0.00000635	0.0044	0.10	0.107	0.112	0.0910	0.085 to 0.115	84.0	70 to 130	4.61	20
AX12083	Beryllium, Total	mg/L	0.0000328	0.00132	0.10	0.103	0.105	0.103	0.085 to 0.115	103	70 to 130	1.13	20
AX12083	Chromium, Total	mg/L	0.0000389	0.0044	0.10	0.0977	0.104	0.0961	0.085 to 0.115	97.7	70 to 130	6.34	20
AX12083	Cadmium, Total	mg/L	0.0000122	0.00044	0.10	0.0901	0.0957	0.101	0.085 to 0.115	90.1	70 to 130	6.00	20
AX12083	Calcium, Total	mg/L	0.00271	0.22	5.00	55.8	55.8	4.58	4.25 to 5.75	101	70 to 130	0.0039420	

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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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AX12081

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12092	Solids, Dissolved	mg/L	4.00	25			459	53.0	40 to 60	1.89	5

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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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-4 Dup

Laboratory ID Number: AX12082

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0202	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	0.350	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	54.7	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/22/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/31/2017	SM 2540C		1		25	302	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	28	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		1	1.40	5.00	31	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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-4 Dup

Laboratory ID Number: AX12082

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AX12083	Boron, Total	mg/L	0.00120	0.044	1.00	1.08	1.10	0.936	0.85 to 1.15	96.7	70 to 130	1.55	20
AX12083	Thallium, Total	mg/L	0.0000320	0.00044	0.10	0.102	0.102	0.0982	0.085 to 0.115	102	70 to 130	0.369	20
AX12083	Molybdenum, Total	mg/L	0.0000148	0.0044	0.10	0.0939	0.0992	0.0976	0.085 to 0.115	93.9	70 to 130	5.46	20
AX12083	Antimony, Total	mg/L	0.0000418	0.00132	0.10	0.0877	0.0918	0.0962	0.085 to 0.115	87.7	70 to 130	4.58	20
AX12083	Arsenic, Total	mg/L	0.0000171	0.0022	0.10	0.0977	0.104	0.103	0.085 to 0.115	96.2	70 to 130	5.89	20
AX12083	Cobalt, Total	mg/L	0.0000113	0.0044	0.10	0.0996	0.104	0.0970	0.085 to 0.115	99.6	70 to 130	4.71	20
AX12083	Lead, Total	mg/L	0.0000316	0.0022	0.10	0.103	0.104	0.0980	0.085 to 0.115	103	70 to 130	0.945	20
AX12083	Selenium, Total	mg/L	0.0000304	0.0044	0.10	0.0913	0.0957	0.0994	0.085 to 0.115	91.3	70 to 130	4.74	20
AX12083	Barium, Total	mg/L	0.00000635	0.0044	0.10	0.107	0.112	0.0910	0.085 to 0.115	84.0	70 to 130	4.61	20
AX12083	Beryllium, Total	mg/L	0.0000328	0.00132	0.10	0.103	0.105	0.103	0.085 to 0.115	103	70 to 130	1.13	20
AX12083	Chromium, Total	mg/L	0.0000389	0.0044	0.10	0.0977	0.104	0.0961	0.085 to 0.115	97.7	70 to 130	6.34	20
AX12083	Lithium, Total	mg/L	-0.0000392	0.022	0.20	0.194	0.198	0.179	0.17 to 0.23	97.1	70 to 130	2.09	20
AX12083	Mercury, Total by CVAA	mg/L	0.0000347	0.0005	0.004	0.00375	0.00365	0.00370	0.0034 to 0.0046	93.8	70 to 130	2.89	20
AX12083	Cadmium, Total	mg/L	0.0000122	0.00044	0.10	0.0901	0.0957	0.101	0.085 to 0.115	90.1	70 to 130	6.00	20
AX12083	Calcium, Total	mg/L	0.00271	0.22	5.00	55.8	55.8	4.58	4.25 to 5.75	101	70 to 130	0.0039420	

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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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-4 Dup

Laboratory ID Number: AX12082

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12092	Solids, Dissolved	mg/L	4.00	25			459	53.0	40 to 60	1.89	5

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Laboratory certification ID: E571114

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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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AX12083

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	J 0.00151	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0228	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	0.113	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	50.8	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/22/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/31/2017	SM 2540C		1		25	296	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	5.4	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	J 0.090	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		1	1.40	5.00	11	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.

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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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AX12083

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec
			Limit	MB					Limit	Rec	Limit	Prec	
AX12083	Boron, Total	mg/L	0.00120	0.044	1.00	1.08	1.10	0.936	0.85 to 1.15	96.7	70 to 130	1.55	20
AX12083	Thallium, Total	mg/L	0.0000320	0.00044	0.10	0.102	0.102	0.0982	0.085 to 0.115	102	70 to 130	0.369	20
AX12083	Molybdenum, Total	mg/L	0.0000148	0.0044	0.10	0.0939	0.0992	0.0976	0.085 to 0.115	93.9	70 to 130	5.46	20
AX12083	Antimony, Total	mg/L	0.0000418	0.00132	0.10	0.0877	0.0918	0.0962	0.085 to 0.115	87.7	70 to 130	4.58	20
AX12083	Arsenic, Total	mg/L	0.0000171	0.0022	0.10	0.0977	0.104	0.103	0.085 to 0.115	96.2	70 to 130	5.89	20
AX12083	Cobalt, Total	mg/L	0.0000113	0.0044	0.10	0.0996	0.104	0.0970	0.085 to 0.115	99.6	70 to 130	4.71	20
AX12083	Lead, Total	mg/L	0.0000316	0.0022	0.10	0.103	0.104	0.0980	0.085 to 0.115	103	70 to 130	0.945	20
AX12083	Selenium, Total	mg/L	0.0000304	0.0044	0.10	0.0913	0.0957	0.0994	0.085 to 0.115	91.3	70 to 130	4.74	20
AX12083	Barium, Total	mg/L	0.00000635	0.0044	0.10	0.107	0.112	0.0910	0.085 to 0.115	84.0	70 to 130	4.61	20
AX12083	Beryllium, Total	mg/L	0.0000328	0.00132	0.10	0.103	0.105	0.103	0.085 to 0.115	103	70 to 130	1.13	20
AX12083	Chromium, Total	mg/L	0.0000389	0.0044	0.10	0.0977	0.104	0.0961	0.085 to 0.115	97.7	70 to 130	6.34	20
AX12083	Cadmium, Total	mg/L	0.0000122	0.00044	0.10	0.0901	0.0957	0.101	0.085 to 0.115	90.1	70 to 130	6.00	20
AX12083	Calcium, Total	mg/L	0.00271	0.22	5.00	55.8	55.8	4.58	4.25 to 5.75	101	70 to 130	0.0039420	
AX12083	Lithium, Total	mg/L	-0.0000392	0.022	0.20	0.194	0.198	0.179	0.17 to 0.23	97.1	70 to 130	2.09	20
AX12083	Mercury, Total by CVAA	mg/L	0.0000347	0.0005	0.004	0.00375	0.00365	0.00370	0.0034 to 0.0046	93.8	70 to 130	2.89	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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AX12083

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12092	Solids, Dissolved	mg/L	4.00	25			459	53.0	40 to 60	1.89	5

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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: WMWGASAPEB
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AX12084

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/26/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/31/2017	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		1	1.40	5.00	U <1.4	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: WMWGASAPEB
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AX12084

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	MB					Limit	Rec	Limit	Prec		
AX12093	Arsenic, Total	mg/L	0.0000171	0.0022	0.10	0.100	0.102	0.103	0.085 to 0.115		98.6	70 to 130	1.48	20
AX12093	Mercury, Total by CVAA	mg/L	0.0000319	0.0005	0.004	0.00357	0.00361	0.00367	0.0034 to 0.0046		89.3	70 to 130	0.967	20
AX12093	Thallium, Total	mg/L	0.0000320	0.00044	0.10	0.101	0.102	0.0982	0.085 to 0.115		101	70 to 130	0.413	20
AX12093	Barium, Total	mg/L	0.00000635	0.0044	0.10	0.120	0.126	0.0910	0.085 to 0.115		83.8	70 to 130	4.76	20
AX12093	Molybdenum, Total	mg/L	0.0000148	0.0044	0.10	0.164	0.167	0.0976	0.085 to 0.115		95.2	70 to 130	1.88	20
AX12093	Selenium, Total	mg/L	0.0000304	0.0044	0.10	0.0920	0.0918	0.0994	0.085 to 0.115		92.0	70 to 130	0.244	20
AX12093	Lead, Total	mg/L	0.0000316	0.0022	0.10	0.103	0.103	0.0980	0.085 to 0.115		103	70 to 130	0.513	20
AX12093	Lithium, Total	mg/L	-0.0000528	0.022	0.20	0.205	0.214	0.195	0.17 to 0.23		103	70 to 130	4.07	20
AX12093	Antimony, Total	mg/L	0.0000418	0.00132	0.10	0.0890	0.0923	0.0962	0.085 to 0.115		89.0	70 to 130	3.64	20
AX12093	Beryllium, Total	mg/L	0.0000328	0.00132	0.10	0.102	0.102	0.103	0.085 to 0.115		102	70 to 130	0.819	20
AX12093	Cobalt, Total	mg/L	0.0000113	0.0044	0.10	0.103	0.107	0.0970	0.085 to 0.115		103	70 to 130	3.55	20
AX12093	Cadmium, Total	mg/L	0.0000122	0.00044	0.10	0.0921	0.0943	0.101	0.085 to 0.115		92.1	70 to 130	2.36	20
AX12093	Chromium, Total	mg/L	0.0000389	0.0044	0.10	0.100	0.102	0.0961	0.085 to 0.115		100	70 to 130	1.91	20
AX12093	Boron, Total	mg/L	-0.000259	0.044	1.00	2.81	2.84	0.958	0.85 to 1.15		94.4	70 to 130	0.925	20
AX12093	Calcium, Total	mg/L	-0.0154	0.22	5.00	81.6	81.9	4.87	4.25 to 5.75		101	70 to 130	0.344	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: WMWGASAPEB
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AX12084

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12092	Solids, Dissolved	mg/L	4.00	25			459	53.0	40 to 60	1.89	5

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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  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AX12085

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	J 0.00369	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0551	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	3.31	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		10	1.00	5	150	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/26/2017	EPA 200.7		2	0.010	0.05	0.103	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.623	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/31/2017	SM 2540C		1		50	886	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	18	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		20	28.0	100	530	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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AX12085

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	MB					Limit	Rec	Limit	Prec		
AX12093	Arsenic, Total	mg/L	0.0000171	0.0022	0.10	0.100	0.102	0.103	0.085 to 0.115		98.6	70 to 130	1.48	20
AX12093	Mercury, Total by CVAA	mg/L	0.0000319	0.0005	0.004	0.00357	0.00361	0.00367	0.0034 to 0.0046		89.3	70 to 130	0.967	20
AX12093	Thallium, Total	mg/L	0.0000320	0.00044	0.10	0.101	0.102	0.0982	0.085 to 0.115		101	70 to 130	0.413	20
AX12093	Antimony, Total	mg/L	0.0000418	0.00132	0.10	0.0890	0.0923	0.0962	0.085 to 0.115		89.0	70 to 130	3.64	20
AX12093	Beryllium, Total	mg/L	0.0000328	0.00132	0.10	0.102	0.102	0.103	0.085 to 0.115		102	70 to 130	0.819	20
AX12093	Cobalt, Total	mg/L	0.0000113	0.0044	0.10	0.103	0.107	0.0970	0.085 to 0.115		103	70 to 130	3.55	20
AX12093	Cadmium, Total	mg/L	0.0000122	0.00044	0.10	0.0921	0.0943	0.101	0.085 to 0.115		92.1	70 to 130	2.36	20
AX12093	Chromium, Total	mg/L	0.0000389	0.0044	0.10	0.100	0.102	0.0961	0.085 to 0.115		100	70 to 130	1.91	20
AX12093	Barium, Total	mg/L	0.00000635	0.0044	0.10	0.120	0.126	0.0910	0.085 to 0.115		83.8	70 to 130	4.76	20
AX12093	Molybdenum, Total	mg/L	0.0000148	0.0044	0.10	0.164	0.167	0.0976	0.085 to 0.115		95.2	70 to 130	1.88	20
AX12093	Selenium, Total	mg/L	0.0000304	0.0044	0.10	0.0920	0.0918	0.0994	0.085 to 0.115		92.0	70 to 130	0.244	20
AX12093	Boron, Total	mg/L	-0.000259	0.044	1.00	2.81	2.84	0.958	0.85 to 1.15		94.4	70 to 130	0.925	20
AX12093	Calcium, Total	mg/L	-0.0154	0.22	5.00	81.6	81.9	4.87	4.25 to 5.75		101	70 to 130	0.344	20
AX12093	Lead, Total	mg/L	0.0000316	0.0022	0.10	0.103	0.103	0.0980	0.085 to 0.115		103	70 to 130	0.513	20
AX12093	Lithium, Total	mg/L	-0.0000528	0.022	0.20	0.205	0.214	0.195	0.17 to 0.23		103	70 to 130	4.07	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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AX12085

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12092	Solids, Dissolved	mg/L	4.00	25			459	53.0	40 to 60	1.89	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.

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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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AX12086

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	J 0.00229	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0382	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	1.17	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		10	1.00	5	102	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/26/2017	EPA 200.7		2	0.010	0.05	J 0.0331	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0168	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	J 0.000376	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/31/2017	SM 2540C		1		50	536	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	13	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		10	14.0	50	150	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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AX12086

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX12093	Arsenic, Total	mg/L	0.0000171	0.0022	0.10	0.100	0.102	0.103	0.085 to 0.115		98.6	70 to 130	1.48	20
AX12093	Barium, Total	mg/L	0.00000635	0.0044	0.10	0.120	0.126	0.0910	0.085 to 0.115		83.8	70 to 130	4.76	20
AX12093	Molybdenum, Total	mg/L	0.0000148	0.0044	0.10	0.164	0.167	0.0976	0.085 to 0.115		95.2	70 to 130	1.88	20
AX12093	Selenium, Total	mg/L	0.0000304	0.0044	0.10	0.0920	0.0918	0.0994	0.085 to 0.115		92.0	70 to 130	0.244	20
AX12093	Mercury, Total by CVAA	mg/L	0.0000319	0.0005	0.004	0.00357	0.00361	0.00367	0.0034 to 0.0046		89.3	70 to 130	0.967	20
AX12093	Thallium, Total	mg/L	0.0000320	0.00044	0.10	0.101	0.102	0.0982	0.085 to 0.115		101	70 to 130	0.413	20
AX12093	Antimony, Total	mg/L	0.0000418	0.00132	0.10	0.0890	0.0923	0.0962	0.085 to 0.115		89.0	70 to 130	3.64	20
AX12093	Beryllium, Total	mg/L	0.0000328	0.00132	0.10	0.102	0.102	0.103	0.085 to 0.115		102	70 to 130	0.819	20
AX12093	Cobalt, Total	mg/L	0.0000113	0.0044	0.10	0.103	0.107	0.0970	0.085 to 0.115		103	70 to 130	3.55	20
AX12093	Boron, Total	mg/L	-0.000259	0.044	1.00	2.81	2.84	0.958	0.85 to 1.15		94.4	70 to 130	0.925	20
AX12093	Calcium, Total	mg/L	-0.0154	0.22	5.00	81.6	81.9	4.87	4.25 to 5.75		101	70 to 130	0.344	20
AX12093	Cadmium, Total	mg/L	0.0000122	0.00044	0.10	0.0921	0.0943	0.101	0.085 to 0.115		92.1	70 to 130	2.36	20
AX12093	Chromium, Total	mg/L	0.0000389	0.0044	0.10	0.100	0.102	0.0961	0.085 to 0.115		100	70 to 130	1.91	20
AX12093	Lead, Total	mg/L	0.0000316	0.0022	0.10	0.103	0.103	0.0980	0.085 to 0.115		103	70 to 130	0.513	20
AX12093	Lithium, Total	mg/L	-0.0000528	0.022	0.20	0.205	0.214	0.195	0.17 to 0.23		103	70 to 130	4.07	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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AX12086

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12092	Solids, Dissolved	mg/L	4.00	25			459	53.0	40 to 60	1.89	5

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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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AX12087

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	0.0121	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0673	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	2.66	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	70.6	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	J 0.000339	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	J 0.000774	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/26/2017	EPA 200.7		2	0.010	0.05	0.561	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	1.77	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/31/2017	SM 2540C		1		25	425	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	17	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	0.20	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		15	21.0	75	230	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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AX12087

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX12093	Arsenic, Total	mg/L	0.0000171	0.0022	0.10	0.100	0.102	0.103	0.085 to 0.115		98.6	70 to 130	1.48	20
AX12093	Barium, Total	mg/L	0.00000635	0.0044	0.10	0.120	0.126	0.0910	0.085 to 0.115		83.8	70 to 130	4.76	20
AX12093	Molybdenum, Total	mg/L	0.0000148	0.0044	0.10	0.164	0.167	0.0976	0.085 to 0.115		95.2	70 to 130	1.88	20
AX12093	Selenium, Total	mg/L	0.0000304	0.0044	0.10	0.0920	0.0918	0.0994	0.085 to 0.115		92.0	70 to 130	0.244	20
AX12093	Mercury, Total by CVAA	mg/L	0.0000319	0.0005	0.004	0.00357	0.00361	0.00367	0.0034 to 0.0046		89.3	70 to 130	0.967	20
AX12093	Thallium, Total	mg/L	0.0000320	0.00044	0.10	0.101	0.102	0.0982	0.085 to 0.115		101	70 to 130	0.413	20
AX12093	Antimony, Total	mg/L	0.0000418	0.00132	0.10	0.0890	0.0923	0.0962	0.085 to 0.115		89.0	70 to 130	3.64	20
AX12093	Beryllium, Total	mg/L	0.0000328	0.00132	0.10	0.102	0.102	0.103	0.085 to 0.115		102	70 to 130	0.819	20
AX12093	Cobalt, Total	mg/L	0.0000113	0.0044	0.10	0.103	0.107	0.0970	0.085 to 0.115		103	70 to 130	3.55	20
AX12093	Boron, Total	mg/L	-0.000259	0.044	1.00	2.81	2.84	0.958	0.85 to 1.15		94.4	70 to 130	0.925	20
AX12093	Calcium, Total	mg/L	-0.0154	0.22	5.00	81.6	81.9	4.87	4.25 to 5.75		101	70 to 130	0.344	20
AX12093	Cadmium, Total	mg/L	0.0000122	0.00044	0.10	0.0921	0.0943	0.101	0.085 to 0.115		92.1	70 to 130	2.36	20
AX12093	Chromium, Total	mg/L	0.0000389	0.0044	0.10	0.100	0.102	0.0961	0.085 to 0.115		100	70 to 130	1.91	20
AX12093	Lead, Total	mg/L	0.0000316	0.0022	0.10	0.103	0.103	0.0980	0.085 to 0.115		103	70 to 130	0.513	20
AX12093	Lithium, Total	mg/L	-0.0000528	0.022	0.20	0.205	0.214	0.195	0.17 to 0.23		103	70 to 130	4.07	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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AX12087

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12092	Solids, Dissolved	mg/L	4.00	25			459	53.0	40 to 60	1.89	5

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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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AX12088

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	J 0.00419	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0275	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	1.24	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	39.8	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/26/2017	EPA 200.7		2	0.010	0.05	0.0722	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.275	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/31/2017	SM 2540C		1		25	257	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	12	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	0.12	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		10	14.0	50	130	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
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 Calera, AL 35040
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AX12088

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX12093	Arsenic, Total	mg/L	0.0000171	0.0022	0.10	0.100	0.102	0.103	0.085 to 0.115		98.6	70 to 130	1.48	20
AX12093	Mercury, Total by CVAA	mg/L	0.0000319	0.0005	0.004	0.00357	0.00361	0.00367	0.0034 to 0.0046		89.3	70 to 130	0.967	20
AX12093	Thallium, Total	mg/L	0.0000320	0.00044	0.10	0.101	0.102	0.0982	0.085 to 0.115		101	70 to 130	0.413	20
AX12093	Barium, Total	mg/L	0.00000635	0.0044	0.10	0.120	0.126	0.0910	0.085 to 0.115		83.8	70 to 130	4.76	20
AX12093	Molybdenum, Total	mg/L	0.0000148	0.0044	0.10	0.164	0.167	0.0976	0.085 to 0.115		95.2	70 to 130	1.88	20
AX12093	Selenium, Total	mg/L	0.0000304	0.0044	0.10	0.0920	0.0918	0.0994	0.085 to 0.115		92.0	70 to 130	0.244	20
AX12093	Lead, Total	mg/L	0.0000316	0.0022	0.10	0.103	0.103	0.0980	0.085 to 0.115		103	70 to 130	0.513	20
AX12093	Lithium, Total	mg/L	-0.0000528	0.022	0.20	0.205	0.214	0.195	0.17 to 0.23		103	70 to 130	4.07	20
AX12093	Boron, Total	mg/L	-0.000259	0.044	1.00	2.81	2.84	0.958	0.85 to 1.15		94.4	70 to 130	0.925	20
AX12093	Calcium, Total	mg/L	-0.0154	0.22	5.00	81.6	81.9	4.87	4.25 to 5.75		101	70 to 130	0.344	20
AX12093	Antimony, Total	mg/L	0.0000418	0.00132	0.10	0.0890	0.0923	0.0962	0.085 to 0.115		89.0	70 to 130	3.64	20
AX12093	Beryllium, Total	mg/L	0.0000328	0.00132	0.10	0.102	0.102	0.103	0.085 to 0.115		102	70 to 130	0.819	20
AX12093	Cobalt, Total	mg/L	0.0000113	0.0044	0.10	0.103	0.107	0.0970	0.085 to 0.115		103	70 to 130	3.55	20
AX12093	Cadmium, Total	mg/L	0.0000122	0.00044	0.10	0.0921	0.0943	0.101	0.085 to 0.115		92.1	70 to 130	2.36	20
AX12093	Chromium, Total	mg/L	0.0000389	0.0044	0.10	0.100	0.102	0.0961	0.085 to 0.115		100	70 to 130	1.91	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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AX12088

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12092	Solids, Dissolved	mg/L	4.00	25			459	53.0	40 to 60	1.89	5

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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: WMWGASAP
 Sample Date: 22-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AX12089

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0116	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	37.4	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/26/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/30/2017	SM 2540C		1		25	178	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	3.7	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		1	1.40	5.00	J 2.6	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: WMWGASAP
 Sample Date: 22-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AX12089

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	MB					Limit	Rec	Limit	Prec		
AX12093	Arsenic, Total	mg/L	0.0000171	0.0022	0.10	0.100	0.102	0.103	0.085 to 0.115		98.6	70 to 130	1.48	20
AX12093	Mercury, Total by CVAA	mg/L	0.0000319	0.0005	0.004	0.00357	0.00361	0.00367	0.0034 to 0.0046		89.3	70 to 130	0.967	20
AX12093	Thallium, Total	mg/L	0.0000320	0.00044	0.10	0.101	0.102	0.0982	0.085 to 0.115		101	70 to 130	0.413	20
AX12093	Antimony, Total	mg/L	0.0000418	0.00132	0.10	0.0890	0.0923	0.0962	0.085 to 0.115		89.0	70 to 130	3.64	20
AX12093	Beryllium, Total	mg/L	0.0000328	0.00132	0.10	0.102	0.102	0.103	0.085 to 0.115		102	70 to 130	0.819	20
AX12093	Cobalt, Total	mg/L	0.0000113	0.0044	0.10	0.103	0.107	0.0970	0.085 to 0.115		103	70 to 130	3.55	20
AX12093	Barium, Total	mg/L	0.00000635	0.0044	0.10	0.120	0.126	0.0910	0.085 to 0.115		83.8	70 to 130	4.76	20
AX12093	Molybdenum, Total	mg/L	0.0000148	0.0044	0.10	0.164	0.167	0.0976	0.085 to 0.115		95.2	70 to 130	1.88	20
AX12093	Selenium, Total	mg/L	0.0000304	0.0044	0.10	0.0920	0.0918	0.0994	0.085 to 0.115		92.0	70 to 130	0.244	20
AX12093	Cadmium, Total	mg/L	0.0000122	0.00044	0.10	0.0921	0.0943	0.101	0.085 to 0.115		92.1	70 to 130	2.36	20
AX12093	Chromium, Total	mg/L	0.0000389	0.0044	0.10	0.100	0.102	0.0961	0.085 to 0.115		100	70 to 130	1.91	20
AX12093	Lead, Total	mg/L	0.0000316	0.0022	0.10	0.103	0.103	0.0980	0.085 to 0.115		103	70 to 130	0.513	20
AX12093	Lithium, Total	mg/L	-0.0000528	0.022	0.20	0.205	0.214	0.195	0.17 to 0.23		103	70 to 130	4.07	20
AX12093	Boron, Total	mg/L	-0.000259	0.044	1.00	2.81	2.84	0.958	0.85 to 1.15		94.4	70 to 130	0.925	20
AX12093	Calcium, Total	mg/L	-0.0154	0.22	5.00	81.6	81.9	4.87	4.25 to 5.75		101	70 to 130	0.344	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: WMWGASAP
 Sample Date: 22-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AX12089

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12090	Solids, Dissolved	mg/L	-6.0	25			182	49.0	40 to 60	0.817	5

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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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: WMWGASAP
 Sample Date: 22-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AX12090

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	J 0.00911	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	0.116	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	34.4	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/26/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/30/2017	SM 2540C		1		25	185	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	7.1	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		1	1.40	5.00	32	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
 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: WMWGASAP
 Sample Date: 22-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AX12090

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	MB					Limit	Rec	Limit	Prec		
AX12093	Arsenic, Total	mg/L	0.0000171	0.0022	0.10	0.100	0.102	0.103	0.085 to 0.115		98.6	70 to 130	1.48	20
AX12093	Mercury, Total by CVAA	mg/L	0.0000319	0.0005	0.004	0.00357	0.00361	0.00367	0.0034 to 0.0046		89.3	70 to 130	0.967	20
AX12093	Thallium, Total	mg/L	0.0000320	0.00044	0.10	0.101	0.102	0.0982	0.085 to 0.115		101	70 to 130	0.413	20
AX12093	Boron, Total	mg/L	-0.000259	0.044	1.00	2.81	2.84	0.958	0.85 to 1.15		94.4	70 to 130	0.925	20
AX12093	Calcium, Total	mg/L	-0.0154	0.22	5.00	81.6	81.9	4.87	4.25 to 5.75		101	70 to 130	0.344	20
AX12093	Antimony, Total	mg/L	0.0000418	0.00132	0.10	0.0890	0.0923	0.0962	0.085 to 0.115		89.0	70 to 130	3.64	20
AX12093	Beryllium, Total	mg/L	0.0000328	0.00132	0.10	0.102	0.102	0.103	0.085 to 0.115		102	70 to 130	0.819	20
AX12093	Cobalt, Total	mg/L	0.0000113	0.0044	0.10	0.103	0.107	0.0970	0.085 to 0.115		103	70 to 130	3.55	20
AX12093	Lead, Total	mg/L	0.0000316	0.0022	0.10	0.103	0.103	0.0980	0.085 to 0.115		103	70 to 130	0.513	20
AX12093	Lithium, Total	mg/L	-0.0000528	0.022	0.20	0.205	0.214	0.195	0.17 to 0.23		103	70 to 130	4.07	20
AX12093	Barium, Total	mg/L	0.00000635	0.0044	0.10	0.120	0.126	0.0910	0.085 to 0.115		83.8	70 to 130	4.76	20
AX12093	Molybdenum, Total	mg/L	0.0000148	0.0044	0.10	0.164	0.167	0.0976	0.085 to 0.115		95.2	70 to 130	1.88	20
AX12093	Selenium, Total	mg/L	0.0000304	0.0044	0.10	0.0920	0.0918	0.0994	0.085 to 0.115		92.0	70 to 130	0.244	20
AX12093	Cadmium, Total	mg/L	0.0000122	0.00044	0.10	0.0921	0.0943	0.101	0.085 to 0.115		92.1	70 to 130	2.36	20
AX12093	Chromium, Total	mg/L	0.0000389	0.0044	0.10	0.100	0.102	0.0961	0.085 to 0.115		100	70 to 130	1.91	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: WMWGASAP
 Sample Date: 22-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AX12090

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Prec	
AX12090	Solids, Dissolved	mg/L	-6.0	25			182	49.0	40 to 60	0.817	5

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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  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AX12091

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0307	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	2.20	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	70.6	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/26/2017	EPA 200.7		2	0.010	0.05	J 0.0416	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.287	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/31/2017	SM 2540C		1		25	448	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	40	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		15	21.0	75	160	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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AX12091

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX12093	Arsenic, Total	mg/L	0.0000171	0.0022	0.10	0.100	0.102	0.103	0.085 to 0.115	98.6	70 to 130	1.48	20
AX12093	Mercury, Total by CVAA	mg/L	0.0000319	0.0005	0.004	0.00357	0.00361	0.00367	0.0034 to 0.0046	89.3	70 to 130	0.967	20
AX12093	Thallium, Total	mg/L	0.0000320	0.00044	0.10	0.101	0.102	0.0982	0.085 to 0.115	101	70 to 130	0.413	20
AX12093	Antimony, Total	mg/L	0.0000418	0.00132	0.10	0.0890	0.0923	0.0962	0.085 to 0.115	89.0	70 to 130	3.64	20
AX12093	Beryllium, Total	mg/L	0.0000328	0.00132	0.10	0.102	0.102	0.103	0.085 to 0.115	102	70 to 130	0.819	20
AX12093	Cobalt, Total	mg/L	0.0000113	0.0044	0.10	0.103	0.107	0.0970	0.085 to 0.115	103	70 to 130	3.55	20
AX12093	Boron, Total	mg/L	-0.000259	0.044	1.00	2.81	2.84	0.958	0.85 to 1.15	94.4	70 to 130	0.925	20
AX12093	Calcium, Total	mg/L	-0.0154	0.22	5.00	81.6	81.9	4.87	4.25 to 5.75	101	70 to 130	0.344	20
AX12093	Barium, Total	mg/L	0.00000635	0.0044	0.10	0.120	0.126	0.0910	0.085 to 0.115	83.8	70 to 130	4.76	20
AX12093	Molybdenum, Total	mg/L	0.0000148	0.0044	0.10	0.164	0.167	0.0976	0.085 to 0.115	95.2	70 to 130	1.88	20
AX12093	Selenium, Total	mg/L	0.0000304	0.0044	0.10	0.0920	0.0918	0.0994	0.085 to 0.115	92.0	70 to 130	0.244	20
AX12093	Lead, Total	mg/L	0.0000316	0.0022	0.10	0.103	0.103	0.0980	0.085 to 0.115	103	70 to 130	0.513	20
AX12093	Lithium, Total	mg/L	-0.0000528	0.022	0.20	0.205	0.214	0.195	0.17 to 0.23	103	70 to 130	4.07	20
AX12093	Cadmium, Total	mg/L	0.0000122	0.00044	0.10	0.0921	0.0943	0.101	0.085 to 0.115	92.1	70 to 130	2.36	20
AX12093	Chromium, Total	mg/L	0.0000389	0.0044	0.10	0.100	0.102	0.0961	0.085 to 0.115	100	70 to 130	1.91	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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AX12091

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12092	Solids, Dissolved	mg/L	4.00	25			459	53.0	40 to 60	1.89	5

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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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-5 Dup

Laboratory ID Number: AX12092

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0309	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	2.19	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	70.5	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/26/2017	EPA 200.7		2	0.010	0.05	J 0.0409	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.294	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/31/2017	SM 2540C		1		25	442	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	40	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		15	21.0	75	170	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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-5 Dup

Laboratory ID Number: AX12092

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX12093	Arsenic, Total	mg/L	0.0000171	0.0022	0.10	0.100	0.102	0.103	0.085 to 0.115		98.6	70 to 130	1.48	20
AX12093	Mercury, Total by CVAA	mg/L	0.0000319	0.0005	0.004	0.00357	0.00361	0.00367	0.0034 to 0.0046		89.3	70 to 130	0.967	20
AX12093	Thallium, Total	mg/L	0.0000320	0.00044	0.10	0.101	0.102	0.0982	0.085 to 0.115		101	70 to 130	0.413	20
AX12093	Lead, Total	mg/L	0.0000316	0.0022	0.10	0.103	0.103	0.0980	0.085 to 0.115		103	70 to 130	0.513	20
AX12093	Lithium, Total	mg/L	-0.0000528	0.022	0.20	0.205	0.214	0.195	0.17 to 0.23		103	70 to 130	4.07	20
AX12093	Barium, Total	mg/L	0.00000635	0.0044	0.10	0.120	0.126	0.0910	0.085 to 0.115		83.8	70 to 130	4.76	20
AX12093	Molybdenum, Total	mg/L	0.0000148	0.0044	0.10	0.164	0.167	0.0976	0.085 to 0.115		95.2	70 to 130	1.88	20
AX12093	Selenium, Total	mg/L	0.0000304	0.0044	0.10	0.0920	0.0918	0.0994	0.085 to 0.115		92.0	70 to 130	0.244	20
AX12093	Cadmium, Total	mg/L	0.0000122	0.00044	0.10	0.0921	0.0943	0.101	0.085 to 0.115		92.1	70 to 130	2.36	20
AX12093	Chromium, Total	mg/L	0.0000389	0.0044	0.10	0.100	0.102	0.0961	0.085 to 0.115		100	70 to 130	1.91	20
AX12093	Boron, Total	mg/L	-0.000259	0.044	1.00	2.81	2.84	0.958	0.85 to 1.15		94.4	70 to 130	0.925	20
AX12093	Calcium, Total	mg/L	-0.0154	0.22	5.00	81.6	81.9	4.87	4.25 to 5.75		101	70 to 130	0.344	20
AX12093	Antimony, Total	mg/L	0.0000418	0.00132	0.10	0.0890	0.0923	0.0962	0.085 to 0.115		89.0	70 to 130	3.64	20
AX12093	Beryllium, Total	mg/L	0.0000328	0.00132	0.10	0.102	0.102	0.103	0.085 to 0.115		102	70 to 130	0.819	20
AX12093	Cobalt, Total	mg/L	0.0000113	0.0044	0.10	0.103	0.107	0.0970	0.085 to 0.115		103	70 to 130	3.55	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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-5 Dup

Laboratory ID Number: AX12092

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12092	Solids, Dissolved	mg/L	4.00	25			459	53.0	40 to 60	1.89	5

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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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AX12093

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	J 0.00151	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0359	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	1.87	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	76.6	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/26/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0684	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/31/2017	SM 2540C		1		25	460	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	48	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	J 0.070	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		10	14.0	50	180	mg/L

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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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AX12093

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	MB					Limit	Rec	Limit	Prec		
AX12093	Arsenic, Total	mg/L	0.0000171	0.0022	0.10	0.100	0.102	0.103	0.085 to 0.115		98.6	70 to 130	1.48	20
AX12093	Mercury, Total by CVAA	mg/L	0.0000319	0.0005	0.004	0.00357	0.00361	0.00367	0.0034 to 0.0046		89.3	70 to 130	0.967	20
AX12093	Thallium, Total	mg/L	0.0000320	0.00044	0.10	0.101	0.102	0.0982	0.085 to 0.115		101	70 to 130	0.413	20
AX12093	Antimony, Total	mg/L	0.0000418	0.00132	0.10	0.0890	0.0923	0.0962	0.085 to 0.115		89.0	70 to 130	3.64	20
AX12093	Beryllium, Total	mg/L	0.0000328	0.00132	0.10	0.102	0.102	0.103	0.085 to 0.115		102	70 to 130	0.819	20
AX12093	Cobalt, Total	mg/L	0.0000113	0.0044	0.10	0.103	0.107	0.0970	0.085 to 0.115		103	70 to 130	3.55	20
AX12093	Boron, Total	mg/L	-0.000259	0.044	1.00	2.81	2.84	0.958	0.85 to 1.15		94.4	70 to 130	0.925	20
AX12093	Calcium, Total	mg/L	-0.0154	0.22	5.00	81.6	81.9	4.87	4.25 to 5.75		101	70 to 130	0.344	20
AX12093	Barium, Total	mg/L	0.00000635	0.0044	0.10	0.120	0.126	0.0910	0.085 to 0.115		83.8	70 to 130	4.76	20
AX12093	Molybdenum, Total	mg/L	0.0000148	0.0044	0.10	0.164	0.167	0.0976	0.085 to 0.115		95.2	70 to 130	1.88	20
AX12093	Selenium, Total	mg/L	0.0000304	0.0044	0.10	0.0920	0.0918	0.0994	0.085 to 0.115		92.0	70 to 130	0.244	20
AX12093	Cadmium, Total	mg/L	0.0000122	0.00044	0.10	0.0921	0.0943	0.101	0.085 to 0.115		92.1	70 to 130	2.36	20
AX12093	Chromium, Total	mg/L	0.0000389	0.0044	0.10	0.100	0.102	0.0961	0.085 to 0.115		100	70 to 130	1.91	20
AX12093	Lead, Total	mg/L	0.0000316	0.0022	0.10	0.103	0.103	0.0980	0.085 to 0.115		103	70 to 130	0.513	20
AX12093	Lithium, Total	mg/L	-0.0000528	0.022	0.20	0.205	0.214	0.195	0.17 to 0.23		103	70 to 130	4.07	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

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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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AX12093

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12101	Solids, Dissolved	mg/L	4.00	25			326	53.0	40 to 60	1.56	5

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AX12094

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	J 0.00294	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0279	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	1.41	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	56.3	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/22/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	J 0.00491	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/31/2017	SM 2540C		1		25	386	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	21	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		10	14.0	50	140	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, 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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AX12094

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX12102	Selenium, Total	mg/L	0.0000216	0.0044	0.10	0.0915	0.0944	0.0983	0.085 to 0.115	91.5	70 to 130	3.09	20
AX12102	Antimony, Total	mg/L	0.0000419	0.00132	0.10	0.0894	0.0915	0.0956	0.085 to 0.115	89.4	70 to 130	2.31	20
AX12102	Beryllium, Total	mg/L	0.0000297	0.00132	0.10	0.102	0.106	0.105	0.085 to 0.115	102	70 to 130	3.97	20
AX12102	Barium, Total	mg/L	0.0000225	0.0044	0.10	0.0874	0.0903	0.0918	0.085 to 0.115	87.4	70 to 130	3.25	20
AX12102	Cadmium, Total	mg/L	0.0000114	0.00044	0.10	0.0936	0.0963	0.0995	0.085 to 0.115	93.6	70 to 130	2.77	20
AX12102	Boron, Total	mg/L	0.000413	0.044	1.00	0.942	0.912	0.969	0.85 to 1.15	94.2	70 to 130	3.18	20
AX12102	Chromium, Total	mg/L	0.0000339	0.0044	0.10	0.101	0.103	0.1000	0.085 to 0.115	101	70 to 130	1.91	20
AX12102	Thallium, Total	mg/L	0.0000299	0.00044	0.10	0.0990	0.103	0.1000	0.085 to 0.115	99.0	70 to 130	3.79	20
AX12102	Calcium, Total	mg/L	-0.0181	0.22	5.00	4.84	4.75	4.82	4.25 to 5.75	96.8	70 to 130	1.96	20
AX12102	Lithium, Total	mg/L	-0.0000590	0.022	0.20	0.190	0.180	0.186	0.17 to 0.23	95.2	70 to 130	5.36	20
AX12102	Molybdenum, Total	mg/L	0.0000159	0.0044	0.10	0.0944	0.0963	0.0961	0.085 to 0.115	94.4	70 to 130	2.00	20
AX12102	Arsenic, Total	mg/L	0.0000179	0.0022	0.10	0.0975	0.0995	0.102	0.085 to 0.115	97.5	70 to 130	2.03	20
AX12102	Lead, Total	mg/L	0.0000314	0.0022	0.10	0.101	0.104	0.0994	0.085 to 0.115	101	70 to 130	2.79	20
AX12102	Cobalt, Total	mg/L	0.00000737	0.0044	0.10	0.103	0.105	0.0974	0.085 to 0.115	103	70 to 130	1.98	20
AX12102	Mercury, Total by CVAA	mg/L	0.0000307	0.0005	0.004	0.00366	0.00369	0.00367	0.0034 to 0.0046	91.6	70 to 130	0.740	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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AX12094

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12101	Solids, Dissolved	mg/L	4.00	25			326	53.0	40 to 60	1.56	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.

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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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-21 Dup

Laboratory ID Number: AX12095

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	J 0.00269	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0264	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	1.38	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	56.5	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/22/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	J 0.00430	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/31/2017	SM 2540C		1		25	378	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	21	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		10	14.0	50	150	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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-21 Dup

Laboratory ID Number: AX12095

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB	Rec		Prec	Limit	
			MB	Limit					Limit	Prec			
AX12102	Antimony, Total	mg/L	0.0000419	0.00132	0.10	0.0894	0.0915	0.0956	0.085 to 0.115	89.4	70 to 130	2.31	20
AX12102	Selenium, Total	mg/L	0.0000216	0.0044	0.10	0.0915	0.0944	0.0983	0.085 to 0.115	91.5	70 to 130	3.09	20
AX12102	Beryllium, Total	mg/L	0.0000297	0.00132	0.10	0.102	0.106	0.105	0.085 to 0.115	102	70 to 130	3.97	20
AX12102	Calcium, Total	mg/L	-0.0181	0.22	5.00	4.84	4.75	4.82	4.25 to 5.75	96.8	70 to 130	1.96	20
AX12102	Lithium, Total	mg/L	-0.0000590	0.022	0.20	0.190	0.180	0.186	0.17 to 0.23	95.2	70 to 130	5.36	20
AX12102	Molybdenum, Total	mg/L	0.0000159	0.0044	0.10	0.0944	0.0963	0.0961	0.085 to 0.115	94.4	70 to 130	2.00	20
AX12102	Arsenic, Total	mg/L	0.0000179	0.0022	0.10	0.0975	0.0995	0.102	0.085 to 0.115	97.5	70 to 130	2.03	20
AX12102	Lead, Total	mg/L	0.0000314	0.0022	0.10	0.101	0.104	0.0994	0.085 to 0.115	101	70 to 130	2.79	20
AX12102	Barium, Total	mg/L	0.0000225	0.0044	0.10	0.0874	0.0903	0.0918	0.085 to 0.115	87.4	70 to 130	3.25	20
AX12102	Cadmium, Total	mg/L	0.0000114	0.00044	0.10	0.0936	0.0963	0.0995	0.085 to 0.115	93.6	70 to 130	2.77	20
AX12102	Boron, Total	mg/L	0.000413	0.044	1.00	0.942	0.912	0.969	0.85 to 1.15	94.2	70 to 130	3.18	20
AX12102	Chromium, Total	mg/L	0.0000339	0.0044	0.10	0.101	0.103	0.1000	0.085 to 0.115	101	70 to 130	1.91	20
AX12102	Thallium, Total	mg/L	0.0000299	0.00044	0.10	0.0990	0.103	0.1000	0.085 to 0.115	99.0	70 to 130	3.79	20
AX12102	Cobalt, Total	mg/L	0.00000737	0.0044	0.10	0.103	0.105	0.0974	0.085 to 0.115	103	70 to 130	1.98	20
AX12102	Mercury, Total by CVAA	mg/L	0.0000307	0.0005	0.004	0.00366	0.00369	0.00367	0.0034 to 0.0046	91.6	70 to 130	0.740	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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-21 Dup

Laboratory ID Number: AX12095

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12101	Solids, Dissolved	mg/L	4.00	25			326	53.0	40 to 60	1.56	5

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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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AX12096

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0162	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	2.11	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	54.8	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/22/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	J 0.00996	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/31/2017	SM 2540C		1		25	375	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	28	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		10	14.0	50	160	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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AX12096

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX12102	Selenium, Total	mg/L	0.0000216	0.0044	0.10	0.0915	0.0944	0.0983	0.085 to 0.115	91.5	70 to 130	3.09	20
AX12102	Antimony, Total	mg/L	0.0000419	0.00132	0.10	0.0894	0.0915	0.0956	0.085 to 0.115	89.4	70 to 130	2.31	20
AX12102	Beryllium, Total	mg/L	0.0000297	0.00132	0.10	0.102	0.106	0.105	0.085 to 0.115	102	70 to 130	3.97	20
AX12102	Cobalt, Total	mg/L	0.00000737	0.0044	0.10	0.103	0.105	0.0974	0.085 to 0.115	103	70 to 130	1.98	20
AX12102	Mercury, Total by CVAA	mg/L	0.0000307	0.0005	0.004	0.00366	0.00369	0.00367	0.0034 to 0.0046	91.6	70 to 130	0.740	20
AX12102	Boron, Total	mg/L	0.000413	0.044	1.00	0.942	0.912	0.969	0.85 to 1.15	94.2	70 to 130	3.18	20
AX12102	Chromium, Total	mg/L	0.0000339	0.0044	0.10	0.101	0.103	0.1000	0.085 to 0.115	101	70 to 130	1.91	20
AX12102	Thallium, Total	mg/L	0.0000299	0.00044	0.10	0.0990	0.103	0.1000	0.085 to 0.115	99.0	70 to 130	3.79	20
AX12102	Barium, Total	mg/L	0.0000225	0.0044	0.10	0.0874	0.0903	0.0918	0.085 to 0.115	87.4	70 to 130	3.25	20
AX12102	Cadmium, Total	mg/L	0.0000114	0.00044	0.10	0.0936	0.0963	0.0995	0.085 to 0.115	93.6	70 to 130	2.77	20
AX12102	Calcium, Total	mg/L	-0.0181	0.22	5.00	4.84	4.75	4.82	4.25 to 5.75	96.8	70 to 130	1.96	20
AX12102	Lithium, Total	mg/L	-0.0000590	0.022	0.20	0.190	0.180	0.186	0.17 to 0.23	95.2	70 to 130	5.36	20
AX12102	Molybdenum, Total	mg/L	0.0000159	0.0044	0.10	0.0944	0.0963	0.0961	0.085 to 0.115	94.4	70 to 130	2.00	20
AX12102	Arsenic, Total	mg/L	0.0000179	0.0022	0.10	0.0975	0.0995	0.102	0.085 to 0.115	97.5	70 to 130	2.03	20
AX12102	Lead, Total	mg/L	0.0000314	0.0022	0.10	0.101	0.104	0.0994	0.085 to 0.115	101	70 to 130	2.79	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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AX12096

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12101	Solids, Dissolved	mg/L	4.00	25			326	53.0	40 to 60	1.56	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.

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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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AX12097

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0208	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	1.69	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		10	1.00	5	88.0	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/22/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/31/2017	SM 2540C		1		25	487	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	19	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		10	14.0	50	200	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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AX12097

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX12102	Beryllium, Total	mg/L	0.0000297	0.00132	0.10	0.102	0.106	0.105	0.085 to 0.115	102	70 to 130	3.97	20
AX12102	Selenium, Total	mg/L	0.0000216	0.0044	0.10	0.0915	0.0944	0.0983	0.085 to 0.115	91.5	70 to 130	3.09	20
AX12102	Antimony, Total	mg/L	0.0000419	0.00132	0.10	0.0894	0.0915	0.0956	0.085 to 0.115	89.4	70 to 130	2.31	20
AX12102	Barium, Total	mg/L	0.0000225	0.0044	0.10	0.0874	0.0903	0.0918	0.085 to 0.115	87.4	70 to 130	3.25	20
AX12102	Cadmium, Total	mg/L	0.0000114	0.00044	0.10	0.0936	0.0963	0.0995	0.085 to 0.115	93.6	70 to 130	2.77	20
AX12102	Boron, Total	mg/L	0.000413	0.044	1.00	0.942	0.912	0.969	0.85 to 1.15	94.2	70 to 130	3.18	20
AX12102	Chromium, Total	mg/L	0.0000339	0.0044	0.10	0.101	0.103	0.1000	0.085 to 0.115	101	70 to 130	1.91	20
AX12102	Thallium, Total	mg/L	0.0000299	0.00044	0.10	0.0990	0.103	0.1000	0.085 to 0.115	99.0	70 to 130	3.79	20
AX12102	Arsenic, Total	mg/L	0.0000179	0.0022	0.10	0.0975	0.0995	0.102	0.085 to 0.115	97.5	70 to 130	2.03	20
AX12102	Lead, Total	mg/L	0.0000314	0.0022	0.10	0.101	0.104	0.0994	0.085 to 0.115	101	70 to 130	2.79	20
AX12102	Calcium, Total	mg/L	-0.0181	0.22	5.00	4.84	4.75	4.82	4.25 to 5.75	96.8	70 to 130	1.96	20
AX12102	Lithium, Total	mg/L	-0.0000590	0.022	0.20	0.190	0.180	0.186	0.17 to 0.23	95.2	70 to 130	5.36	20
AX12102	Molybdenum, Total	mg/L	0.0000159	0.0044	0.10	0.0944	0.0963	0.0961	0.085 to 0.115	94.4	70 to 130	2.00	20
AX12102	Cobalt, Total	mg/L	0.00000737	0.0044	0.10	0.103	0.105	0.0974	0.085 to 0.115	103	70 to 130	1.98	20
AX12102	Mercury, Total by CVAA	mg/L	0.0000307	0.0005	0.004	0.00366	0.00369	0.00367	0.0034 to 0.0046	91.6	70 to 130	0.740	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: WMWGASAP
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AX12097

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Limit
AX12101	Solids, Dissolved	mg/L	4.00	25				326	53.0	40 to 60			1.56 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.

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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: WMWGASAPFB
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX12098

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7	2		0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7	2		0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/22/2017	EPA 200.7	2		0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/31/2017	SM 2540C	1			25	U Not Detected	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E	1		0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C	1		0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E	1		1.40	5.00	U <1.4	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: WMWGASAPFB
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX12098

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX12102	Selenium, Total	mg/L	0.0000216	0.0044	0.10	0.0915	0.0944	0.0983	0.085 to 0.115	91.5	70 to 130	3.09	20
AX12102	Beryllium, Total	mg/L	0.0000297	0.00132	0.10	0.102	0.106	0.105	0.085 to 0.115	102	70 to 130	3.97	20
AX12102	Antimony, Total	mg/L	0.0000419	0.00132	0.10	0.0894	0.0915	0.0956	0.085 to 0.115	89.4	70 to 130	2.31	20
AX12102	Barium, Total	mg/L	0.0000225	0.0044	0.10	0.0874	0.0903	0.0918	0.085 to 0.115	87.4	70 to 130	3.25	20
AX12102	Cadmium, Total	mg/L	0.0000114	0.00044	0.10	0.0936	0.0963	0.0995	0.085 to 0.115	93.6	70 to 130	2.77	20
AX12102	Calcium, Total	mg/L	-0.0181	0.22	5.00	4.84	4.75	4.82	4.25 to 5.75	96.8	70 to 130	1.96	20
AX12102	Lithium, Total	mg/L	-0.0000590	0.022	0.20	0.190	0.180	0.186	0.17 to 0.23	95.2	70 to 130	5.36	20
AX12102	Molybdenum, Total	mg/L	0.0000159	0.0044	0.10	0.0944	0.0963	0.0961	0.085 to 0.115	94.4	70 to 130	2.00	20
AX12102	Boron, Total	mg/L	0.000413	0.044	1.00	0.942	0.912	0.969	0.85 to 1.15	94.2	70 to 130	3.18	20
AX12102	Chromium, Total	mg/L	0.0000339	0.0044	0.10	0.101	0.103	0.1000	0.085 to 0.115	101	70 to 130	1.91	20
AX12102	Thallium, Total	mg/L	0.0000299	0.00044	0.10	0.0990	0.103	0.1000	0.085 to 0.115	99.0	70 to 130	3.79	20
AX12102	Arsenic, Total	mg/L	0.0000179	0.0022	0.10	0.0975	0.0995	0.102	0.085 to 0.115	97.5	70 to 130	2.03	20
AX12102	Lead, Total	mg/L	0.0000314	0.0022	0.10	0.101	0.104	0.0994	0.085 to 0.115	101	70 to 130	2.79	20
AX12102	Cobalt, Total	mg/L	0.00000737	0.0044	0.10	0.103	0.105	0.0974	0.085 to 0.115	103	70 to 130	1.98	20
AX12102	Mercury, Total by CVAA	mg/L	0.0000307	0.0005	0.004	0.00366	0.00369	0.00367	0.0034 to 0.0046	91.6	70 to 130	0.740	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: WMWGASAPFB
 Sample Date: 23-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX12098

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12101	Solids, Dissolved	mg/L	4.00	25			326	53.0	40 to 60	1.56	5

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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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AX12099

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	0.00564	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0671	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	0.342	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	62.3	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/22/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/31/2017	SM 2540C		1		25	234	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	22	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		6	8.40	30	92	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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AX12099

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX12102	Antimony, Total	mg/L	0.0000419	0.00132	0.10	0.0894	0.0915	0.0956	0.085 to 0.115	89.4	70 to 130	2.31	20
AX12102	Selenium, Total	mg/L	0.0000216	0.0044	0.10	0.0915	0.0944	0.0983	0.085 to 0.115	91.5	70 to 130	3.09	20
AX12102	Beryllium, Total	mg/L	0.0000297	0.00132	0.10	0.102	0.106	0.105	0.085 to 0.115	102	70 to 130	3.97	20
AX12102	Barium, Total	mg/L	0.0000225	0.0044	0.10	0.0874	0.0903	0.0918	0.085 to 0.115	87.4	70 to 130	3.25	20
AX12102	Cadmium, Total	mg/L	0.0000114	0.00044	0.10	0.0936	0.0963	0.0995	0.085 to 0.115	93.6	70 to 130	2.77	20
AX12102	Boron, Total	mg/L	0.000413	0.044	1.00	0.942	0.912	0.969	0.85 to 1.15	94.2	70 to 130	3.18	20
AX12102	Chromium, Total	mg/L	0.0000339	0.0044	0.10	0.101	0.103	0.1000	0.085 to 0.115	101	70 to 130	1.91	20
AX12102	Thallium, Total	mg/L	0.0000299	0.00044	0.10	0.0990	0.103	0.1000	0.085 to 0.115	99.0	70 to 130	3.79	20
AX12102	Calcium, Total	mg/L	-0.0181	0.22	5.00	4.84	4.75	4.82	4.25 to 5.75	96.8	70 to 130	1.96	20
AX12102	Lithium, Total	mg/L	-0.0000590	0.022	0.20	0.190	0.180	0.186	0.17 to 0.23	95.2	70 to 130	5.36	20
AX12102	Molybdenum, Total	mg/L	0.0000159	0.0044	0.10	0.0944	0.0963	0.0961	0.085 to 0.115	94.4	70 to 130	2.00	20
AX12102	Cobalt, Total	mg/L	0.00000737	0.0044	0.10	0.103	0.105	0.0974	0.085 to 0.115	103	70 to 130	1.98	20
AX12102	Mercury, Total by CVAA	mg/L	0.0000307	0.0005	0.004	0.00366	0.00369	0.00367	0.0034 to 0.0046	91.6	70 to 130	0.740	20
AX12102	Arsenic, Total	mg/L	0.0000179	0.0022	0.10	0.0975	0.0995	0.102	0.085 to 0.115	97.5	70 to 130	2.03	20
AX12102	Lead, Total	mg/L	0.0000314	0.0022	0.10	0.101	0.104	0.0994	0.085 to 0.115	101	70 to 130	2.79	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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AX12099

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12101	Solids, Dissolved	mg/L	4.00	25			326	53.0	40 to 60	1.56	5

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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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 FAX (205) 257-1654

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AX12100

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0344	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	44.3	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/22/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/31/2017	SM 2540C		1		25	204	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	5.4	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		1	1.40	5.00	U <1.4	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, 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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AX12100

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX12102	Antimony, Total	mg/L	0.0000419	0.00132	0.10	0.0894	0.0915	0.0956	0.085 to 0.115	89.4	70 to 130	2.31	20
AX12102	Selenium, Total	mg/L	0.0000216	0.0044	0.10	0.0915	0.0944	0.0983	0.085 to 0.115	91.5	70 to 130	3.09	20
AX12102	Beryllium, Total	mg/L	0.0000297	0.00132	0.10	0.102	0.106	0.105	0.085 to 0.115	102	70 to 130	3.97	20
AX12102	Cobalt, Total	mg/L	0.00000737	0.0044	0.10	0.103	0.105	0.0974	0.085 to 0.115	103	70 to 130	1.98	20
AX12102	Mercury, Total by CVAA	mg/L	0.0000307	0.0005	0.004	0.00366	0.00369	0.00367	0.0034 to 0.0046	91.6	70 to 130	0.740	20
AX12102	Arsenic, Total	mg/L	0.0000179	0.0022	0.10	0.0975	0.0995	0.102	0.085 to 0.115	97.5	70 to 130	2.03	20
AX12102	Lead, Total	mg/L	0.0000314	0.0022	0.10	0.101	0.104	0.0994	0.085 to 0.115	101	70 to 130	2.79	20
AX12102	Barium, Total	mg/L	0.0000225	0.0044	0.10	0.0874	0.0903	0.0918	0.085 to 0.115	87.4	70 to 130	3.25	20
AX12102	Cadmium, Total	mg/L	0.0000114	0.00044	0.10	0.0936	0.0963	0.0995	0.085 to 0.115	93.6	70 to 130	2.77	20
AX12102	Calcium, Total	mg/L	-0.0181	0.22	5.00	4.84	4.75	4.82	4.25 to 5.75	96.8	70 to 130	1.96	20
AX12102	Lithium, Total	mg/L	-0.0000590	0.022	0.20	0.190	0.180	0.186	0.17 to 0.23	95.2	70 to 130	5.36	20
AX12102	Molybdenum, Total	mg/L	0.0000159	0.0044	0.10	0.0944	0.0963	0.0961	0.085 to 0.115	94.4	70 to 130	2.00	20
AX12102	Boron, Total	mg/L	0.000413	0.044	1.00	0.942	0.912	0.969	0.85 to 1.15	94.2	70 to 130	3.18	20
AX12102	Chromium, Total	mg/L	0.0000339	0.0044	0.10	0.101	0.103	0.1000	0.085 to 0.115	101	70 to 130	1.91	20
AX12102	Thallium, Total	mg/L	0.0000299	0.00044	0.10	0.0990	0.103	0.1000	0.085 to 0.115	99.0	70 to 130	3.79	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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AX12100

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12101	Solids, Dissolved	mg/L	4.00	25			326	53.0	40 to 60	1.56	5

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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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AX12101

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	0.0476	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	72.9	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/22/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/31/2017	SM 2540C		1		25	316	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	5.9	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	0.12	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		4	5.60	20	56	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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AX12101

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB Limit	Rec		Prec	Prec Limit	
			MB	Limit					Rec	Limit			
AX12102	Selenium, Total	mg/L	0.0000216	0.0044	0.10	0.0915	0.0944	0.0983	0.085 to 0.115	91.5	70 to 130	3.09	20
AX12102	Antimony, Total	mg/L	0.0000419	0.00132	0.10	0.0894	0.0915	0.0956	0.085 to 0.115	89.4	70 to 130	2.31	20
AX12102	Beryllium, Total	mg/L	0.0000297	0.00132	0.10	0.102	0.106	0.105	0.085 to 0.115	102	70 to 130	3.97	20
AX12102	Barium, Total	mg/L	0.0000225	0.0044	0.10	0.0874	0.0903	0.0918	0.085 to 0.115	87.4	70 to 130	3.25	20
AX12102	Cadmium, Total	mg/L	0.0000114	0.00044	0.10	0.0936	0.0963	0.0995	0.085 to 0.115	93.6	70 to 130	2.77	20
AX12102	Arsenic, Total	mg/L	0.0000179	0.0022	0.10	0.0975	0.0995	0.102	0.085 to 0.115	97.5	70 to 130	2.03	20
AX12102	Lead, Total	mg/L	0.0000314	0.0022	0.10	0.101	0.104	0.0994	0.085 to 0.115	101	70 to 130	2.79	20
AX12102	Boron, Total	mg/L	0.000413	0.044	1.00	0.942	0.912	0.969	0.85 to 1.15	94.2	70 to 130	3.18	20
AX12102	Chromium, Total	mg/L	0.0000339	0.0044	0.10	0.101	0.103	0.1000	0.085 to 0.115	101	70 to 130	1.91	20
AX12102	Thallium, Total	mg/L	0.0000299	0.00044	0.10	0.0990	0.103	0.1000	0.085 to 0.115	99.0	70 to 130	3.79	20
AX12102	Calcium, Total	mg/L	-0.0181	0.22	5.00	4.84	4.75	4.82	4.25 to 5.75	96.8	70 to 130	1.96	20
AX12102	Lithium, Total	mg/L	-0.0000590	0.022	0.20	0.190	0.180	0.186	0.17 to 0.23	95.2	70 to 130	5.36	20
AX12102	Molybdenum, Total	mg/L	0.0000159	0.0044	0.10	0.0944	0.0963	0.0961	0.085 to 0.115	94.4	70 to 130	2.00	20
AX12102	Cobalt, Total	mg/L	0.00000737	0.0044	0.10	0.103	0.105	0.0974	0.085 to 0.115	103	70 to 130	1.98	20
AX12102	Mercury, Total by CVAA	mg/L	0.0000307	0.0005	0.004	0.00366	0.00369	0.00367	0.0034 to 0.0046	91.6	70 to 130	0.740	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: WMWGASAP
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AX12101

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Limit
AX12101	Solids, Dissolved	mg/L	4.00	25				326	53.0	40 to 60			1.56 5

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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: WMWGASAPFB
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX12102

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Beryllium, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/7/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/7/2017	EPA 200.7		2	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	5/30/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/6/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/22/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	5/30/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	5/30/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	5/30/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/31/2017	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total, by Test America	SGC	6/14/2017	SM 4500 Cl_E		1	0.60	2.00	J 1.4	mg/L
* Fluoride, Total, by Test America	SGC	6/14/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	6/14/2017	SM 4500 SO4_E		1	1.40	5.00	U <1.4	mg/L

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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAPFB
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX12102

Sample	Analysis	Units	MB				LFB			Rec		Prec	
			MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	
AX12102	Antimony, Total	mg/L	0.0000419	0.00132	0.10	0.0894	0.0915	0.0956	0.085 to 0.115	89.4	70 to 130	2.31	20
AX12102	Beryllium, Total	mg/L	0.0000297	0.00132	0.10	0.102	0.106	0.105	0.085 to 0.115	102	70 to 130	3.97	20
AX12102	Selenium, Total	mg/L	0.0000216	0.0044	0.10	0.0915	0.0944	0.0983	0.085 to 0.115	91.5	70 to 130	3.09	20
AX12102	Cobalt, Total	mg/L	0.00000737	0.0044	0.10	0.103	0.105	0.0974	0.085 to 0.115	103	70 to 130	1.98	20
AX12102	Mercury, Total by CVAA	mg/L	0.0000307	0.0005	0.004	0.00366	0.00369	0.00367	0.0034 to 0.0046	91.6	70 to 130	0.740	20
AX12102	Barium, Total	mg/L	0.0000225	0.0044	0.10	0.0874	0.0903	0.0918	0.085 to 0.115	87.4	70 to 130	3.25	20
AX12102	Cadmium, Total	mg/L	0.0000114	0.00044	0.10	0.0936	0.0963	0.0995	0.085 to 0.115	93.6	70 to 130	2.77	20
AX12102	Boron, Total	mg/L	0.000413	0.044	1.00	0.942	0.912	0.969	0.85 to 1.15	94.2	70 to 130	3.18	20
AX12102	Chromium, Total	mg/L	0.0000339	0.0044	0.10	0.101	0.103	0.1000	0.085 to 0.115	101	70 to 130	1.91	20
AX12102	Thallium, Total	mg/L	0.0000299	0.00044	0.10	0.0990	0.103	0.1000	0.085 to 0.115	99.0	70 to 130	3.79	20
AX12102	Arsenic, Total	mg/L	0.0000179	0.0022	0.10	0.0975	0.0995	0.102	0.085 to 0.115	97.5	70 to 130	2.03	20
AX12102	Lead, Total	mg/L	0.0000314	0.0022	0.10	0.101	0.104	0.0994	0.085 to 0.115	101	70 to 130	2.79	20
AX12102	Calcium, Total	mg/L	-0.0181	0.22	5.00	4.84	4.75	4.82	4.25 to 5.75	96.8	70 to 130	1.96	20
AX12102	Lithium, Total	mg/L	-0.0000590	0.022	0.20	0.190	0.180	0.186	0.17 to 0.23	95.2	70 to 130	5.36	20
AX12102	Molybdenum, Total	mg/L	0.0000159	0.0044	0.10	0.0944	0.0963	0.0961	0.085 to 0.115	94.4	70 to 130	2.00	20

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Laboratory certification ID: E571114

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAPFB
 Sample Date: 24-May-17
 Customer ID:
 Delivery Date: 25-May-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX12102

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX12101	Solids, Dissolved	mg/L	4.00	25			326	53.0	40 to 60	1.56	5

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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:

Definitions



Abbreviation	Description
DF	Dilution Factor
LFB	Lab Fortified Blank
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 05/24/2017 17:00

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Jason Rouss	Location	Gaston Ash Pond

Analysis Requested	Bottle 1 (500mL): Metals, Bottle 2 (250mL): Hg, Bottle 3 (500mL): TDS, Bottle 4 (250mL): Anions
Comments	All anions outsourced to Test America, Pensacola.

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-19	05/22/2017	12:32	4	Groundwater		AX12074
MW-15R	05/22/2017	14:52	4	Groundwater		AX12075
MW-1	05/23/2017	10:46	4	Groundwater		AX12076
MW-2	05/23/2017	13:09	4	Groundwater		AX12077
MW-3	05/23/2017	14:55	4	Groundwater		AX12078
MW-9	05/24/2017	10:28	4	Groundwater		AX12079
FB-1	05/24/2017	11:04	4	Field Blank		AX12080
MW-4	05/24/2017	12:35	4	Groundwater		AX12081
MW-4 Dup	05/24/2017	12:35	4	Sample Duplicate		AX12082
MW-8	05/24/2017	14:23	4	Groundwater		AX12083
EB-1	05/24/2017	15:10	4	Equipment Blank		AX12084

Relinquished By	Received By	Date/Time
	Sarah Copeland <small>Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o.ou, email=sgcopela@southerncco.com, c=US Date: 2017.05.24 16:56:47 -05'00'</small>	05/24/2017 16:56

SmarTroll ID	4696-23443-3-2	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	4677-23342-4-1	Cooler Temp
		0.0 degrees C
		Thermometer ID
		5408-27568-2-2
		pH Strip ID
		5521-28268-20-12



Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

- Field Complete
- Lab Complete

Lab ETA

Requested Complete Date	Routine
Site Representative	Byron Corina
Collector	Anthony Goggins

Results To	Dustin Brooks, Greg Dyer
Requested By	Greg Dyer
Location	Gaston Ash Pond

Analysis Requested	Bottle 1 (500mL): Metals, Bottle 2 (250mL): Hg, Bottle 3 (500mL): TDS, Bottle 4 (250mL): Anions
Comments	All anions outsourced to Test America, Pensacola.

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-20	05/24/2017	11:02	4	Groundwater		AX12085
MW-18	05/24/2017	12:07	4	Groundwater		AX12086
MW-17	05/24/2017	13:50	4	Groundwater		AX12087
MW-16	05/24/2017	13:06	4	Groundwater		AX12088

Relinquished By	Received By	Date/Time
<i>Anthony Goggins</i>	Sarah Copeland <small>Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o.ou, email=sgcopela@southernco.com, c=US Date: 2017.05.24 16:21:50 -05'00'</small>	05/24/2017 16:21

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	0.7 degrees C	
Thermometer ID	5408-27568-2-2	
pH Strip ID	5521-28268-20-12	



Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

- Field Complete
- Lab Complete

Lab ETA 05/25/2017 08:30

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Ben Rothschild	Location	Gaston Ash Pond
Analysis Requested	Bottle 1 (500mL): Metals, Bottle 2 (250mL): Hg, Bottle 3 (500mL): TDS, Bottle 4 (250mL): Anions		
Comments	All anions outsourced to Test America, Pensacola.		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-10	05/22/2017	13:23	4	Groundwater		AX12089
MW-11	05/22/2017	15:11	4	Groundwater		AX12090
MW-5	05/23/2017	11:38	4	Groundwater		AX12091
MW-5 DUP	05/23/2017	11:38	4	Sample Duplicate		AX12092
MW-22	05/23/2017	12:45	4	Groundwater		AX12093
MW-21	05/23/2017	13:45	4	Groundwater		AX12094
MW-21 DUP	05/23/2017	13:45	4	Sample Duplicate		AX12095
MW-6	05/23/2017	15:01	4	Groundwater		AX12096
MW-7	05/23/2017	16:24	4	Groundwater		AX12097
FB-2	05/23/2017	17:05	4	Field Blank		AX12098
MW-12	05/24/2017	12:33	4	Groundwater		AX12099
MW-13	05/24/2017	13:54	4	Groundwater		AX12100
MW-14	05/24/2017	15:15	4	Groundwater		AX12101
FB-3	05/24/2017	15:55	4	Field Blank		AX12102

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: 2017.05.25 08:21:11 -05'00'</small>	05/25/2017 08:21

SmarTroll ID	5151-26193-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	3901-20010-2-2	Cooler Temp
		0.1 degrees C
		Thermometer ID
		5408-27568-2-2
		pH Strip ID
		5521-28268-20-12

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: 400-138488-1

TestAmerica Sample Delivery Group: Gaston Ash Pond (7)

Client Project/Site: CCR Plant Gaston

Revision: 1

For:

Alabama Power General Test Laboratory

744 County Rd 87

GSC #8

Calera, Alabama 35040

Attn: Sarah Copeland



Authorized for release by:

6/16/2017 6:03:27 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: 400-138488-1
SDG: Gaston Ash Pond (7)

Job ID: 400-138488-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-138488-1

General Chemistry

Method(s) SM 4500 F C: The sample duplicate precision for the following sample associated with batch 356861 was outside control limits. Both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL. (400-138488-A-26 DU).

Method(s) SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 355580 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 Cl- E: The native sample, matrix spike, and matrix spike duplicate (MS/MSD) associated with analytical batch 355580 were performed at the same dilution. Due to the additional level of analyte present in the spiked samples, the concentration of <AffectedAnalytes> in the MS/MSD was above the instrument calibration range. The data have been reported and qualified.

Method(s) SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 355480 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 matrix spike / matrix spike duplicate (MS/MSD) precision for analytical batch 355741 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 355805 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: AX12075 MW-15R (400-138488-2), AX12085 MW-20 (400-138488-12), AX12086 MW-18 (400-138488-13), AX12087 MW-17 (400-138488-14), AX12088 MW-16 (400-138488-15), AX12091 MW-5 (400-138488-18), AX12092 MW-5 DUP (400-138488-19), (400-138488-A-18 MS), (400-138488-A-18 MSD), AX12093 MW-22 (400-138488-20), AX12093 MW-22 (400-138488-20[MS]), AX12093 MW-22 (400-138488-20[MSD]), AX12094 MW-21 (400-138488-21), AX12095 MW-21 DUP (400-138488-22), AX12096 MW-6 (400-138488-23) and AX12097 MW-7 (400-138488-24). Elevated reporting limits (RLs) are provided.

Method(s) SM 4500 SO4 E: The closing CCV that brackets the following samples shows on the raw data, but not in TALS. CCV: 16.30 CCB: .2062. (400-138437-C-4).

Comments

Report was revised to rerun AX12091 MW-5 (400-138488-18) and AX12092 MW-5 DUP (400-138488-19) to verify dilutions.

Detection Summary

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

TestAmerica Job ID: 400-138488-1
SDG: Gaston Ash Pond (7)

Client Sample ID: AX12074 MW-19

Lab Sample ID: 400-138488-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	12		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	26		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12075 MW-15R

Lab Sample ID: 400-138488-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	28		2.0	0.60	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	120		100	28	mg/L	20		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12076 MW-1

Lab Sample ID: 400-138488-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.7		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.080	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	16		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12077 MW-2

Lab Sample ID: 400-138488-4

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
Sulfate	2.3	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12078 MW-3

Lab Sample ID: 400-138488-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.2		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	2.0	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12079 MW-9

Lab Sample ID: 400-138488-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	9.3		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.11		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	18		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12080 FB-1

Lab Sample ID: 400-138488-7

No Detections.

Client Sample ID: AX12081 MW-4

Lab Sample ID: 400-138488-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	28		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	30		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12082 MW-4 DUP

Lab Sample ID: 400-138488-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	28		2.0	0.60	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: 400-138488-1
SDG: Gaston Ash Pond (7)

Client Sample ID: AX12082 MW-4 DUP (Continued)

Lab Sample ID: 400-138488-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	31		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12083 MW-8

Lab Sample ID: 400-138488-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.4		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	11	F1	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12084 EB-1

Lab Sample ID: 400-138488-11

No Detections.

Client Sample ID: AX12085 MW-20

Lab Sample ID: 400-138488-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	18		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	530		100	28	mg/L	20		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12086 MW-18

Lab Sample ID: 400-138488-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	13		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	150		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12087 MW-17

Lab Sample ID: 400-138488-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	17		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.20		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	230		75	21	mg/L	15		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12088 MW-16

Lab Sample ID: 400-138488-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	12		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.12		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	130		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12089 MW-10

Lab Sample ID: 400-138488-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.7		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	2.6	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12090 MW-11

Lab Sample ID: 400-138488-17

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: 400-138488-1
SDG: Gaston Ash Pond (7)

Client Sample ID: AX12090 MW-11 (Continued)

Lab Sample ID: 400-138488-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	7.1		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	32		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12091 MW-5

Lab Sample ID: 400-138488-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	40		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	160		75	21	mg/L	15		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12092 MW-5 DUP

Lab Sample ID: 400-138488-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	40		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	170		75	21	mg/L	15		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12093 MW-22

Lab Sample ID: 400-138488-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	48		2.0	0.60	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	180	F1	50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12094 MW-21

Lab Sample ID: 400-138488-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	21		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	140		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12095 MW-21 DUP

Lab Sample ID: 400-138488-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	21		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	150		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12096 MW-6

Lab Sample ID: 400-138488-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	28		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	160		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12097 MW-7

Lab Sample ID: 400-138488-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	19		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

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: 400-138488-1
SDG: Gaston Ash Pond (7)

Client Sample ID: AX12097 MW-7 (Continued)

Lab Sample ID: 400-138488-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	200		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12098 FB-2

Lab Sample ID: 400-138488-25

No Detections.

Client Sample ID: AX12099 MW-12

Lab Sample ID: 400-138488-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	22		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	92		30	8.4	mg/L	6		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12100 MW-13

Lab Sample ID: 400-138488-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.4		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

Client Sample ID: AX12101 MW-14

Lab Sample ID: 400-138488-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.9		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.12		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	56		20	5.6	mg/L	4		SM 4500 SO4 E	Total/NA

Client Sample ID: AX12102 FB-3

Lab Sample ID: 400-138488-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.4	J	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

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: 400-138488-1
SDG: Gaston Ash Pond (7)

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: 400-138488-1
SDG: Gaston Ash Pond (7)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-138488-1	AX12074 MW-19	Water	05/22/17 12:32	05/30/17 08:40
400-138488-2	AX12075 MW-15R	Water	05/22/17 14:52	05/30/17 08:40
400-138488-3	AX12076 MW-1	Water	05/23/17 10:46	05/30/17 08:40
400-138488-4	AX12077 MW-2	Water	05/23/17 13:09	05/30/17 08:40
400-138488-5	AX12078 MW-3	Water	05/23/17 14:55	05/30/17 08:40
400-138488-6	AX12079 MW-9	Water	05/24/17 10:28	05/30/17 08:40
400-138488-7	AX12080 FB-1	Water	05/24/17 11:04	05/30/17 08:40
400-138488-8	AX12081 MW-4	Water	05/24/17 12:35	05/30/17 08:40
400-138488-9	AX12082 MW-4 DUP	Water	05/24/17 12:35	05/30/17 08:40
400-138488-10	AX12083 MW-8	Water	05/24/17 14:23	05/30/17 08:40
400-138488-11	AX12084 EB-1	Water	05/24/17 15:10	05/30/17 08:40
400-138488-12	AX12085 MW-20	Water	05/24/17 11:02	05/30/17 08:40
400-138488-13	AX12086 MW-18	Water	05/24/17 12:07	05/30/17 08:40
400-138488-14	AX12087 MW-17	Water	05/24/17 13:50	05/30/17 08:40
400-138488-15	AX12088 MW-16	Water	05/24/17 13:06	05/30/17 08:40
400-138488-16	AX12089 MW-10	Water	05/22/17 13:23	05/30/17 08:40
400-138488-17	AX12090 MW-11	Water	05/22/17 15:11	05/30/17 08:40
400-138488-18	AX12091 MW-5	Water	05/23/17 11:38	05/30/17 08:40
400-138488-19	AX12092 MW-5 DUP	Water	05/23/17 11:38	05/30/17 08:40
400-138488-20	AX12093 MW-22	Water	05/23/17 12:45	05/30/17 08:40
400-138488-21	AX12094 MW-21	Water	05/23/17 13:45	05/30/17 08:40
400-138488-22	AX12095 MW-21 DUP	Water	05/23/17 13:45	05/30/17 08:40
400-138488-23	AX12096 MW-6	Water	05/23/17 15:01	05/30/17 08:40
400-138488-24	AX12097 MW-7	Water	05/23/17 16:24	05/30/17 08:40
400-138488-25	AX12098 FB-2	Water	05/23/17 17:05	05/30/17 08:40
400-138488-26	AX12099 MW-12	Water	05/24/17 12:33	05/30/17 08:40
400-138488-27	AX12100 MW-13	Water	05/24/17 13:54	05/30/17 08:40
400-138488-28	AX12101 MW-14	Water	05/24/17 15:15	05/30/17 08:40
400-138488-29	AX12102 FB-3	Water	05/24/17 15:55	05/30/17 08:40

Client Sample Results

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

TestAmerica Job ID: 400-138488-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12074 MW-19

Lab Sample ID: 400-138488-1

Date Collected: 05/22/17 12:32

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		2.0	0.60	mg/L			06/01/17 10:19	1
Fluoride	0.040	J	0.10	0.032	mg/L			06/07/17 18:21	1
Sulfate	26		5.0	1.4	mg/L			05/31/17 10:40	1

Client Sample ID: AX12075 MW-15R

Lab Sample ID: 400-138488-2

Date Collected: 05/22/17 14:52

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28		2.0	0.60	mg/L			06/01/17 10:38	1
Fluoride	0.070	J	0.10	0.032	mg/L			06/09/17 17:57	1
Sulfate	120		100	28	mg/L			05/31/17 11:20	20

Client Sample ID: AX12076 MW-1

Lab Sample ID: 400-138488-3

Date Collected: 05/23/17 10:46

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.7		2.0	0.60	mg/L			06/01/17 11:46	1
Fluoride	0.080	J	0.10	0.032	mg/L			06/09/17 17:59	1
Sulfate	16		5.0	1.4	mg/L			05/31/17 13:06	1

Client Sample ID: AX12077 MW-2

Lab Sample ID: 400-138488-4

Date Collected: 05/23/17 13:09

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.4		2.0	0.60	mg/L			06/01/17 11:46	1
Fluoride	<0.032		0.10	0.032	mg/L			06/09/17 18:01	1
Sulfate	2.3	J	5.0	1.4	mg/L			05/31/17 13:30	1

Client Sample ID: AX12078 MW-3

Lab Sample ID: 400-138488-5

Date Collected: 05/23/17 14:55

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.2		2.0	0.60	mg/L			06/01/17 11:46	1
Fluoride	<0.032		0.10	0.032	mg/L			06/09/17 18:03	1
Sulfate	2.0	J	5.0	1.4	mg/L			05/31/17 13:30	1

Client Sample Results

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

TestAmerica Job ID: 400-138488-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12079 MW-9

Lab Sample ID: 400-138488-6

Date Collected: 05/24/17 10:28

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.3		2.0	0.60	mg/L			06/01/17 11:46	1
Fluoride	0.11		0.10	0.032	mg/L			06/09/17 18:05	1
Sulfate	18		5.0	1.4	mg/L			06/03/17 11:51	1

Client Sample ID: AX12080 FB-1

Lab Sample ID: 400-138488-7

Date Collected: 05/24/17 11:04

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			06/01/17 11:46	1
Fluoride	<0.032		0.10	0.032	mg/L			06/09/17 18:08	1
Sulfate	<1.4		5.0	1.4	mg/L			06/03/17 11:51	1

Client Sample ID: AX12081 MW-4

Lab Sample ID: 400-138488-8

Date Collected: 05/24/17 12:35

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28		2.0	0.60	mg/L			06/01/17 11:46	1
Fluoride	<0.032		0.10	0.032	mg/L			06/09/17 18:10	1
Sulfate	30		5.0	1.4	mg/L			06/02/17 15:23	1

Client Sample ID: AX12082 MW-4 DUP

Lab Sample ID: 400-138488-9

Date Collected: 05/24/17 12:35

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28		2.0	0.60	mg/L			06/01/17 11:46	1
Fluoride	<0.032		0.10	0.032	mg/L			06/09/17 18:17	1
Sulfate	31		5.0	1.4	mg/L			06/02/17 15:23	1

Client Sample ID: AX12083 MW-8

Lab Sample ID: 400-138488-10

Date Collected: 05/24/17 14:23

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.4		2.0	0.60	mg/L			06/01/17 11:46	1
Fluoride	0.090	J	0.10	0.032	mg/L			06/09/17 17:52	1
Sulfate	11	F1	5.0	1.4	mg/L			06/03/17 11:51	1

Client Sample ID: AX12084 EB-1

Lab Sample ID: 400-138488-11

Date Collected: 05/24/17 15:10

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			06/01/17 11:47	1

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-138488-1
SDG: Gaston Ash Pond (7)

Client Sample ID: AX12084 EB-1

Lab Sample ID: 400-138488-11

Date Collected: 05/24/17 15:10

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			06/09/17 18:23	1
Sulfate	<1.4		5.0	1.4	mg/L			06/03/17 11:51	1

Client Sample ID: AX12085 MW-20

Lab Sample ID: 400-138488-12

Date Collected: 05/24/17 11:02

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		2.0	0.60	mg/L			06/01/17 11:47	1
Fluoride	0.040	J	0.10	0.032	mg/L			06/09/17 18:25	1
Sulfate	530		100	28	mg/L			06/03/17 12:29	20

Client Sample ID: AX12086 MW-18

Lab Sample ID: 400-138488-13

Date Collected: 05/24/17 12:07

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13		2.0	0.60	mg/L			06/01/17 12:02	1
Fluoride	0.050	J	0.10	0.032	mg/L			06/09/17 18:27	1
Sulfate	150		50	14	mg/L			06/03/17 12:29	10

Client Sample ID: AX12087 MW-17

Lab Sample ID: 400-138488-14

Date Collected: 05/24/17 13:50

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		2.0	0.60	mg/L			06/01/17 12:02	1
Fluoride	0.20		0.10	0.032	mg/L			06/09/17 18:30	1
Sulfate	230		75	21	mg/L			06/03/17 12:29	15

Client Sample ID: AX12088 MW-16

Lab Sample ID: 400-138488-15

Date Collected: 05/24/17 13:06

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		2.0	0.60	mg/L			06/01/17 12:02	1
Fluoride	0.12		0.10	0.032	mg/L			06/09/17 18:31	1
Sulfate	130		50	14	mg/L			06/03/17 12:29	10

Client Sample ID: AX12089 MW-10

Lab Sample ID: 400-138488-16

Date Collected: 05/22/17 13:23

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.7		2.0	0.60	mg/L			06/01/17 12:02	1
Fluoride	0.040	J	0.10	0.032	mg/L			06/09/17 18:33	1

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-138488-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12089 MW-10

Lab Sample ID: 400-138488-16

Date Collected: 05/22/17 13:23

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2.6	J	5.0	1.4	mg/L			05/31/17 10:40	1

Client Sample ID: AX12090 MW-11

Lab Sample ID: 400-138488-17

Date Collected: 05/22/17 15:11

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.1		2.0	0.60	mg/L			06/01/17 12:02	1
Fluoride	<0.032		0.10	0.032	mg/L			06/09/17 18:35	1
Sulfate	32		5.0	1.4	mg/L			05/31/17 10:40	1

Client Sample ID: AX12091 MW-5

Lab Sample ID: 400-138488-18

Date Collected: 05/23/17 11:38

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40		2.0	0.60	mg/L			06/01/17 12:02	1
Fluoride	0.050	J	0.10	0.032	mg/L			06/13/17 18:01	1
Sulfate	160		75	21	mg/L			06/15/17 15:05	15

Client Sample ID: AX12092 MW-5 DUP

Lab Sample ID: 400-138488-19

Date Collected: 05/23/17 11:38

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40		2.0	0.60	mg/L			06/01/17 12:02	1
Fluoride	0.050	J	0.10	0.032	mg/L			06/13/17 18:03	1
Sulfate	170		75	21	mg/L			06/15/17 15:05	15

Client Sample ID: AX12093 MW-22

Lab Sample ID: 400-138488-20

Date Collected: 05/23/17 12:45

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	48		2.0	0.60	mg/L			06/01/17 12:02	1
Fluoride	0.070	J	0.10	0.032	mg/L			06/13/17 17:55	1
Sulfate	180	F1	50	14	mg/L			06/03/17 12:32	10

Client Sample ID: AX12094 MW-21

Lab Sample ID: 400-138488-21

Date Collected: 05/23/17 13:45

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21		2.0	0.60	mg/L			06/01/17 12:03	1
Fluoride	0.040	J	0.10	0.032	mg/L			06/13/17 18:05	1
Sulfate	140		50	14	mg/L			06/03/17 12:32	10

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-138488-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12095 MW-21 DUP

Lab Sample ID: 400-138488-22

Date Collected: 05/23/17 13:45

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21		2.0	0.60	mg/L			06/01/17 12:03	1
Fluoride	0.040	J	0.10	0.032	mg/L			06/13/17 18:07	1
Sulfate	150		50	14	mg/L			06/03/17 13:51	10

Client Sample ID: AX12096 MW-6

Lab Sample ID: 400-138488-23

Date Collected: 05/23/17 15:01

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	28		2.0	0.60	mg/L			06/06/17 14:25	1
Fluoride	0.040	J	0.10	0.032	mg/L			06/13/17 18:09	1
Sulfate	160		50	14	mg/L			06/03/17 13:51	10

Client Sample ID: AX12097 MW-7

Lab Sample ID: 400-138488-24

Date Collected: 05/23/17 16:24

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19		2.0	0.60	mg/L			06/06/17 14:25	1
Fluoride	0.040	J	0.10	0.032	mg/L			06/13/17 18:12	1
Sulfate	200		50	14	mg/L			06/03/17 13:51	10

Client Sample ID: AX12098 FB-2

Lab Sample ID: 400-138488-25

Date Collected: 05/23/17 17:05

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			06/03/17 14:54	1
Fluoride	<0.032		0.10	0.032	mg/L			06/13/17 18:14	1
Sulfate	<1.4		5.0	1.4	mg/L			06/06/17 16:05	1

Client Sample ID: AX12099 MW-12

Lab Sample ID: 400-138488-26

Date Collected: 05/24/17 12:33

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22		2.0	0.60	mg/L			06/03/17 14:54	1
Fluoride	0.050	J	0.10	0.032	mg/L			06/13/17 18:27	1
Sulfate	92		30	8.4	mg/L			06/07/17 14:29	6

Client Sample Results

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

TestAmerica Job ID: 400-138488-1
SDG: Gaston Ash Pond (7)

Client Sample ID: AX12100 MW-13

Lab Sample ID: 400-138488-27

Date Collected: 05/24/17 13:54

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.4		2.0	0.60	mg/L			06/03/17 14:59	1
Fluoride	0.050	J	0.10	0.032	mg/L			06/13/17 18:31	1
Sulfate	<1.4		5.0	1.4	mg/L			06/06/17 16:05	1

Client Sample ID: AX12101 MW-14

Lab Sample ID: 400-138488-28

Date Collected: 05/24/17 15:15

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.9		2.0	0.60	mg/L			06/03/17 14:59	1
Fluoride	0.12		0.10	0.032	mg/L			06/13/17 18:33	1
Sulfate	56		20	5.6	mg/L			06/07/17 14:29	4

Client Sample ID: AX12102 FB-3

Lab Sample ID: 400-138488-29

Date Collected: 05/24/17 15:55

Matrix: Water

Date Received: 05/30/17 08:40

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.4	J	2.0	0.60	mg/L			06/06/17 14:25	1
Fluoride	<0.032		0.10	0.032	mg/L			06/13/17 18:22	1
Sulfate	<1.4		5.0	1.4	mg/L			06/06/17 17:01	1

Definitions/Glossary

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

TestAmerica Job ID: 400-138488-1
SDG: Gaston Ash Pond (7)

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.
F1	MS and/or MSD Recovery is outside acceptance limits.
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.
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.
F2	MS/MSD RPD exceeds control 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: 400-138488-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12074 MW-19

Lab Sample ID: 400-138488-1

Date Collected: 05/22/17 12:32

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355542	06/01/17 10:19	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356229	06/07/17 18:21	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355476	05/31/17 10:40	VLS	TAL PEN

Client Sample ID: AX12075 MW-15R

Lab Sample ID: 400-138488-2

Date Collected: 05/22/17 14:52

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355542	06/01/17 10:38	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356484	06/09/17 17:57	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		20	355476	05/31/17 11:20	VLS	TAL PEN

Client Sample ID: AX12076 MW-1

Lab Sample ID: 400-138488-3

Date Collected: 05/23/17 10:46

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355580	06/01/17 11:46	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356484	06/09/17 17:59	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355480	05/31/17 13:06	VLS	TAL PEN

Client Sample ID: AX12077 MW-2

Lab Sample ID: 400-138488-4

Date Collected: 05/23/17 13:09

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355580	06/01/17 11:46	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356484	06/09/17 18:01	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355480	05/31/17 13:30	VLS	TAL PEN

Client Sample ID: AX12078 MW-3

Lab Sample ID: 400-138488-5

Date Collected: 05/23/17 14:55

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355580	06/01/17 11:46	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356484	06/09/17 18:03	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355480	05/31/17 13:30	VLS	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-138488-1
SDG: Gaston Ash Pond (7)

Client Sample ID: AX12079 MW-9

Lab Sample ID: 400-138488-6

Date Collected: 05/24/17 10:28

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355580	06/01/17 11:46	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356484	06/09/17 18:05	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355805	06/03/17 11:51	JLB	TAL PEN

Client Sample ID: AX12080 FB-1

Lab Sample ID: 400-138488-7

Date Collected: 05/24/17 11:04

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355580	06/01/17 11:46	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356484	06/09/17 18:08	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355805	06/03/17 11:51	JLB	TAL PEN

Client Sample ID: AX12081 MW-4

Lab Sample ID: 400-138488-8

Date Collected: 05/24/17 12:35

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355580	06/01/17 11:46	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356484	06/09/17 18:10	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355741	06/02/17 15:23	JLB	TAL PEN

Client Sample ID: AX12082 MW-4 DUP

Lab Sample ID: 400-138488-9

Date Collected: 05/24/17 12:35

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355580	06/01/17 11:46	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356484	06/09/17 18:17	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355741	06/02/17 15:23	JLB	TAL PEN

Client Sample ID: AX12083 MW-8

Lab Sample ID: 400-138488-10

Date Collected: 05/24/17 14:23

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355580	06/01/17 11:46	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356484	06/09/17 17:52	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355805	06/03/17 11:51	JLB	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-138488-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12084 EB-1

Lab Sample ID: 400-138488-11

Date Collected: 05/24/17 15:10

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355580	06/01/17 11:47	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356484	06/09/17 18:23	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355805	06/03/17 11:51	JLB	TAL PEN

Client Sample ID: AX12085 MW-20

Lab Sample ID: 400-138488-12

Date Collected: 05/24/17 11:02

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355580	06/01/17 11:47	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356484	06/09/17 18:25	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		20	355805	06/03/17 12:29	JLB	TAL PEN

Client Sample ID: AX12086 MW-18

Lab Sample ID: 400-138488-13

Date Collected: 05/24/17 12:07

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355580	06/01/17 12:02	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356484	06/09/17 18:27	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	355805	06/03/17 12:29	JLB	TAL PEN

Client Sample ID: AX12087 MW-17

Lab Sample ID: 400-138488-14

Date Collected: 05/24/17 13:50

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355580	06/01/17 12:02	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356484	06/09/17 18:30	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		15	355805	06/03/17 12:29	JLB	TAL PEN

Client Sample ID: AX12088 MW-16

Lab Sample ID: 400-138488-15

Date Collected: 05/24/17 13:06

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355580	06/01/17 12:02	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356484	06/09/17 18:31	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	355805	06/03/17 12:29	JLB	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-138488-1
SDG: Gaston Ash Pond (7)

Client Sample ID: AX12089 MW-10

Lab Sample ID: 400-138488-16

Date Collected: 05/22/17 13:23

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355580	06/01/17 12:02	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356484	06/09/17 18:33	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355476	05/31/17 10:40	VLS	TAL PEN

Client Sample ID: AX12090 MW-11

Lab Sample ID: 400-138488-17

Date Collected: 05/22/17 15:11

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355580	06/01/17 12:02	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356484	06/09/17 18:35	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355476	05/31/17 10:40	VLS	TAL PEN

Client Sample ID: AX12091 MW-5

Lab Sample ID: 400-138488-18

Date Collected: 05/23/17 11:38

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355580	06/01/17 12:02	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356861	06/13/17 18:01	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		15	357136	06/15/17 15:05	JLB	TAL PEN

Client Sample ID: AX12092 MW-5 DUP

Lab Sample ID: 400-138488-19

Date Collected: 05/23/17 11:38

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355580	06/01/17 12:02	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356861	06/13/17 18:03	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		15	357136	06/15/17 15:05	JLB	TAL PEN

Client Sample ID: AX12093 MW-22

Lab Sample ID: 400-138488-20

Date Collected: 05/23/17 12:45

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355580	06/01/17 12:02	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356861	06/13/17 17:55	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	355805	06/03/17 12:32	JLB	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-138488-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12094 MW-21

Lab Sample ID: 400-138488-21

Date Collected: 05/23/17 13:45

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355580	06/01/17 12:03	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356861	06/13/17 18:05	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	355805	06/03/17 12:32	JLB	TAL PEN

Client Sample ID: AX12095 MW-21 DUP

Lab Sample ID: 400-138488-22

Date Collected: 05/23/17 13:45

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355580	06/01/17 12:03	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356861	06/13/17 18:07	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	355805	06/03/17 13:51	JLB	TAL PEN

Client Sample ID: AX12096 MW-6

Lab Sample ID: 400-138488-23

Date Collected: 05/23/17 15:01

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	356087	06/06/17 14:25	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356861	06/13/17 18:09	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	355805	06/03/17 13:51	JLB	TAL PEN

Client Sample ID: AX12097 MW-7

Lab Sample ID: 400-138488-24

Date Collected: 05/23/17 16:24

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	356087	06/06/17 14:25	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356861	06/13/17 18:12	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	355805	06/03/17 13:51	JLB	TAL PEN

Client Sample ID: AX12098 FB-2

Lab Sample ID: 400-138488-25

Date Collected: 05/23/17 17:05

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355810	06/03/17 14:54	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356861	06/13/17 18:14	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	356102	06/06/17 16:05	JLB	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-138488-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12099 MW-12

Lab Sample ID: 400-138488-26

Date Collected: 05/24/17 12:33

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355810	06/03/17 14:54	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356861	06/13/17 18:27	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		6	356225	06/07/17 14:29	JLB	TAL PEN

Client Sample ID: AX12100 MW-13

Lab Sample ID: 400-138488-27

Date Collected: 05/24/17 13:54

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355810	06/03/17 14:59	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356861	06/13/17 18:31	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	356102	06/06/17 16:05	JLB	TAL PEN

Client Sample ID: AX12101 MW-14

Lab Sample ID: 400-138488-28

Date Collected: 05/24/17 15:15

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	355810	06/03/17 14:59	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356861	06/13/17 18:33	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		4	356225	06/07/17 14:29	JLB	TAL PEN

Client Sample ID: AX12102 FB-3

Lab Sample ID: 400-138488-29

Date Collected: 05/24/17 15:55

Matrix: Water

Date Received: 05/30/17 08:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	356087	06/06/17 14:25	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356861	06/13/17 18:22	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	356102	06/06/17 17:01	JLB	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: 400-138488-1
 SDG: Gaston Ash Pond (7)

General Chemistry

Analysis Batch: 355476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138488-1	AX12074 MW-19	Total/NA	Water	SM 4500 SO4 E	
400-138488-2	AX12075 MW-15R	Total/NA	Water	SM 4500 SO4 E	
400-138488-16	AX12089 MW-10	Total/NA	Water	SM 4500 SO4 E	
400-138488-17	AX12090 MW-11	Total/NA	Water	SM 4500 SO4 E	
MB 400-355476/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-355476/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-355476/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-138410-A-2 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-138410-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	
400-138410-A-9 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-138410-A-9 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 355480

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138488-3	AX12076 MW-1	Total/NA	Water	SM 4500 SO4 E	
400-138488-4	AX12077 MW-2	Total/NA	Water	SM 4500 SO4 E	
400-138488-5	AX12078 MW-3	Total/NA	Water	SM 4500 SO4 E	
MB 400-355480/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-355480/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-355480/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-138488-3 MS	AX12076 MW-1	Total/NA	Water	SM 4500 SO4 E	
400-138488-3 MSD	AX12076 MW-1	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 355542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138488-1	AX12074 MW-19	Total/NA	Water	SM 4500 Cl- E	
400-138488-2	AX12075 MW-15R	Total/NA	Water	SM 4500 Cl- E	
MB 400-355542/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-355542/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-355542/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-138488-1 MS	AX12074 MW-19	Total/NA	Water	SM 4500 Cl- E	
400-138488-1 MSD	AX12074 MW-19	Total/NA	Water	SM 4500 Cl- E	
400-138488-2 MS	AX12075 MW-15R	Total/NA	Water	SM 4500 Cl- E	
400-138488-2 MSD	AX12075 MW-15R	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 355580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138488-3	AX12076 MW-1	Total/NA	Water	SM 4500 Cl- E	
400-138488-4	AX12077 MW-2	Total/NA	Water	SM 4500 Cl- E	
400-138488-5	AX12078 MW-3	Total/NA	Water	SM 4500 Cl- E	
400-138488-6	AX12079 MW-9	Total/NA	Water	SM 4500 Cl- E	
400-138488-7	AX12080 FB-1	Total/NA	Water	SM 4500 Cl- E	
400-138488-8	AX12081 MW-4	Total/NA	Water	SM 4500 Cl- E	
400-138488-9	AX12082 MW-4 DUP	Total/NA	Water	SM 4500 Cl- E	
400-138488-10	AX12083 MW-8	Total/NA	Water	SM 4500 Cl- E	
400-138488-11	AX12084 EB-1	Total/NA	Water	SM 4500 Cl- E	
400-138488-12	AX12085 MW-20	Total/NA	Water	SM 4500 Cl- E	
400-138488-13	AX12086 MW-18	Total/NA	Water	SM 4500 Cl- E	
400-138488-14	AX12087 MW-17	Total/NA	Water	SM 4500 Cl- E	
400-138488-15	AX12088 MW-16	Total/NA	Water	SM 4500 Cl- E	
400-138488-16	AX12089 MW-10	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: 400-138488-1
 SDG: Gaston Ash Pond (7)

General Chemistry (Continued)

Analysis Batch: 355580 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138488-17	AX12090 MW-11	Total/NA	Water	SM 4500 Cl- E	
400-138488-18	AX12091 MW-5	Total/NA	Water	SM 4500 Cl- E	
400-138488-19	AX12092 MW-5 DUP	Total/NA	Water	SM 4500 Cl- E	
400-138488-20	AX12093 MW-22	Total/NA	Water	SM 4500 Cl- E	
400-138488-21	AX12094 MW-21	Total/NA	Water	SM 4500 Cl- E	
400-138488-22	AX12095 MW-21 DUP	Total/NA	Water	SM 4500 Cl- E	
MB 400-355580/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-355580/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-355580/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-138488-10 MS	AX12083 MW-8	Total/NA	Water	SM 4500 Cl- E	
400-138488-10 MSD	AX12083 MW-8	Total/NA	Water	SM 4500 Cl- E	
400-138488-20 MS	AX12093 MW-22	Total/NA	Water	SM 4500 Cl- E	
400-138488-20 MSD	AX12093 MW-22	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 355741

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138488-8	AX12081 MW-4	Total/NA	Water	SM 4500 SO4 E	
400-138488-9	AX12082 MW-4 DUP	Total/NA	Water	SM 4500 SO4 E	
MB 400-355741/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-355741/10	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-355741/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-138511-A-1 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-138511-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 355805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138488-6	AX12079 MW-9	Total/NA	Water	SM 4500 SO4 E	
400-138488-7	AX12080 FB-1	Total/NA	Water	SM 4500 SO4 E	
400-138488-10	AX12083 MW-8	Total/NA	Water	SM 4500 SO4 E	
400-138488-11	AX12084 EB-1	Total/NA	Water	SM 4500 SO4 E	
400-138488-12	AX12085 MW-20	Total/NA	Water	SM 4500 SO4 E	
400-138488-13	AX12086 MW-18	Total/NA	Water	SM 4500 SO4 E	
400-138488-14	AX12087 MW-17	Total/NA	Water	SM 4500 SO4 E	
400-138488-15	AX12088 MW-16	Total/NA	Water	SM 4500 SO4 E	
400-138488-20	AX12093 MW-22	Total/NA	Water	SM 4500 SO4 E	
400-138488-21	AX12094 MW-21	Total/NA	Water	SM 4500 SO4 E	
400-138488-22	AX12095 MW-21 DUP	Total/NA	Water	SM 4500 SO4 E	
400-138488-23	AX12096 MW-6	Total/NA	Water	SM 4500 SO4 E	
400-138488-24	AX12097 MW-7	Total/NA	Water	SM 4500 SO4 E	
MB 400-355805/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-355805/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-355805/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-138488-10 MS	AX12083 MW-8	Total/NA	Water	SM 4500 SO4 E	
400-138488-10 MSD	AX12083 MW-8	Total/NA	Water	SM 4500 SO4 E	
400-138488-20 MS	AX12093 MW-22	Total/NA	Water	SM 4500 SO4 E	
400-138488-20 MSD	AX12093 MW-22	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 355810

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138488-25	AX12098 FB-2	Total/NA	Water	SM 4500 Cl- E	
400-138488-26	AX12099 MW-12	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: 400-138488-1
 SDG: Gaston Ash Pond (7)

General Chemistry (Continued)

Analysis Batch: 355810 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138488-27	AX12100 MW-13	Total/NA	Water	SM 4500 Cl- E	
400-138488-28	AX12101 MW-14	Total/NA	Water	SM 4500 Cl- E	
MB 400-355810/24	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-355810/28	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-355810/21	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-138726-A-1 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-138726-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 356087

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138488-23	AX12096 MW-6	Total/NA	Water	SM 4500 Cl- E	
400-138488-24	AX12097 MW-7	Total/NA	Water	SM 4500 Cl- E	
400-138488-29	AX12102 FB-3	Total/NA	Water	SM 4500 Cl- E	
MB 400-356087/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-356087/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-356087/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-138488-29 MS	AX12102 FB-3	Total/NA	Water	SM 4500 Cl- E	
400-138488-29 MSD	AX12102 FB-3	Total/NA	Water	SM 4500 Cl- E	
400-138615-D-1 DU	Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 356102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138488-25	AX12098 FB-2	Total/NA	Water	SM 4500 SO4 E	
400-138488-27	AX12100 MW-13	Total/NA	Water	SM 4500 SO4 E	
400-138488-29	AX12102 FB-3	Total/NA	Water	SM 4500 SO4 E	
MB 400-356102/24	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-356102/25	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-356102/21	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-138488-29 MS	AX12102 FB-3	Total/NA	Water	SM 4500 SO4 E	
400-138488-29 MSD	AX12102 FB-3	Total/NA	Water	SM 4500 SO4 E	
400-138615-D-1 DU	Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 356225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138488-26	AX12099 MW-12	Total/NA	Water	SM 4500 SO4 E	
400-138488-28	AX12101 MW-14	Total/NA	Water	SM 4500 SO4 E	
MB 400-356225/24	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-356225/25	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-356225/21	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-138437-C-4 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-138437-C-4 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 356229

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138488-1	AX12074 MW-19	Total/NA	Water	SM 4500 F C	
MB 400-356229/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-356229/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-138429-C-6 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-138429-C-6 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-138469-C-1 DU	Duplicate	Total/NA	Water	SM 4500 F C	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-138488-1
 SDG: Gaston Ash Pond (7)

General Chemistry (Continued)

Analysis Batch: 356484

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138488-2	AX12075 MW-15R	Total/NA	Water	SM 4500 F C	
400-138488-3	AX12076 MW-1	Total/NA	Water	SM 4500 F C	
400-138488-4	AX12077 MW-2	Total/NA	Water	SM 4500 F C	
400-138488-5	AX12078 MW-3	Total/NA	Water	SM 4500 F C	
400-138488-6	AX12079 MW-9	Total/NA	Water	SM 4500 F C	
400-138488-7	AX12080 FB-1	Total/NA	Water	SM 4500 F C	
400-138488-8	AX12081 MW-4	Total/NA	Water	SM 4500 F C	
400-138488-9	AX12082 MW-4 DUP	Total/NA	Water	SM 4500 F C	
400-138488-10	AX12083 MW-8	Total/NA	Water	SM 4500 F C	
400-138488-11	AX12084 EB-1	Total/NA	Water	SM 4500 F C	
400-138488-12	AX12085 MW-20	Total/NA	Water	SM 4500 F C	
400-138488-13	AX12086 MW-18	Total/NA	Water	SM 4500 F C	
400-138488-14	AX12087 MW-17	Total/NA	Water	SM 4500 F C	
400-138488-15	AX12088 MW-16	Total/NA	Water	SM 4500 F C	
400-138488-16	AX12089 MW-10	Total/NA	Water	SM 4500 F C	
400-138488-17	AX12090 MW-11	Total/NA	Water	SM 4500 F C	
MB 400-356484/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-356484/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-138488-10 MS	AX12083 MW-8	Total/NA	Water	SM 4500 F C	
400-138488-10 MSD	AX12083 MW-8	Total/NA	Water	SM 4500 F C	
400-138488-9 DU	AX12082 MW-4 DUP	Total/NA	Water	SM 4500 F C	

Analysis Batch: 356861

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138488-18	AX12091 MW-5	Total/NA	Water	SM 4500 F C	
400-138488-19	AX12092 MW-5 DUP	Total/NA	Water	SM 4500 F C	
400-138488-20	AX12093 MW-22	Total/NA	Water	SM 4500 F C	
400-138488-21	AX12094 MW-21	Total/NA	Water	SM 4500 F C	
400-138488-22	AX12095 MW-21 DUP	Total/NA	Water	SM 4500 F C	
400-138488-23	AX12096 MW-6	Total/NA	Water	SM 4500 F C	
400-138488-24	AX12097 MW-7	Total/NA	Water	SM 4500 F C	
400-138488-25	AX12098 FB-2	Total/NA	Water	SM 4500 F C	
400-138488-26	AX12099 MW-12	Total/NA	Water	SM 4500 F C	
400-138488-27	AX12100 MW-13	Total/NA	Water	SM 4500 F C	
400-138488-28	AX12101 MW-14	Total/NA	Water	SM 4500 F C	
400-138488-29	AX12102 FB-3	Total/NA	Water	SM 4500 F C	
MB 400-356861/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-356861/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-138488-20 MS	AX12093 MW-22	Total/NA	Water	SM 4500 F C	
400-138488-20 MSD	AX12093 MW-22	Total/NA	Water	SM 4500 F C	
400-138488-29 MS	AX12102 FB-3	Total/NA	Water	SM 4500 F C	
400-138488-29 MSD	AX12102 FB-3	Total/NA	Water	SM 4500 F C	
400-138488-26 DU	AX12099 MW-12	Total/NA	Water	SM 4500 F C	

Analysis Batch: 357136

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138488-18	AX12091 MW-5	Total/NA	Water	SM 4500 SO4 E	
400-138488-19	AX12092 MW-5 DUP	Total/NA	Water	SM 4500 SO4 E	
MB 400-357136/8	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-357136/9	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-357136/5	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-138488-1
 SDG: Gaston Ash Pond (7)

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-355542/6
Matrix: Water
Analysis Batch: 355542

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			06/01/17 10:03	1

Lab Sample ID: LCS 400-355542/7
Matrix: Water
Analysis Batch: 355542

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	32.7		mg/L		109	90 - 110

Lab Sample ID: MRL 400-355542/3
Matrix: Water
Analysis Batch: 355542

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	2.13		mg/L		106	50 - 150

Lab Sample ID: 400-138488-1 MS
Matrix: Water
Analysis Batch: 355542

Client Sample ID: AX12074 MW-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	12		10.0	23.1		mg/L		112	73 - 120

Lab Sample ID: 400-138488-1 MSD
Matrix: Water
Analysis Batch: 355542

Client Sample ID: AX12074 MW-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	12		10.0	23.2		mg/L		113	73 - 120	0	8

Lab Sample ID: 400-138488-2 MS
Matrix: Water
Analysis Batch: 355542

Client Sample ID: AX12075 MW-15R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	28		10.0	37.1		mg/L		95	73 - 120

Lab Sample ID: 400-138488-2 MSD
Matrix: Water
Analysis Batch: 355542

Client Sample ID: AX12075 MW-15R
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	28		10.0	37.0		mg/L		94	73 - 120	0	8

Lab Sample ID: MB 400-355580/6
Matrix: Water
Analysis Batch: 355580

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			06/01/17 11:02	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-138488-1
 SDG: Gaston Ash Pond (7)

Lab Sample ID: LCS 400-355580/7
Matrix: Water
Analysis Batch: 355580

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	32.7		mg/L		109	90 - 110

Lab Sample ID: MRL 400-355580/3
Matrix: Water
Analysis Batch: 355580

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	2.10		mg/L		105	50 - 150

Lab Sample ID: 400-138488-10 MS
Matrix: Water
Analysis Batch: 355580

Client Sample ID: AX12083 MW-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.4		10.0	17.2		mg/L		118	73 - 120

Lab Sample ID: 400-138488-10 MSD
Matrix: Water
Analysis Batch: 355580

Client Sample ID: AX12083 MW-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	5.4		10.0	17.1		mg/L		117	73 - 120	1	8

Lab Sample ID: 400-138488-20 MS
Matrix: Water
Analysis Batch: 355580

Client Sample ID: AX12093 MW-22
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	48		10.0	54.8	4	mg/L		63	73 - 120

Lab Sample ID: 400-138488-20 MSD
Matrix: Water
Analysis Batch: 355580

Client Sample ID: AX12093 MW-22
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	48		10.0	55.2	4	mg/L		68	73 - 120	1	8

Lab Sample ID: MB 400-355810/24
Matrix: Water
Analysis Batch: 355810

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			06/03/17 14:50	1

Lab Sample ID: LCS 400-355810/28
Matrix: Water
Analysis Batch: 355810

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	32.2		mg/L		107	90 - 110

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-138488-1
 SDG: Gaston Ash Pond (7)

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: MRL 400-355810/21
Matrix: Water
Analysis Batch: 355810

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	1.94	J	mg/L		97	50 - 150

Lab Sample ID: 400-138726-A-1 MS
Matrix: Water
Analysis Batch: 355810

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	13		10.0	23.7		mg/L		109	73 - 120

Lab Sample ID: 400-138726-A-1 MSD
Matrix: Water
Analysis Batch: 355810

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	13		10.0	23.7		mg/L		108	73 - 120	0	8

Lab Sample ID: MB 400-356087/6
Matrix: Water
Analysis Batch: 356087

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			06/06/17 13:22	1

Lab Sample ID: LCS 400-356087/7
Matrix: Water
Analysis Batch: 356087

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	32.0		mg/L		107	90 - 110

Lab Sample ID: MRL 400-356087/3
Matrix: Water
Analysis Batch: 356087

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	1.48	J	mg/L		74	50 - 150

Lab Sample ID: 400-138488-29 MS
Matrix: Water
Analysis Batch: 356087

Client Sample ID: AX12102 FB-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	FB Result	FB Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.4	J	10.0	11.0		mg/L		96	73 - 120

Lab Sample ID: 400-138488-29 MSD
Matrix: Water
Analysis Batch: 356087

Client Sample ID: AX12102 FB-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	FB Result	FB Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.4	J	10.0	11.0		mg/L		96	73 - 120	0	8

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-138488-1
 SDG: Gaston Ash Pond (7)

Lab Sample ID: 400-138615-D-1 DU
Matrix: Water
Analysis Batch: 356087

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	14		13.4		mg/L		6	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-356229/3
Matrix: Water
Analysis Batch: 356229

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			06/07/17 17:34	1

Lab Sample ID: LCS 400-356229/4
Matrix: Water
Analysis Batch: 356229

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	4.10		mg/L		103	90 - 110

Lab Sample ID: 400-138429-C-6 MS
Matrix: Water
Analysis Batch: 356229

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	0.17		1.00	1.17		mg/L		100	75 - 125

Lab Sample ID: 400-138429-C-6 MSD
Matrix: Water
Analysis Batch: 356229

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	0.17		1.00	1.15		mg/L		98	75 - 125	2	4

Lab Sample ID: 400-138469-C-1 DU
Matrix: Water
Analysis Batch: 356229

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride	0.27		0.270		mg/L		0	4

Lab Sample ID: MB 400-356484/3
Matrix: Water
Analysis Batch: 356484

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			06/09/17 17:44	1

QC Sample Results

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

TestAmerica Job ID: 400-138488-1
 SDG: Gaston Ash Pond (7)

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: LCS 400-356484/4
Matrix: Water
Analysis Batch: 356484

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: 400-138488-10 MS
Matrix: Water
Analysis Batch: 356484

Client Sample ID: AX12083 MW-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.090	J	1.00	1.02		mg/L		93	75 - 125

Lab Sample ID: 400-138488-10 MSD
Matrix: Water
Analysis Batch: 356484

Client Sample ID: AX12083 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	0.090	J	1.00	1.02		mg/L		93	75 - 125	0	4

Lab Sample ID: 400-138488-9 DU
Matrix: Water
Analysis Batch: 356484

Client Sample ID: AX12082 MW-4 DUP
Prep Type: Total/NA

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

Lab Sample ID: MB 400-356861/3
Matrix: Water
Analysis Batch: 356861

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			06/13/17 17:47	1

Lab Sample ID: LCS 400-356861/4
Matrix: Water
Analysis Batch: 356861

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: 400-138488-20 MS
Matrix: Water
Analysis Batch: 356861

Client Sample ID: AX12093 MW-22
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	1.00		mg/L		93	75 - 125

Lab Sample ID: 400-138488-20 MSD
Matrix: Water
Analysis Batch: 356861

Client Sample ID: AX12093 MW-22
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	1.02		mg/L		95	75 - 125	2	4

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-138488-1
 SDG: Gaston Ash Pond (7)

Lab Sample ID: 400-138488-29 MS
Matrix: Water
Analysis Batch: 356861

Client Sample ID: AX12102 FB-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	FB Result	FB Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	<0.032		1.00	0.930		mg/L		93	75 - 125

Lab Sample ID: 400-138488-29 MSD
Matrix: Water
Analysis Batch: 356861

Client Sample ID: AX12102 FB-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	FB Result	FB Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	<0.032		1.00	0.950		mg/L		95	75 - 125	2	4

Lab Sample ID: 400-138488-26 DU
Matrix: Water
Analysis Batch: 356861

Client Sample ID: AX12099 MW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride	0.050	J	0.0400	J F5	mg/L		22	4

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-355476/6
Matrix: Water
Analysis Batch: 355476

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			05/31/17 09:13	1

Lab Sample ID: LCS 400-355476/7
Matrix: Water
Analysis Batch: 355476

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	14.9		mg/L		99	90 - 110

Lab Sample ID: MRL 400-355476/3
Matrix: Water
Analysis Batch: 355476

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	4.33	J	mg/L		87	50 - 150

Lab Sample ID: 400-138410-A-2 MS
Matrix: Water
Analysis Batch: 355476

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	11		10.0	23.2		mg/L		120	77 - 128

QC Sample Results

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

TestAmerica Job ID: 400-138488-1
 SDG: Gaston Ash Pond (7)

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: 400-138410-A-2 MSD
Matrix: Water
Analysis Batch: 355476

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	11		10.0	22.7		mg/L		115	77 - 128	2	5

Lab Sample ID: 400-138410-A-9 MS
Matrix: Water
Analysis Batch: 355476

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	RPD	RPD Limit
Sulfate	<1.4		10.0	12.7		mg/L		127	77 - 128		

Lab Sample ID: 400-138410-A-9 MSD
Matrix: Water
Analysis Batch: 355476

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	<1.4		10.0	12.2		mg/L		122	77 - 128	4	5

Lab Sample ID: MB 400-355480/6
Matrix: Water
Analysis Batch: 355480

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			05/31/17 12:26	1

Lab Sample ID: LCS 400-355480/7
Matrix: Water
Analysis Batch: 355480

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	15.0	15.3		mg/L		102	90 - 110		

Lab Sample ID: MRL 400-355480/3
Matrix: Water
Analysis Batch: 355480

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	5.00	4.51	J	mg/L		90	50 - 150		

Lab Sample ID: 400-138488-3 MS
Matrix: Water
Analysis Batch: 355480

Client Sample ID: AX12076 MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	16		10.0	27.1		mg/L		114	77 - 128		

Lab Sample ID: 400-138488-3 MSD
Matrix: Water
Analysis Batch: 355480

Client Sample ID: AX12076 MW-1
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	26.7		mg/L		110	77 - 128	2	5

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-138488-1
 SDG: Gaston Ash Pond (7)

Lab Sample ID: MB 400-355741/6
Matrix: Water
Analysis Batch: 355741

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			06/02/17 14:44	1

Lab Sample ID: LCS 400-355741/10
Matrix: Water
Analysis Batch: 355741

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	15.0		mg/L		100	90 - 110

Lab Sample ID: MRL 400-355741/3
Matrix: Water
Analysis Batch: 355741

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	4.76	J	mg/L		95	50 - 150

Lab Sample ID: 400-138511-A-1 MS
Matrix: Water
Analysis Batch: 355741

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	F2	10.0	9.49		mg/L		95	77 - 128

Lab Sample ID: 400-138511-A-1 MSD
Matrix: Water
Analysis Batch: 355741

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	<1.4	F2	10.0	10.4	F2	mg/L		104	77 - 128	9	5

Lab Sample ID: MB 400-355805/6
Matrix: Water
Analysis Batch: 355805

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			06/03/17 11:18	1

Lab Sample ID: LCS 400-355805/7
Matrix: Water
Analysis Batch: 355805

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	14.6		mg/L		97	90 - 110

Lab Sample ID: MRL 400-355805/3
Matrix: Water
Analysis Batch: 355805

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	4.34	J	mg/L		87	50 - 150

QC Sample Results

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

TestAmerica Job ID: 400-138488-1
 SDG: Gaston Ash Pond (7)

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: 400-138488-10 MS

Matrix: Water
Analysis Batch: 355805

Client Sample ID: AX12083 MW-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	11	F1	1000	21.3	F1	mg/L		1	77 - 128

Lab Sample ID: 400-138488-10 MSD

Matrix: Water
Analysis Batch: 355805

Client Sample ID: AX12083 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
Sulfate	11	F1	1000	21.1	F1	mg/L		1	77 - 128	1	5

Lab Sample ID: 400-138488-20 MS

Matrix: Water
Analysis Batch: 355805

Client Sample ID: AX12093 MW-22
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	180	F1	20000	383	F1	mg/L		1	77 - 128

Lab Sample ID: 400-138488-20 MSD

Matrix: Water
Analysis Batch: 355805

Client Sample ID: AX12093 MW-22
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	180	F1	20000	385	F1	mg/L		1	77 - 128	1	5

Lab Sample ID: MB 400-356102/24

Matrix: Water
Analysis Batch: 356102

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			06/06/17 16:05	1

Lab Sample ID: LCS 400-356102/25

Matrix: Water
Analysis Batch: 356102

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	14.7		mg/L		98	90 - 110

Lab Sample ID: MRL 400-356102/21

Matrix: Water
Analysis Batch: 356102

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	6.35		mg/L		127	50 - 150

Lab Sample ID: 400-138488-29 MS

Matrix: Water
Analysis Batch: 356102

Client Sample ID: AX12102 FB-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	FB Result	FB Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	<1.4		10.0	10.1		mg/L		101	77 - 128

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-138488-1
 SDG: Gaston Ash Pond (7)

Lab Sample ID: 400-138488-29 MSD
Matrix: Water
Analysis Batch: 356102

Client Sample ID: AX12102 FB-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	FB Result	FB Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	<1.4		10.0	10.1		mg/L		101	77 - 128	0	5

Lab Sample ID: 400-138615-D-1 DU
Matrix: Water
Analysis Batch: 356102

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	5.8		5.54		mg/L		4	5

Lab Sample ID: MB 400-356225/24
Matrix: Water
Analysis Batch: 356225

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			06/07/17 12:47	1

Lab Sample ID: LCS 400-356225/25
Matrix: Water
Analysis Batch: 356225

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	15.5		mg/L		103	90 - 110

Lab Sample ID: MRL 400-356225/21
Matrix: Water
Analysis Batch: 356225

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	5.49		mg/L		110	50 - 150

Lab Sample ID: 400-138437-C-4 MS
Matrix: Water
Analysis Batch: 356225

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		1.00	10.9		mg/L		NC	77 - 128

Lab Sample ID: 400-138437-C-4 MSD
Matrix: Water
Analysis Batch: 356225

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	<1.4		1.00	11.2		mg/L		NC	77 - 128	2	5

Lab Sample ID: MB 400-357136/8
Matrix: Water
Analysis Batch: 357136

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			06/15/17 15:02	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-138488-1
SDG: Gaston Ash Pond (7)

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: LCS 400-357136/9
Matrix: Water
Analysis Batch: 357136

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	16.5		mg/L		110	90 - 110

Lab Sample ID: MRL 400-357136/5
Matrix: Water
Analysis Batch: 357136

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	4.81	J	mg/L		96	50 - 150

Chain of Custody Record

Client Information
 Sampler: Jason Roush
 Lab PI#: Whitmire, Cheyenne R
 Client Contact: Sarah Copeland
 E-Mail: cheyenne.whitmire@testamericainc.com
 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@southerncco.com
 Project #: 40007143
 CCR
 Site: Gaston Ash Pond (7)

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastefl, BT=tissue, A=air)	Preservation Code	Analysis Requested			Special Instructions/Note:
						Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of Containers	
AX12074	5/22/17	1232	G	Water		X	X	1	MW-19
AX12075	5/22/17	1452	G	Water		X	X	1	MW-15R
AX12076	5/23/17	1046	G	Water		X	X	1	MW-1
AX12077	5/23/17	1309	G	Water		X	X	1	MW-2
AX12078	5/23/17	1455	G	Water		X	X	1	MW-3
AX12079	5/24/17	1028	G	Water		X	X	1	MW-9
AX12080	5/24/17	1104	G	Water		X	X	1	FB-1 (Field Blank)
AX12081	5/24/17	1235	G	Water		X	X	1	MW-4
AX12082	5/24/17	1235	G	Water		X	X	1	MW-4 Dup (Sample Duplicate)
AX12083	5/24/17	1423	G	Water		Y	X	1	MW-8
AX12084	5/24/17	1510	G	Water		X	X	1	EB-1 (Equipment Blank)

Due Date Requested:
 TAT Requested (days): Routine
 PO #:
 WO #:
 Project Name:
 CCR
 Site:
 Gaston Ash Pond (7)

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:
 Relinquished by: Sarah Copeland
 Relinquished by:
 Relinquished by:

Method of Shipment:
 Date/Time: 05/18/2017: 1115
 Date/Time:
 Date/Time:

Company: APC
 Company:
 Company:

Received by:
 Received by:
 Received by:

Cooler Temperature(s) °C and Other Remarks: 20.8°C JRC



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/ Ben Rothschild Lab PM: Whitmire, Cheyenne R Client Contact: Sarah Copeland E-Mail: cheyenne.whitmire@testamericainc.com	
Company: Alabama Power General Test Laboratory Address: 744 County Rd 87 GSC #8 City: Calera State, Zip: AL, 35040 Phone: 205-664-6121(Tel) Email: sgcopela@southernco.com Project Name: CCR Site: Gaston Ash Pond (7)		Carrier Tracking No(s): Job #: 400-56525-24537.1 Page: Page 2 of 3 Job #: 400-138488	
Due Date Requested: TAT Requested (days): Routine PO #: WO #: Project #: 40007143 SSOW#:		Analysis Requested Total Number of containers:	
Sample Identification Sample ID: AX12085 Sample Date: 5/24/17 Sample Time: 1102 Sample Type (C=Comp, G=grab): G Matrix (W=water, S=solid, O=water/oil, BT=tissue, A=air): Water Preservation Code:		Field Filtered Sample (Yes or No): Perform MS/MSD (Yes or No): SM 4500 F.C. SM 4500 Cl.E SM 4500 SO4.E Total Number of containers: 1	
AX12086 5/24/17 1207 G Water AX12087 5/24/17 1350 G Water AX12088 5/24/17 1306 G Water AX12089 5/22/17 1323 G Water AX12090 5/22/17 1511 G Water AX12091 5/23/17 1138 G Water AX12092 5/23/17 1138 G Water AX12093 5/23/17 1245 G Water AX12094 5/23/17 1345 G Water AX12095 5/23/17 1345 G Water		Special Instructions/Note: MW-20 MW-18 MW-17 MW-16 MW-10 MW-11 MW-5 MW-5 Dup (Sample Duplicate) MW-22 MW-21 MW-21 Dup (Sample Duplicate)	
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			
Deliverable Requested: <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological <input type="checkbox"/> Empty Kit Relinquished by: Sarah Copeland			
Relinquished by: Sarah Copeland Date/Time: 05/25/2017: 1615		Method of Shipment:	
Relinquished by:		Date/Time:	
Relinquished by:		Date/Time:	
Relinquished by:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks:	

5/30/17 08:40
 TA-182



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

Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information			Lab PM: Whitmire, Cheyenne R			Carrier Tracking No(s):			COC No: 400-56525-24537.1																																																																																																		
Client Contact: Sarah Copeland			Phone: Ben Rothschild			E-Mail: cheyenne.whitmire@testamericainc.com			Page: Page 3 of 3																																																																																																		
Company: Alabama Power General Test Laboratory			Due Date Requested: Routine			TAT Requested (days):			Job #: 400-138488																																																																																																		
Address: 744 County Rd 87 GSC #8			City: Calera			State, Zip: AL, 35040			Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - NaHSO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA Y - EDA Z - other (specify) Other:																																																																																																		
PO #: 205-664-6121 (Tel)			Project #: 40007143			SSOW#:			Analysis Requested <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Sample ID</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=Comp, G=grab)</th> <th>Matrix (W=water, S=solid, O=soil, A=air)</th> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>SM 4500 F.C</th> <th>SM 4500 Cl.E</th> <th>SM 4500 SO4.E</th> <th>Total Number of containers</th> <th>Special Instructions/Note:</th> </tr> <tr> <td>AX12096</td> <td>5/23/17</td> <td>1501</td> <td>G</td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>1</td> <td>MW-5</td> </tr> <tr> <td>AX12097</td> <td>5/23/17</td> <td>1624</td> <td>G</td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>1</td> <td>MW-7</td> </tr> <tr> <td>AX12098</td> <td>5/23/17</td> <td>1705</td> <td>G</td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>1</td> <td>FB-2 (Field Blank)</td> </tr> <tr> <td>AX12099</td> <td>5/24/17</td> <td>1233</td> <td>G</td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>1</td> <td>MW-12</td> </tr> <tr> <td>AX12100</td> <td>5/24/17</td> <td>1354</td> <td>G</td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>1</td> <td>MW-13</td> </tr> <tr> <td>AX12101</td> <td>5/24/17</td> <td>1515</td> <td>G</td> <td>Water</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>1</td> <td>MW-14</td> </tr> <tr> <td>AX12102</td> <td>5/24/17</td> <td>1555</td> <td>G</td> <td>Water</td> <td>Y</td> <td>X</td> <td>X</td> <td>X</td> <td>X</td> <td>1</td> <td>FB-3 (Field Blank)</td> </tr> </table>			Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F.C	SM 4500 Cl.E	SM 4500 SO4.E	Total Number of containers	Special Instructions/Note:	AX12096	5/23/17	1501	G	Water	X	X	X	X	X	1	MW-5	AX12097	5/23/17	1624	G	Water	X	X	X	X	X	1	MW-7	AX12098	5/23/17	1705	G	Water	X	X	X	X	X	1	FB-2 (Field Blank)	AX12099	5/24/17	1233	G	Water	X	X	X	X	X	1	MW-12	AX12100	5/24/17	1354	G	Water	X	X	X	X	X	1	MW-13	AX12101	5/24/17	1515	G	Water	X	X	X	X	X	1	MW-14	AX12102	5/24/17	1555	G	Water	Y	X	X	X	X	1	FB-3 (Field Blank)
Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=soil, A=air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F.C	SM 4500 Cl.E				SM 4500 SO4.E	Total Number of containers	Special Instructions/Note:																																																																																													
AX12096	5/23/17	1501	G	Water	X	X	X	X	X	1	MW-5																																																																																																
AX12097	5/23/17	1624	G	Water	X	X	X	X	X	1	MW-7																																																																																																
AX12098	5/23/17	1705	G	Water	X	X	X	X	X	1	FB-2 (Field Blank)																																																																																																
AX12099	5/24/17	1233	G	Water	X	X	X	X	X	1	MW-12																																																																																																
AX12100	5/24/17	1354	G	Water	X	X	X	X	X	1	MW-13																																																																																																
AX12101	5/24/17	1515	G	Water	X	X	X	X	X	1	MW-14																																																																																																
AX12102	5/24/17	1555	G	Water	Y	X	X	X	X	1	FB-3 (Field Blank)																																																																																																
Site: Gaston Ash Pond (7)																																																																																																											
Deliverable Requested: <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological <input type="checkbox"/> Empty Kit Relinquished by: Sarah Copeland Relinquished by: _____ Date: _____ Relinquished by: _____ Date/Time: 05/25/2017, 1615 Relinquished by: _____ Date/Time: _____ Relinquished by: _____ Date/Time: _____ Custody Seal No.: _____ Δ Yes Δ 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: 5/30/17 0840 Received by: _____ Date/Time: _____ Received by: _____ Date/Time: _____ Cooler Temperature(s) °C and Other Remarks:																																																																																																											

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Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-138488-1
SDG Number: Gaston Ash Pond (7)

Login Number: 138488

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.	True	Water present in cooler; indicates evidence of melted ice.
Cooler Temperature is acceptable.	False	Cooler temperature outside required temperature criteria.
Cooler Temperature is recorded.	True	20.8°C IR-2
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: 400-138488-1
 SDG: Gaston Ash Pond (7)

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	06-30-17
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-18
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	06-30-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
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	06-30-17



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: 400-138780-1

TestAmerica Sample Delivery Group: Gaston Ash Pond (7)

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:

7/12/2017 6:43:28 PM

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

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

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Case Narrative

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

TestAmerica Job ID: 400-138780-1
SDG: Gaston Ash Pond (7)

Job ID: 400-138780-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-138780-1

RAD

Method(s) 9315: Radium-226 Prep Batch: 160-312639. The number of samples in this batch (21) exceeds the maximum amount of samples allowed in a single batch (20) per the SOP. AX12045 MW-19 (400-138780-1), AX12046 MW-15R (400-138780-2), AX12047 MW-1 (400-138780-3), AX12048 MW-2 (400-138780-4), AX12048 MW-2 (400-138780-4[DUJ]), AX12049 MW-3 (400-138780-5), AX12050 MW-9 (400-138780-6), AX12051 FB-1 (400-138780-7), AX12052 MW-4 (400-138780-8), AX12053 MW-4 DUP (400-138780-9), AX12054 MW-8 (400-138780-10), AX12055 EB-1 (400-138780-11), AX12056 MW-20 (400-138780-12), AX12057 MW-18 (400-138780-13), AX12058 MW-17 (400-138780-14), AX12059 MW-16 (400-138780-15), AX12060 MW-10 (400-138780-16), AX12061 MW-11 (400-138780-17), AX12062 MW-5 (400-138780-18), AX12063 MW-5 DUP (400-138780-19), AX12064 MW-22 (400-138780-20), AX12065 MW-21 (400-138780-21), (LCS 160-312639/2-A) and (MB 160-312639/1-A) As this was inadvertently done during the prep process, the laboratory does not believe this anomaly adversely affects the data. That data have been verified and reported.

Method(s) 9320: Radium-228 Prep Batch: 160-312641. The number of samples in this batch (21) exceeds the maximum amount of samples allowed in a single batch (20) per the SOP. As this was inadvertently done during the prep process, the laboratory does not believe this anomaly adversely affects the data. That data have been verified and reported. AX12045 MW-19 (400-138780-1), AX12046 MW-15R (400-138780-2), AX12047 MW-1 (400-138780-3), AX12048 MW-2 (400-138780-4), AX12048 MW-2 (400-138780-4[DUJ]), AX12049 MW-3 (400-138780-5), AX12050 MW-9 (400-138780-6), AX12051 FB-1 (400-138780-7), AX12052 MW-4 (400-138780-8), AX12053 MW-4 DUP (400-138780-9), AX12054 MW-8 (400-138780-10), AX12055 EB-1 (400-138780-11), AX12056 MW-20 (400-138780-12), AX12057 MW-18 (400-138780-13), AX12058 MW-17 (400-138780-14), AX12059 MW-16 (400-138780-15), AX12060 MW-10 (400-138780-16), AX12061 MW-11 (400-138780-17), AX12062 MW-5 (400-138780-18), AX12063 MW-5 DUP (400-138780-19), AX12064 MW-22 (400-138780-20), AX12065 MW-21 (400-138780-21), (LCS 160-312641/2-A) and (MB 160-312641/1-A)

Method(s) PrecSep_0: Radium 228 Prep Batch 160-312641. The following samples were reduced due to limited volume: AX12045 MW-19 (400-138780-1), AX12046 MW-15R (400-138780-2), AX12047 MW-1 (400-138780-3), AX12048 MW-2 (400-138780-4), AX12048 MW-2 (400-138780-4[DUJ]), AX12049 MW-3 (400-138780-5), AX12050 MW-9 (400-138780-6), AX12051 FB-1 (400-138780-7), AX12052 MW-4 (400-138780-8), AX12053 MW-4 DUP (400-138780-9), AX12054 MW-8 (400-138780-10), AX12055 EB-1 (400-138780-11), AX12056 MW-20 (400-138780-12), AX12057 MW-18 (400-138780-13), AX12058 MW-17 (400-138780-14), AX12059 MW-16 (400-138780-15), AX12060 MW-10 (400-138780-16), AX12061 MW-11 (400-138780-17), AX12062 MW-5 (400-138780-18), AX12063 MW-5 DUP (400-138780-19), AX12064 MW-22 (400-138780-20) and AX12065 MW-21 (400-138780-21).

Method(s) PrecSep_0: Radium 228 Prep Batch 160-312653. The following samples were reduced due to limited volume: AX12066 MW-21 DUP (400-138780-22), AX12067 MW-6 (400-138780-23), AX12067 MW-6 (400-138780-23[DUJ]), AX12068 MW-7 (400-138780-24), AX12069 FB-2 (400-138780-25), AX12070 MW-12 (400-138780-26), AX12071 MW-13 (400-138780-27), AX12072 MW-14 (400-138780-28) and AX12073 FB-3 (400-138780-29).

Method(s) PrecSep-21: Radium 226 Prep Batch 160-312639. The following samples were reduced due to limited volume: AX12045 MW-19 (400-138780-1), AX12046 MW-15R (400-138780-2), AX12047 MW-1 (400-138780-3), AX12048 MW-2 (400-138780-4), AX12048 MW-2 (400-138780-4[DUJ]), AX12049 MW-3 (400-138780-5), AX12050 MW-9 (400-138780-6), AX12051 FB-1 (400-138780-7), AX12052 MW-4 (400-138780-8), AX12053 MW-4 DUP (400-138780-9), AX12054 MW-8 (400-138780-10), AX12055 EB-1 (400-138780-11), AX12056 MW-20 (400-138780-12), AX12057 MW-18 (400-138780-13), AX12058 MW-17 (400-138780-14), AX12059 MW-16 (400-138780-15), AX12060 MW-10 (400-138780-16), AX12061 MW-11 (400-138780-17), AX12062 MW-5 (400-138780-18), AX12063 MW-5 DUP (400-138780-19), AX12064 MW-22 (400-138780-20) and AX12065 MW-21 (400-138780-21).

Method(s) PrecSep-21: Radium 226 Prep Batch 160-312646. The following samples were reduced due to limited volume: AX12066 MW-21 DUP (400-138780-22), AX12067 MW-6 (400-138780-23), AX12067 MW-6 (400-138780-23[DUJ]), AX12068 MW-7 (400-138780-24), AX12069 FB-2 (400-138780-25), AX12070 MW-12 (400-138780-26), AX12071 MW-13 (400-138780-27), AX12072 MW-14 (400-138780-28) and AX12073 FB-3 (400-138780-29).

Method Summary

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

TestAmerica Job ID: 400-138780-1
SDG: Gaston Ash Pond (7)

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: 400-138780-1
SDG: Gaston Ash Pond (7)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-138780-1	AX12045 MW-19	Water	05/22/17 12:32	06/05/17 16:30
400-138780-2	AX12046 MW-15R	Water	05/22/17 14:52	06/05/17 16:30
400-138780-3	AX12047 MW-1	Water	05/23/17 10:46	06/05/17 16:30
400-138780-4	AX12048 MW-2	Water	05/23/17 13:09	06/05/17 16:30
400-138780-5	AX12049 MW-3	Water	05/23/17 14:55	06/05/17 16:30
400-138780-6	AX12050 MW-9	Water	05/24/17 10:28	06/05/17 16:30
400-138780-7	AX12051 FB-1	Water	05/24/17 11:04	06/05/17 16:30
400-138780-8	AX12052 MW-4	Water	05/24/17 12:35	06/05/17 16:30
400-138780-9	AX12053 MW-4 DUP	Water	05/24/17 12:35	06/05/17 16:30
400-138780-10	AX12054 MW-8	Water	05/24/17 14:23	06/05/17 16:30
400-138780-11	AX12055 EB-1	Water	05/24/17 15:10	06/05/17 16:30
400-138780-12	AX12056 MW-20	Water	05/24/17 11:02	06/05/17 16:30
400-138780-13	AX12057 MW-18	Water	05/24/17 12:07	06/05/17 16:30
400-138780-14	AX12058 MW-17	Water	05/24/17 13:50	06/05/17 16:30
400-138780-15	AX12059 MW-16	Water	05/24/17 13:06	06/05/17 16:30
400-138780-16	AX12060 MW-10	Water	05/22/17 13:23	06/05/17 16:30
400-138780-17	AX12061 MW-11	Water	05/22/17 15:11	06/05/17 16:30
400-138780-18	AX12062 MW-5	Water	05/23/17 11:38	06/05/17 16:30
400-138780-19	AX12063 MW-5 DUP	Water	05/23/17 11:38	06/05/17 16:30
400-138780-20	AX12064 MW-22	Water	05/23/17 12:45	06/05/17 16:30
400-138780-21	AX12065 MW-21	Water	05/23/17 13:45	06/05/17 16:30
400-138780-22	AX12066 MW-21 DUP	Water	05/23/17 13:45	06/05/17 16:30
400-138780-23	AX12067 MW-6	Water	05/23/17 15:01	06/05/17 16:30
400-138780-24	AX12068 MW-7	Water	05/23/17 16:24	06/05/17 16:30
400-138780-25	AX12069 FB-2	Water	05/23/17 17:05	06/05/17 16:30
400-138780-26	AX12070 MW-12	Water	05/24/17 12:33	06/05/17 16:30
400-138780-27	AX12071 MW-13	Water	05/24/17 13:54	06/05/17 16:30
400-138780-28	AX12072 MW-14	Water	05/24/17 15:15	06/05/17 16:30
400-138780-29	AX12073 FB-3	Water	05/24/17 15:55	06/05/17 16:30

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12045 MW-19

Lab Sample ID: 400-138780-1

Date Collected: 05/22/17 12:32

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.244		0.114	0.116	1.00	0.138	pCi/L	06/09/17 07:29	07/03/17 11:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		40 - 110					06/09/17 07:29	07/03/17 11:03	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.138	U	0.312	0.312	1.00	0.536	pCi/L	06/09/17 07:55	06/15/17 14:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		40 - 110					06/09/17 07:55	06/15/17 14:28	1
Y Carrier	83.7		40 - 110					06/09/17 07:55	06/15/17 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	0.382	U	0.332	0.333	5.00	0.536	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12046 MW-15R

Lab Sample ID: 400-138780-2

Date Collected: 05/22/17 14:52

Matrix: Water

Date Received: 06/05/17 16:30

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	U	0.0867	0.0873	1.00	0.122	pCi/L	06/09/17 07:29	07/03/17 11:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					06/09/17 07:29	07/03/17 11:03	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.413	U	0.322	0.325	1.00	0.509	pCi/L	06/09/17 07:55	06/15/17 14:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					06/09/17 07:55	06/15/17 14:28	1
Y Carrier	88.6		40 - 110					06/09/17 07:55	06/15/17 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	0.532		0.334	0.336	5.00	0.509	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12047 MW-1

Lab Sample ID: 400-138780-3

Date Collected: 05/23/17 10:46

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.525		0.147	0.155	1.00	0.125	pCi/L	06/09/17 07:29	07/03/17 11:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					06/09/17 07:29	07/03/17 11:03	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.430	U	0.308	0.310	1.00	0.474	pCi/L	06/09/17 07:55	06/15/17 14:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					06/09/17 07:55	06/15/17 14:28	1
Y Carrier	82.6		40 - 110					06/09/17 07:55	06/15/17 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	0.955		0.341	0.347	5.00	0.474	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12048 MW-2

Lab Sample ID: 400-138780-4

Date Collected: 05/23/17 13:09

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.144		0.0860	0.0870	1.00	0.110	pCi/L	06/09/17 07:29	07/03/17 11:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					06/09/17 07:29	07/03/17 11:04	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.380	U	0.301	0.303	1.00	0.472	pCi/L	06/09/17 07:55	06/15/17 14:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					06/09/17 07:55	06/15/17 14:28	1
Y Carrier	81.9		40 - 110					06/09/17 07:55	06/15/17 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	0.524		0.313	0.315	5.00	0.472	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12049 MW-3

Lab Sample ID: 400-138780-5

Date Collected: 05/23/17 14:55

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0125	U	0.0520	0.0520	1.00	0.104	pCi/L	06/09/17 07:29	07/03/17 11:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					06/09/17 07:29	07/03/17 11:04	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.683		0.338	0.344	1.00	0.491	pCi/L	06/09/17 07:55	06/15/17 14:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					06/09/17 07:55	06/15/17 14:29	1
Y Carrier	86.0		40 - 110					06/09/17 07:55	06/15/17 14:29	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	0.695		0.342	0.348	5.00	0.491	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12050 MW-9

Lab Sample ID: 400-138780-6

Date Collected: 05/24/17 10:28

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.106	U	0.0866	0.0871	1.00	0.128	pCi/L	06/09/17 07:29	07/03/17 11:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.9		40 - 110					06/09/17 07:29	07/03/17 11:04	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.136	U	0.289	0.289	1.00	0.498	pCi/L	06/09/17 07:55	06/15/17 14:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.9		40 - 110					06/09/17 07:55	06/15/17 14:29	1
Y Carrier	84.9		40 - 110					06/09/17 07:55	06/15/17 14:29	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	0.242	U	0.302	0.302	5.00	0.498	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12051 FB-1

Lab Sample ID: 400-138780-7

Date Collected: 05/24/17 11:04

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0244	U	0.0619	0.0619	1.00	0.137	pCi/L	06/09/17 07:29	07/03/17 11:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					06/09/17 07:29	07/03/17 11:04	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.234	U	0.289	0.290	1.00	0.479	pCi/L	06/09/17 07:55	06/15/17 14:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					06/09/17 07:55	06/15/17 14:29	1
Y Carrier	82.6		40 - 110					06/09/17 07:55	06/15/17 14:29	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	0.210	U	0.296	0.297	5.00	0.479	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12052 MW-4

Lab Sample ID: 400-138780-8

Date Collected: 05/24/17 12:35

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.127		0.0800	0.0808	1.00	0.103	pCi/L	06/09/17 07:29	07/03/17 11:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		40 - 110					06/09/17 07:29	07/03/17 11:04	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.148	U	0.276	0.277	1.00	0.471	pCi/L	06/09/17 07:55	06/15/17 14:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		40 - 110					06/09/17 07:55	06/15/17 14:29	1
Y Carrier	87.1		40 - 110					06/09/17 07:55	06/15/17 14:29	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	0.275	U	0.288	0.288	5.00	0.471	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12053 MW-4 DUP

Lab Sample ID: 400-138780-9

Date Collected: 05/24/17 12:35

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.158		0.0859	0.0871	1.00	0.102	pCi/L	06/09/17 07:29	07/03/17 11:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					06/09/17 07:29	07/03/17 11:05	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.496	U	0.342	0.345	1.00	0.531	pCi/L	06/09/17 07:55	06/15/17 14:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					06/09/17 07:55	06/15/17 14:29	1
Y Carrier	86.4		40 - 110					06/09/17 07:55	06/15/17 14:29	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	0.654		0.352	0.356	5.00	0.531	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12054 MW-8

Lab Sample ID: 400-138780-10

Date Collected: 05/24/17 14:23

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0215	U	0.0643	0.0643	1.00	0.123	pCi/L	06/09/17 07:29	07/03/17 11:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.6		40 - 110					06/09/17 07:29	07/03/17 11:05	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.478	U	0.368	0.371	1.00	0.579	pCi/L	06/09/17 07:55	06/15/17 14:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.6		40 - 110					06/09/17 07:55	06/15/17 14:29	1
Y Carrier	85.2		40 - 110					06/09/17 07:55	06/15/17 14:29	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	0.499	U	0.374	0.376	5.00	0.579	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12055 EB-1

Lab Sample ID: 400-138780-11

Date Collected: 05/24/17 15:10

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0624	U	0.0680	0.0682	1.00	0.108	pCi/L	06/09/17 07:29	07/03/17 11:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					06/09/17 07:29	07/03/17 11:05	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.134	U	0.276	0.276	1.00	0.476	pCi/L	06/09/17 07:55	06/15/17 14:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					06/09/17 07:55	06/15/17 14:30	1
Y Carrier	84.5		40 - 110					06/09/17 07:55	06/15/17 14:30	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.196	U	0.284	0.285	5.00	0.476	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12056 MW-20

Lab Sample ID: 400-138780-12

Date Collected: 05/24/17 11:02

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	13.9		0.667	1.41	1.00	0.105	pCi/L	06/09/17 07:29	07/03/17 11:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110					06/09/17 07:29	07/03/17 11:05	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.786		0.410	0.417	1.00	0.621	pCi/L	06/09/17 07:55	06/15/17 14:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110					06/09/17 07:55	06/15/17 14:30	1
Y Carrier	86.4		40 - 110					06/09/17 07:55	06/15/17 14:30	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	14.6		0.784	1.47	5.00	0.621	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12057 MW-18

Lab Sample ID: 400-138780-13

Date Collected: 05/24/17 12:07

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.457		0.139	0.145	1.00	0.131	pCi/L	06/09/17 07:29	07/03/17 11:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.8		40 - 110					06/09/17 07:29	07/03/17 11:05	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.486	U	0.328	0.331	1.00	0.505	pCi/L	06/09/17 07:55	06/15/17 14:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.8		40 - 110					06/09/17 07:55	06/15/17 14:30	1
Y Carrier	87.9		40 - 110					06/09/17 07:55	06/15/17 14:30	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	0.943		0.357	0.362	5.00	0.505	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12058 MW-17

Lab Sample ID: 400-138780-14

Date Collected: 05/24/17 13:50

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.351		0.116	0.120	1.00	0.0921	pCi/L	06/09/17 07:29	07/03/17 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					06/09/17 07:29	07/03/17 11:06	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.641		0.387	0.391	1.00	0.595	pCi/L	06/09/17 07:55	06/15/17 14:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					06/09/17 07:55	06/15/17 14:30	1
Y Carrier	85.6		40 - 110					06/09/17 07:55	06/15/17 14:30	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	0.992		0.404	0.409	5.00	0.595	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12059 MW-16

Lab Sample ID: 400-138780-15

Date Collected: 05/24/17 13:06

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	2.73		0.309	0.395	1.00	0.105	pCi/L	06/09/17 07:29	07/03/17 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					06/09/17 07:29	07/03/17 11:06	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.724		0.389	0.395	1.00	0.580	pCi/L	06/09/17 07:55	06/15/17 14:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					06/09/17 07:55	06/15/17 14:30	1
Y Carrier	80.7		40 - 110					06/09/17 07:55	06/15/17 14:30	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	3.45		0.497	0.558	5.00	0.580	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12060 MW-10

Lab Sample ID: 400-138780-16

Date Collected: 05/22/17 13:23

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0383	U	0.0681	0.0682	1.00	0.121	pCi/L	06/09/17 07:29	07/03/17 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.6		40 - 110					06/09/17 07:29	07/03/17 11:06	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.256	U	0.313	0.314	1.00	0.519	pCi/L	06/09/17 07:55	06/15/17 14:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.6		40 - 110					06/09/17 07:55	06/15/17 14:30	1
Y Carrier	85.6		40 - 110					06/09/17 07:55	06/15/17 14:30	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.294	U	0.321	0.322	5.00	0.519	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12061 MW-11

Lab Sample ID: 400-138780-17

Date Collected: 05/22/17 15:11

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0685	U	0.0715	0.0717	1.00	0.112	pCi/L	06/09/17 07:29	07/03/17 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					06/09/17 07:29	07/03/17 11:06	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.192	U	0.318	0.318	1.00	0.619	pCi/L	06/09/17 07:55	06/15/17 14:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					06/09/17 07:55	06/15/17 14:30	1
Y Carrier	65.8		40 - 110					06/09/17 07:55	06/15/17 14:30	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	-0.124	U	0.326	0.326	5.00	0.619	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12062 MW-5

Lab Sample ID: 400-138780-18

Date Collected: 05/23/17 11:38

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.167		0.0929	0.0941	1.00	0.115	pCi/L	06/09/17 07:29	07/03/17 11:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.1		40 - 110					06/09/17 07:29	07/03/17 11:07	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.603		0.304	0.309	1.00	0.441	pCi/L	06/09/17 07:55	06/15/17 14:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.1		40 - 110					06/09/17 07:55	06/15/17 14:30	1
Y Carrier	87.1		40 - 110					06/09/17 07:55	06/15/17 14:30	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	0.771		0.318	0.323	5.00	0.441	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12063 MW-5 DUP

Lab Sample ID: 400-138780-19

Date Collected: 05/23/17 11:38

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.195		0.103	0.104	1.00	0.122	pCi/L	06/09/17 07:29	07/03/17 11:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.5		40 - 110					06/09/17 07:29	07/03/17 11:07	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.635		0.366	0.370	1.00	0.547	pCi/L	06/09/17 07:55	06/15/17 14:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.5		40 - 110					06/09/17 07:55	06/15/17 14:37	1
Y Carrier	86.4		40 - 110					06/09/17 07:55	06/15/17 14:37	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	0.830		0.380	0.385	5.00	0.547	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12064 MW-22

Lab Sample ID: 400-138780-20

Date Collected: 05/23/17 12:45

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.203		0.109	0.111	1.00	0.129	pCi/L	06/09/17 07:29	07/03/17 11:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					06/09/17 07:29	07/03/17 11:07	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.329	U	0.351	0.352	1.00	0.573	pCi/L	06/09/17 07:55	06/15/17 14:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					06/09/17 07:55	06/15/17 14:38	1
Y Carrier	86.0		40 - 110					06/09/17 07:55	06/15/17 14:38	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	0.532	U	0.367	0.369	5.00	0.573	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12065 MW-21

Lab Sample ID: 400-138780-21

Date Collected: 05/23/17 13:45

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0957	U	0.0766	0.0771	1.00	0.109	pCi/L	06/09/17 07:29	07/03/17 11:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.6		40 - 110					06/09/17 07:29	07/03/17 11:07	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0431	U	0.350	0.350	1.00	0.615	pCi/L	06/09/17 07:55	06/15/17 14:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.6		40 - 110					06/09/17 07:55	06/15/17 14:38	1
Y Carrier	87.1		40 - 110					06/09/17 07:55	06/15/17 14:38	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	0.139	U	0.358	0.358	5.00	0.615	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12066 MW-21 DUP

Lab Sample ID: 400-138780-22

Date Collected: 05/23/17 13:45

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.152		0.105	0.106	1.00	0.142	pCi/L	06/09/17 08:50	07/03/17 07:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					06/09/17 08:50	07/03/17 07:11	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.847		0.426	0.433	1.00	0.641	pCi/L	06/09/17 09:00	06/21/17 10:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					06/09/17 09:00	06/21/17 10:38	1
Y Carrier	84.5		40 - 110					06/09/17 09:00	06/21/17 10:38	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	0.999		0.439	0.446	5.00	0.641	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12067 MW-6

Lab Sample ID: 400-138780-23

Date Collected: 05/23/17 15:01

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.244		0.121	0.123	1.00	0.136	pCi/L	06/09/17 08:50	07/03/17 07:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		40 - 110					06/09/17 08:50	07/03/17 07:11	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.168	U	0.241	0.241	1.00	0.465	pCi/L	06/09/17 09:00	06/21/17 10:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		40 - 110					06/09/17 09:00	06/21/17 10:38	1
Y Carrier	89.0		40 - 110					06/09/17 09:00	06/21/17 10:38	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	0.0761	U	0.269	0.271	5.00	0.465	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12068 MW-7

Lab Sample ID: 400-138780-24

Date Collected: 05/23/17 16:24

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.232		0.121	0.123	1.00	0.147	pCi/L	06/09/17 08:50	07/03/17 07:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					06/09/17 08:50	07/03/17 07:11	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.125	U	0.309	0.309	1.00	0.532	pCi/L	06/09/17 09:00	06/21/17 10:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					06/09/17 09:00	06/21/17 10:38	1
Y Carrier	82.2		40 - 110					06/09/17 09:00	06/21/17 10:38	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	0.358	U	0.332	0.333	5.00	0.532	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12069 FB-2

Lab Sample ID: 400-138780-25

Date Collected: 05/23/17 17:05

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0157	U	0.0739	0.0739	1.00	0.147	pCi/L	06/09/17 08:50	07/03/17 07:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		40 - 110					06/09/17 08:50	07/03/17 07:11	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.448	U	0.341	0.343	1.00	0.666	pCi/L	06/09/17 09:00	06/21/17 10:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		40 - 110					06/09/17 09:00	06/21/17 10:38	1
Y Carrier	84.1		40 - 110					06/09/17 09:00	06/21/17 10:38	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	-0.432	U	0.349	0.351	5.00	0.666	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12070 MW-12

Lab Sample ID: 400-138780-26

Date Collected: 05/24/17 12:33

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.529		0.175	0.182	1.00	0.174	pCi/L	06/09/17 08:50	07/03/17 07:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.8		40 - 110					06/09/17 08:50	07/03/17 07:11	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.534	U	0.373	0.376	1.00	0.584	pCi/L	06/09/17 09:00	06/21/17 10:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.8		40 - 110					06/09/17 09:00	06/21/17 10:38	1
Y Carrier	85.2		40 - 110					06/09/17 09:00	06/21/17 10:38	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	1.06		0.412	0.418	5.00	0.584	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12071 MW-13

Lab Sample ID: 400-138780-27

Date Collected: 05/24/17 13:54

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.785		0.199	0.211	1.00	0.150	pCi/L	06/09/17 08:50	07/03/17 07:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					06/09/17 08:50	07/03/17 07:13	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.818		0.352	0.360	1.00	0.508	pCi/L	06/09/17 09:00	06/21/17 10:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					06/09/17 09:00	06/21/17 10:38	1
Y Carrier	88.6		40 - 110					06/09/17 09:00	06/21/17 10:38	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	1.60		0.405	0.418	5.00	0.508	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12072 MW-14

Lab Sample ID: 400-138780-28

Date Collected: 05/24/17 15:15

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.417		0.156	0.161	1.00	0.160	pCi/L	06/09/17 08:50	07/03/17 07:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					06/09/17 08:50	07/03/17 07:13	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.564		0.328	0.332	1.00	0.494	pCi/L	06/09/17 09:00	06/21/17 10:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					06/09/17 09:00	06/21/17 10:38	1
Y Carrier	83.7		40 - 110					06/09/17 09:00	06/21/17 10:38	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	0.981		0.363	0.369	5.00	0.494	pCi/L		07/05/17 16:51	1

Client Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12073 FB-3

Lab Sample ID: 400-138780-29

Date Collected: 05/24/17 15:55

Matrix: Water

Date Received: 06/05/17 16:30

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.237		0.125	0.127	1.00	0.147	pCi/L	06/09/17 08:50	07/03/17 07:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					06/09/17 08:50	07/03/17 07:13	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0106	U	0.282	0.282	1.00	0.505	pCi/L	06/09/17 09:00	06/21/17 10:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					06/09/17 09:00	06/21/17 10:38	1
Y Carrier	88.6		40 - 110					06/09/17 09:00	06/21/17 10:38	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	0.226	U	0.308	0.309	5.00	0.505	pCi/L		07/05/17 16:51	1

Definitions/Glossary

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

TestAmerica Job ID: 400-138780-1
SDG: Gaston Ash Pond (7)

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: 400-138780-1
SDG: Gaston Ash Pond (7)

Client Sample ID: AX12045 MW-19

Lab Sample ID: 400-138780-1

Date Collected: 05/22/17 12:32

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312639	06/09/17 07:29	LDE	TAL SL
Total/NA	Analysis	9315		1	316201	07/03/17 11:03	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312641	06/09/17 07:55	LDE	TAL SL
Total/NA	Analysis	9320		1	313462	06/15/17 14:28	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Client Sample ID: AX12046 MW-15R

Lab Sample ID: 400-138780-2

Date Collected: 05/22/17 14:52

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312639	06/09/17 07:29	LDE	TAL SL
Total/NA	Analysis	9315		1	316201	07/03/17 11:03	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312641	06/09/17 07:55	LDE	TAL SL
Total/NA	Analysis	9320		1	313462	06/15/17 14:28	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Client Sample ID: AX12047 MW-1

Lab Sample ID: 400-138780-3

Date Collected: 05/23/17 10:46

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312639	06/09/17 07:29	LDE	TAL SL
Total/NA	Analysis	9315		1	316201	07/03/17 11:03	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312641	06/09/17 07:55	LDE	TAL SL
Total/NA	Analysis	9320		1	313462	06/15/17 14:28	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Client Sample ID: AX12048 MW-2

Lab Sample ID: 400-138780-4

Date Collected: 05/23/17 13:09

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312639	06/09/17 07:29	LDE	TAL SL
Total/NA	Analysis	9315		1	316201	07/03/17 11:04	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312641	06/09/17 07:55	LDE	TAL SL
Total/NA	Analysis	9320		1	313462	06/15/17 14:28	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-138780-1
SDG: Gaston Ash Pond (7)

Client Sample ID: AX12049 MW-3

Lab Sample ID: 400-138780-5

Date Collected: 05/23/17 14:55

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312639	06/09/17 07:29	LDE	TAL SL
Total/NA	Analysis	9315		1	316201	07/03/17 11:04	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312641	06/09/17 07:55	LDE	TAL SL
Total/NA	Analysis	9320		1	313462	06/15/17 14:29	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Client Sample ID: AX12050 MW-9

Lab Sample ID: 400-138780-6

Date Collected: 05/24/17 10:28

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312639	06/09/17 07:29	LDE	TAL SL
Total/NA	Analysis	9315		1	316201	07/03/17 11:04	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312641	06/09/17 07:55	LDE	TAL SL
Total/NA	Analysis	9320		1	313462	06/15/17 14:29	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Client Sample ID: AX12051 FB-1

Lab Sample ID: 400-138780-7

Date Collected: 05/24/17 11:04

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312639	06/09/17 07:29	LDE	TAL SL
Total/NA	Analysis	9315		1	316201	07/03/17 11:04	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312641	06/09/17 07:55	LDE	TAL SL
Total/NA	Analysis	9320		1	313462	06/15/17 14:29	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Client Sample ID: AX12052 MW-4

Lab Sample ID: 400-138780-8

Date Collected: 05/24/17 12:35

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312639	06/09/17 07:29	LDE	TAL SL
Total/NA	Analysis	9315		1	316201	07/03/17 11:04	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312641	06/09/17 07:55	LDE	TAL SL
Total/NA	Analysis	9320		1	313462	06/15/17 14:29	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12053 MW-4 DUP

Lab Sample ID: 400-138780-9

Date Collected: 05/24/17 12:35

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312639	06/09/17 07:29	LDE	TAL SL
Total/NA	Analysis	9315		1	316201	07/03/17 11:05	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312641	06/09/17 07:55	LDE	TAL SL
Total/NA	Analysis	9320		1	313462	06/15/17 14:29	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Client Sample ID: AX12054 MW-8

Lab Sample ID: 400-138780-10

Date Collected: 05/24/17 14:23

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312639	06/09/17 07:29	LDE	TAL SL
Total/NA	Analysis	9315		1	316201	07/03/17 11:05	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312641	06/09/17 07:55	LDE	TAL SL
Total/NA	Analysis	9320		1	313462	06/15/17 14:29	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Client Sample ID: AX12055 EB-1

Lab Sample ID: 400-138780-11

Date Collected: 05/24/17 15:10

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312639	06/09/17 07:29	LDE	TAL SL
Total/NA	Analysis	9315		1	316201	07/03/17 11:05	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312641	06/09/17 07:55	LDE	TAL SL
Total/NA	Analysis	9320		1	313462	06/15/17 14:30	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Client Sample ID: AX12056 MW-20

Lab Sample ID: 400-138780-12

Date Collected: 05/24/17 11:02

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312639	06/09/17 07:29	LDE	TAL SL
Total/NA	Analysis	9315		1	316201	07/03/17 11:05	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312641	06/09/17 07:55	LDE	TAL SL
Total/NA	Analysis	9320		1	313462	06/15/17 14:30	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12057 MW-18

Lab Sample ID: 400-138780-13

Date Collected: 05/24/17 12:07

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312639	06/09/17 07:29	LDE	TAL SL
Total/NA	Analysis	9315		1	316201	07/03/17 11:05	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312641	06/09/17 07:55	LDE	TAL SL
Total/NA	Analysis	9320		1	313462	06/15/17 14:30	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Client Sample ID: AX12058 MW-17

Lab Sample ID: 400-138780-14

Date Collected: 05/24/17 13:50

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312639	06/09/17 07:29	LDE	TAL SL
Total/NA	Analysis	9315		1	10664	07/03/17 11:06	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312641	06/09/17 07:55	LDE	TAL SL
Total/NA	Analysis	9320		1	313462	06/15/17 14:30	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Client Sample ID: AX12059 MW-16

Lab Sample ID: 400-138780-15

Date Collected: 05/24/17 13:06

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312639	06/09/17 07:29	LDE	TAL SL
Total/NA	Analysis	9315		1	10664	07/03/17 11:06	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312641	06/09/17 07:55	LDE	TAL SL
Total/NA	Analysis	9320		1	313462	06/15/17 14:30	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Client Sample ID: AX12060 MW-10

Lab Sample ID: 400-138780-16

Date Collected: 05/22/17 13:23

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312639	06/09/17 07:29	LDE	TAL SL
Total/NA	Analysis	9315		1	10664	07/03/17 11:06	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312641	06/09/17 07:55	LDE	TAL SL
Total/NA	Analysis	9320		1	313462	06/15/17 14:30	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12061 MW-11

Lab Sample ID: 400-138780-17

Date Collected: 05/22/17 15:11

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312639	06/09/17 07:29	LDE	TAL SL
Total/NA	Analysis	9315		1	10664	07/03/17 11:06	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312641	06/09/17 07:55	LDE	TAL SL
Total/NA	Analysis	9320		1	313462	06/15/17 14:30	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Client Sample ID: AX12062 MW-5

Lab Sample ID: 400-138780-18

Date Collected: 05/23/17 11:38

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312639	06/09/17 07:29	LDE	TAL SL
Total/NA	Analysis	9315		1	10664	07/03/17 11:07	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312641	06/09/17 07:55	LDE	TAL SL
Total/NA	Analysis	9320		1	313462	06/15/17 14:30	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Client Sample ID: AX12063 MW-5 DUP

Lab Sample ID: 400-138780-19

Date Collected: 05/23/17 11:38

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312639	06/09/17 07:29	LDE	TAL SL
Total/NA	Analysis	9315		1	10664	07/03/17 11:07	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312641	06/09/17 07:55	LDE	TAL SL
Total/NA	Analysis	9320		1	313460	06/15/17 14:37	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Client Sample ID: AX12064 MW-22

Lab Sample ID: 400-138780-20

Date Collected: 05/23/17 12:45

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312639	06/09/17 07:29	LDE	TAL SL
Total/NA	Analysis	9315		1	10664	07/03/17 11:07	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312641	06/09/17 07:55	LDE	TAL SL
Total/NA	Analysis	9320		1	313460	06/15/17 14:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Client Sample ID: AX12065 MW-21

Lab Sample ID: 400-138780-21

Date Collected: 05/23/17 13:45

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312639	06/09/17 07:29	LDE	TAL SL
Total/NA	Analysis	9315		1	10664	07/03/17 11:07	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312641	06/09/17 07:55	LDE	TAL SL
Total/NA	Analysis	9320		1	313460	06/15/17 14:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Client Sample ID: AX12066 MW-21 DUP

Lab Sample ID: 400-138780-22

Date Collected: 05/23/17 13:45

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312646	06/09/17 08:50	LDE	TAL SL
Total/NA	Analysis	9315		1	316201	07/03/17 07:11	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312653	06/09/17 09:00	LDE	TAL SL
Total/NA	Analysis	9320		1	314409	06/21/17 10:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Client Sample ID: AX12067 MW-6

Lab Sample ID: 400-138780-23

Date Collected: 05/23/17 15:01

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312646	06/09/17 08:50	LDE	TAL SL
Total/NA	Analysis	9315		1	316201	07/03/17 07:11	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312653	06/09/17 09:00	LDE	TAL SL
Total/NA	Analysis	9320		1	314409	06/21/17 10:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Client Sample ID: AX12068 MW-7

Lab Sample ID: 400-138780-24

Date Collected: 05/23/17 16:24

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312646	06/09/17 08:50	LDE	TAL SL
Total/NA	Analysis	9315		1	316201	07/03/17 07:11	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312653	06/09/17 09:00	LDE	TAL SL
Total/NA	Analysis	9320		1	314409	06/21/17 10:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-138780-1
SDG: Gaston Ash Pond (7)

Client Sample ID: AX12069 FB-2

Lab Sample ID: 400-138780-25

Date Collected: 05/23/17 17:05

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312646	06/09/17 08:50	LDE	TAL SL
Total/NA	Analysis	9315		1	316201	07/03/17 07:11	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312653	06/09/17 09:00	LDE	TAL SL
Total/NA	Analysis	9320		1	314409	06/21/17 10:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Client Sample ID: AX12070 MW-12

Lab Sample ID: 400-138780-26

Date Collected: 05/24/17 12:33

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312646	06/09/17 08:50	LDE	TAL SL
Total/NA	Analysis	9315		1	316201	07/03/17 07:11	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312653	06/09/17 09:00	LDE	TAL SL
Total/NA	Analysis	9320		1	314409	06/21/17 10:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Client Sample ID: AX12071 MW-13

Lab Sample ID: 400-138780-27

Date Collected: 05/24/17 13:54

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312646	06/09/17 08:50	LDE	TAL SL
Total/NA	Analysis	9315		1	316200	07/03/17 07:13	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312653	06/09/17 09:00	LDE	TAL SL
Total/NA	Analysis	9320		1	314409	06/21/17 10:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Client Sample ID: AX12072 MW-14

Lab Sample ID: 400-138780-28

Date Collected: 05/24/17 15:15

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312646	06/09/17 08:50	LDE	TAL SL
Total/NA	Analysis	9315		1	316200	07/03/17 07:13	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312653	06/09/17 09:00	LDE	TAL SL
Total/NA	Analysis	9320		1	314409	06/21/17 10:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-138780-1
SDG: Gaston Ash Pond (7)

Client Sample ID: AX12073 FB-3

Lab Sample ID: 400-138780-29

Date Collected: 05/24/17 15:55

Matrix: Water

Date Received: 06/05/17 16:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			312646	06/09/17 08:50	LDE	TAL SL
Total/NA	Analysis	9315		1	316200	07/03/17 07:13	ALD	TAL SL
Total/NA	Prep	PrecSep_0			312653	06/09/17 09:00	LDE	TAL SL
Total/NA	Analysis	9320		1	314409	06/21/17 10:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	316322	07/05/17 16:51	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: 400-138780-1
 SDG: Gaston Ash Pond (7)

Rad

Prep Batch: 312639

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138780-1	AX12045 MW-19	Total/NA	Water	PrecSep-21	
400-138780-2	AX12046 MW-15R	Total/NA	Water	PrecSep-21	
400-138780-3	AX12047 MW-1	Total/NA	Water	PrecSep-21	
400-138780-4	AX12048 MW-2	Total/NA	Water	PrecSep-21	
400-138780-5	AX12049 MW-3	Total/NA	Water	PrecSep-21	
400-138780-6	AX12050 MW-9	Total/NA	Water	PrecSep-21	
400-138780-7	AX12051 FB-1	Total/NA	Water	PrecSep-21	
400-138780-8	AX12052 MW-4	Total/NA	Water	PrecSep-21	
400-138780-9	AX12053 MW-4 DUP	Total/NA	Water	PrecSep-21	
400-138780-10	AX12054 MW-8	Total/NA	Water	PrecSep-21	
400-138780-11	AX12055 EB-1	Total/NA	Water	PrecSep-21	
400-138780-12	AX12056 MW-20	Total/NA	Water	PrecSep-21	
400-138780-13	AX12057 MW-18	Total/NA	Water	PrecSep-21	
400-138780-14	AX12058 MW-17	Total/NA	Water	PrecSep-21	
400-138780-15	AX12059 MW-16	Total/NA	Water	PrecSep-21	
400-138780-16	AX12060 MW-10	Total/NA	Water	PrecSep-21	
400-138780-17	AX12061 MW-11	Total/NA	Water	PrecSep-21	
400-138780-18	AX12062 MW-5	Total/NA	Water	PrecSep-21	
400-138780-19	AX12063 MW-5 DUP	Total/NA	Water	PrecSep-21	
400-138780-20	AX12064 MW-22	Total/NA	Water	PrecSep-21	
400-138780-21	AX12065 MW-21	Total/NA	Water	PrecSep-21	
MB 160-312639/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-312639/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-138780-4 DU	AX12048 MW-2	Total/NA	Water	PrecSep-21	

Prep Batch: 312641

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138780-1	AX12045 MW-19	Total/NA	Water	PrecSep_0	
400-138780-2	AX12046 MW-15R	Total/NA	Water	PrecSep_0	
400-138780-3	AX12047 MW-1	Total/NA	Water	PrecSep_0	
400-138780-4	AX12048 MW-2	Total/NA	Water	PrecSep_0	
400-138780-5	AX12049 MW-3	Total/NA	Water	PrecSep_0	
400-138780-6	AX12050 MW-9	Total/NA	Water	PrecSep_0	
400-138780-7	AX12051 FB-1	Total/NA	Water	PrecSep_0	
400-138780-8	AX12052 MW-4	Total/NA	Water	PrecSep_0	
400-138780-9	AX12053 MW-4 DUP	Total/NA	Water	PrecSep_0	
400-138780-10	AX12054 MW-8	Total/NA	Water	PrecSep_0	
400-138780-11	AX12055 EB-1	Total/NA	Water	PrecSep_0	
400-138780-12	AX12056 MW-20	Total/NA	Water	PrecSep_0	
400-138780-13	AX12057 MW-18	Total/NA	Water	PrecSep_0	
400-138780-14	AX12058 MW-17	Total/NA	Water	PrecSep_0	
400-138780-15	AX12059 MW-16	Total/NA	Water	PrecSep_0	
400-138780-16	AX12060 MW-10	Total/NA	Water	PrecSep_0	
400-138780-17	AX12061 MW-11	Total/NA	Water	PrecSep_0	
400-138780-18	AX12062 MW-5	Total/NA	Water	PrecSep_0	
400-138780-19	AX12063 MW-5 DUP	Total/NA	Water	PrecSep_0	
400-138780-20	AX12064 MW-22	Total/NA	Water	PrecSep_0	
400-138780-21	AX12065 MW-21	Total/NA	Water	PrecSep_0	
MB 160-312641/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-312641/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-138780-4 DU	AX12048 MW-2	Total/NA	Water	PrecSep_0	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-138780-1
SDG: Gaston Ash Pond (7)

Prep Batch: 312646

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138780-22	AX12066 MW-21 DUP	Total/NA	Water	PrecSep-21	
400-138780-23	AX12067 MW-6	Total/NA	Water	PrecSep-21	
400-138780-24	AX12068 MW-7	Total/NA	Water	PrecSep-21	
400-138780-25	AX12069 FB-2	Total/NA	Water	PrecSep-21	
400-138780-26	AX12070 MW-12	Total/NA	Water	PrecSep-21	
400-138780-27	AX12071 MW-13	Total/NA	Water	PrecSep-21	
400-138780-28	AX12072 MW-14	Total/NA	Water	PrecSep-21	
400-138780-29	AX12073 FB-3	Total/NA	Water	PrecSep-21	
MB 160-312646/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-312646/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-138780-23 DU	AX12067 MW-6	Total/NA	Water	PrecSep-21	

Prep Batch: 312653

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138780-22	AX12066 MW-21 DUP	Total/NA	Water	PrecSep_0	
400-138780-23	AX12067 MW-6	Total/NA	Water	PrecSep_0	
400-138780-24	AX12068 MW-7	Total/NA	Water	PrecSep_0	
400-138780-25	AX12069 FB-2	Total/NA	Water	PrecSep_0	
400-138780-26	AX12070 MW-12	Total/NA	Water	PrecSep_0	
400-138780-27	AX12071 MW-13	Total/NA	Water	PrecSep_0	
400-138780-28	AX12072 MW-14	Total/NA	Water	PrecSep_0	
400-138780-29	AX12073 FB-3	Total/NA	Water	PrecSep_0	
MB 160-312653/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-312653/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-138780-23 DU	AX12067 MW-6	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-312639/1-A
Matrix: Water
Analysis Batch: 316201

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 312639

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.03206	U	0.0744	0.0744	1.00	0.135	pCi/L	06/09/17 07:29	07/03/17 11:03	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		40 - 110						
	87.9					06/09/17 07:29	07/03/17 11:03	1		

Lab Sample ID: LCS 160-312639/2-A
Matrix: Water
Analysis Batch: 316201

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 312639

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	15.1	14.35		1.47	1.00	0.116	pCi/L	95	68 - 137
Carrier	LCS LCS		Limits			Prepared	Analyzed	Dil Fac	
Ba Carrier	%Yield	Qualifier		40 - 110					
	88.2								

Lab Sample ID: 400-138780-4 DU
Matrix: Water
Analysis Batch: 316201

Client Sample ID: AX12048 MW-2
Prep Type: Total/NA
Prep Batch: 312639

Analyte	Sample Sample		DU	DU	Total	RL	MDC	Unit	RER	RER Limit
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					
Radium-226	0.144		0.08185	U	0.0741	1.00	0.111	pCi/L	0.39	1
Carrier	DU DU		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		40 - 110						
	92.0									

Lab Sample ID: MB 160-312646/1-A
Matrix: Water
Analysis Batch: 316201

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 312646

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.1425	U	0.110	0.111	1.00	0.158	pCi/L	06/09/17 08:50	07/03/17 07:10	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		40 - 110						
	93.8					06/09/17 08:50	07/03/17 07:10	1		

Lab Sample ID: LCS 160-312646/2-A
Matrix: Water
Analysis Batch: 316201

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 312646

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	15.1	17.42		1.80	1.00	0.183	pCi/L	115	68 - 137

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

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

Lab Sample ID: LCS 160-312646/2-A
Matrix: Water
Analysis Batch: 316201

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 312646

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	91.2		40 - 110

Lab Sample ID: 400-138780-23 DU
Matrix: Water
Analysis Batch: 316201

Client Sample ID: AX12067 MW-6
Prep Type: Total/NA
Prep Batch: 312646

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.244		0.1745		0.110	1.00	0.141	pCi/L	0.30	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	94.4		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-312641/1-A
Matrix: Water
Analysis Batch: 313462

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 312641

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.06037	U	0.287	0.287	1.00	0.507	pCi/L	06/09/17 07:55	06/15/17 14:28	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	87.9		40 - 110	06/09/17 07:55	06/15/17 14:28	1
Y Carrier	87.9		40 - 110	06/09/17 07:55	06/15/17 14:28	1

Lab Sample ID: LCS 160-312641/2-A
Matrix: Water
Analysis Batch: 313462

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 312641

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	17.7	21.37		2.29	1.00	0.500	pCi/L	120	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	88.2		40 - 110
Y Carrier	87.9		40 - 110

Lab Sample ID: 400-138780-4 DU
Matrix: Water
Analysis Batch: 313462

Client Sample ID: AX12048 MW-2
Prep Type: Total/NA
Prep Batch: 312641

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.380	U	0.4945	U	0.334	1.00	0.510	pCi/L	0.18	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

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

Lab Sample ID: 400-138780-4 DU
Matrix: Water
Analysis Batch: 313462

Client Sample ID: AX12048 MW-2
Prep Type: Total/NA
Prep Batch: 312641

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	92.0		40 - 110
Y Carrier	84.5		40 - 110

Lab Sample ID: MB 160-312653/1-A
Matrix: Water
Analysis Batch: 314409

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 312653

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3110	U	0.277	0.278	1.00	0.442	pCi/L	06/09/17 09:00	06/21/17 10:37	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	93.8		40 - 110	06/09/17 09:00	06/21/17 10:37	1
Y Carrier	84.9		40 - 110	06/09/17 09:00	06/21/17 10:37	1

Lab Sample ID: LCS 160-312653/2-A
Matrix: Water
Analysis Batch: 314409

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 312653

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	17.7	18.68		2.02	1.00	0.475	pCi/L	105	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	91.2		40 - 110
Y Carrier	87.5		40 - 110

Lab Sample ID: 400-138780-23 DU
Matrix: Water
Analysis Batch: 314409

Client Sample ID: AX12067 MW-6
Prep Type: Total/NA
Prep Batch: 312653

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	-0.168	U	0.09827	U	0.313	1.00	0.542	pCi/L	0.48	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	94.4		40 - 110
Y Carrier	85.2		40 - 110

QC Sample Results

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

TestAmerica Job ID: 400-138780-1
 SDG: Gaston Ash Pond (7)

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

Lab Sample ID: 400-138780-4 DU
Matrix: Water
Analysis Batch: 316322

Client Sample ID: AX12048 MW-2
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	0.524		0.5763		0.342	5.00	0.510	pCi/L	0.08	

Lab Sample ID: 400-138780-23 DU
Matrix: Water
Analysis Batch: 316322

Client Sample ID: AX12067 MW-6
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	0.0761	U	0.2728	U	0.332	5.00	0.542	pCi/L	0.33	

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

Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information
 Sampler: Anthony Goggins/ Ben Rothschild
 Lab PI: Whitmire, Cheyenne R
 Client Contact: Sarah Copeland
 Phone: _____ E-Mail: cheyenne.whitmire@testamericainc.com
 Company: Alabama Power General Test Laboratory
 Address: 744 County Rd 87 GSC #8
 City: Calera
 State, Zip: AL, 35040
 Phone: 205-664-6121(Tel)
 Email: sgcopela@southernco.com
 Project #: 40007143
 CCR _____
 Site: Gaston Ash Pond (7)

Due Date Requested: _____
 TAT Requested (days): **Routine**
 PO #: _____
 WO #: _____
 Project #: 40007143
 SSO/WF: _____

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastefl, BT=issue, A=AU)	Preservation Code:	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of Containers	Special Instructions/Note:
AX12056	5/24/17	1102	G	Water	D	X	X	1	MW-20
AX12057	5/24/17	1207	G	Water		X	X	1	MW-18
AX12058	5/24/17	1350	G	Water		X	X	1	MW-17
AX12059	5/24/17	1306	G	Water		X	X	1	MW-16
AX12060	5/22/17	1323	G	Water		X	X	1	MW-10
AX12061	5/22/17	1511	G	Water		X	X	1	MW-11
AX12062	5/23/17	1138	G	Water		X	X	1	MW-5
AX12063	5/23/17	1138	G	Water		X	X	1	MW-5 Dup (Sample Duplicate)
AX12064	5/23/17	1245	G	Water		X	X	1	MW-22
AX12065	5/23/17	1345	G	Water		X	X	1	MW-21
AX12066	5/23/17	1345	G	Water		X	X	1	MW-21 Dup (Sample Duplicate)



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

Empty Kit Relinquished by: _____ Date: _____
 Relinquished by: Sarah Copeland Date/Time: 05/31/2017, 1100 Company: APC
 Relinquished by: _____ Date/Time: _____ Company: _____
 Relinquished by: _____ Date/Time: _____ Company: _____
 Custody Seals Intact: Yes No Δ No Δ No
 Custody Seal No.: _____
 Cooler Temperature(s) °C and Other Remarks: _____

Special Instructions/QC Requirements:
 Return To Client Disposal By Lab Archive For _____ Months
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Date/Time: 5/17/17 1530 Company: _____
 Date/Time: _____ Company: _____
 Date/Time: _____ Company: _____



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

Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information
 Client Contact: Sarah Copeland
 Lab PM: Whitmire, Chyenne R
 Carrier Tracking No(s):
 E-Mail: chyenne.whitmire@testamericainc.com
 Page 3 of 3
 Job #: 400-138780
 GOC No: 400-56525-24537.1

Company: Alabama Power General Test Laboratory
 Address: 744 County Rd 87 GSC #8
 City: Calera
 State, Zip: AL, 35040
 Phone: 205-664-6121(Tel)
 Email: sgcopela@southernco.com
 Project #: 40007143
 CCR
 SSO/W#: Gaston Ash Pond (7)

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Water, Overhead, Sewer, Other)	Preservation Code:	Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of Containers	Special Instructions/Note:
						Y	X	Y	X		
AX12067	5/23/17	1501	G	Water			X	X	3	MW-6	
AX12068	5/23/17	1624	G	Water			X	X	1	MW-7	
AX12069	5/23/17	1705	G	Water			X	X	1	FB-2 (Field Blank)	
AX12070	5/24/17	1233	G	Water			X	X	1	MW-12	
AX12071	5/24/17	1354	G	Water			X	X	1	MW-13	
AX12072	5/24/17	1515	G	Water			X	X	1	MW-14	
AX12073	5/24/17	1555	G	Water			X	X	1	FB-3 (Field Blank)	

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

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Return To Client Disposal By Lab Archive For _____ Months
 Special Instructions/QC Requirements:
 Date/Time: 05/31/2017: 1100
 Date/Time: 6/5/17 1530
 Date/Time: _____
 Date/Time: _____
 Date/Time: _____
 Company: APC
 Company: _____
 Company: _____
 Cooler Temperature(s) °C and Other Remarks:



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

Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information		Sampler: Jason Rouss		Lab PM: Whitmire, Chyenne R		Carrier Tracking No(s):		COC No: 400-56525-24537.1	
Client Contact: Sarah Copeland		Phone:		E-Mail: chyenne.whitmire@testamericainc.com		Page: 1 of 3		Job #: 400-139780	
Company: Alabama Power General Test Laboratory		Due Date Requested:		Analysis Requested		Preservation Codes:		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 X - EDTA L - EDA Z - other (specify)	
Address: 744 County Rd 87 GSC #8		TAT Requested (days):		Routine		Total Number of containers		Special Instructions/Note:	
City: Calera		PO #:		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
State, Zip: AL, 35040		WO #:		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Phone: 205-564-6121(Tel)		Project #:		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Email: sgcopela@southernco.com		CCR		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Project Name:		SSOW#:		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Site: Gaston Ash Pond (7)		Project #:		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
40007143		SSOW#:		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Matrix (Water, Solid, or Tissue, Ash)		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Sample Type (C=Comp, G=grab)	
AX12045		5/22/17		1232		G		Water	
AX12046		5/22/17		1452		G		Water	
AX12047		5/23/17		1046		G		Water	
AX12048		5/23/17		1309		G		Water	
AX12049		5/23/17		1455		G		Water	
AX12050		5/24/17		1028		G		Water	
AX12051		5/24/17		1104		G		Water	
AX12052		5/24/17		1235		G		Water	
AX12053		5/24/17		1235		G		Water	
AX12054		5/24/17		1423		G		Water	
AX12055		5/24/17		1510		G		Water	
Possible Hazard Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Sample Type (C=Comp, G=grab)	
<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		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Sample Type (C=Comp, G=grab)	
Deliverable Requested: I, II, III, IV, Other (specify)		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Sample Type (C=Comp, G=grab)	
Empty Kit Relinquished by:		Date:		Date:		Date:		Date:	
Relinquished by: Sarah Copeland		Date/Time: 05/31/2017: 1100		Company: APC		Company: APC		Company: APC	
Relinquished by:		Date/Time:		Company:		Company:		Company:	
Relinquished by:		Date/Time:		Company:		Company:		Company:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Cooler Temperature(s) °C and Other Remarks:		Cooler Temperature(s) °C and Other Remarks:	



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-138780-1
SDG Number: Gaston Ash Pond (7)

Login Number: 138780

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.	N/A	
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: 400-138780-1
 SDG: Gaston Ash Pond (7)

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	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
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	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17 *
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-18
Michigan	State Program	5	9912	06-30-17 *
New Jersey	NELAP	2	FL006	06-30-18
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17 *
Tennessee	State Program	4	TN02907	06-30-18
Texas	NELAP	6	T104704286-16-10	09-30-17
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
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	11-30-17
Iowa	State Program	7	373	02-01-18
Kansas	NELAP	7	E-10236	10-31-17
Kentucky (DW)	State Program	4	90125	12-31-17
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-18
Louisiana (DW)	NELAP	6	LA170011	12-31-17
Maryland	State Program	3	310	09-30-18
Missouri	State Program	7	780	06-30-17 *
Nevada	State Program	9	MO000542017-1	07-31-17 *
New Jersey	NELAP	2	MO002	06-30-18
New York	NELAP	2	11616	03-31-18

* 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: 400-138780-1
 SDG: Gaston Ash Pond (7)

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
North Dakota	State Program	8	R207	06-30-17 *
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-17 *
Pennsylvania	NELAP	3	68-00540	02-21-18
South Carolina	State Program	4	85002001	06-30-17 *
Texas	NELAP	6	T104704193-16-10	07-31-17 *
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		P330-17-0028	02-02-20
Utah	NELAP	8	MO000542016-8	07-31-17 *
Virginia	NELAP	3	460230	06-14-18
Washington	State Program	10	C592	08-30-17 *
West Virginia DEP	State Program	3	381	08-31-17 *

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





Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

- Field Complete
- Lab Complete

Lab ETA 05/24/2017 17:00

Requested Complete Date	<input type="text" value="Routine"/>	Results To	<input type="text" value="Dustin Brooks, Greg Dyer"/>
Site Representative	<input type="text" value="Byron Corina"/>	Requested By	<input type="text" value="Greg Dyer"/>
Collector	<input type="text" value="Jason Rouss"/>	Location	<input type="text" value="Gaston Ash Pond"/>
Analysis Requested	<input type="text" value="Bottle 1 (1L): Radiological"/>		
Comments	<input type="text" value="Radium Duplicate collected at MW-2
There is no temperature preservation requirement for Radium."/>		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-19	05/22/2017	12:32	1	Groundwater		AX12045
MW-15R	05/22/2017	14:52	1	Groundwater		AX12046
MW-1	05/23/2017	10:46	1	Groundwater		AX12047
MW-2	05/23/2017	13:09	3	Groundwater		AX12048
MW-3	05/23/2017	14:55	1	Groundwater		AX12049
MW-9	05/24/2017	10:28	1	Groundwater		AX12050
FB-1	05/24/2017	11:04	1	Field Blank		AX12051
MW-4	05/24/2017	12:35	1	Groundwater		AX12052
MW-4 Dup	05/24/2017	12:35	1	Sample Duplicate		AX12053
MW-8	05/24/2017	14:23	1	Groundwater		AX12054
EB-1	05/24/2017	15:10	1	Equipment Blank		AX12055

Relinquished By	Received By	Date/Time
	Sarah Copeland <small>Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o.ou, email=sgcopela@southernmco.com, c=US Date: 2017.05.24 16:55:28 -05'00'</small>	05/24/2017 16:55

SmarTroll ID	<input type="text" value="4696-23443-3-2"/>	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	<input type="text" value="4677-23342-4-1"/>	Cooler Temp
		<input type="text" value="NA"/>
		Thermometer ID
		<input type="text" value="NA"/>
		pH Strip ID
		<input type="text" value="5521-28268-20-12"/>



Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

- Field Complete
- Lab Complete

Lab ETA 05/25/2017 08:30

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Ben Rothschild	Location	Gaston Ash Pond
Analysis Requested	Bottle 1 (1L): Radiological		
Comments	Radium Duplicate collected at MW-6 There is no temperature preservation requirement for Radium.		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-10	05/22/2017	13:23	1	Groundwater		AX12060
MW-11	05/22/2017	15:11	1	Groundwater		AX12061
MW-5	05/23/2017	11:38	1	Groundwater		AX12062
MW-5 DUP	05/23/2017	11:38	1	Sample Duplicate		AX12063
MW-22	05/23/2017	12:45	1	Groundwater		AX12064
MW-21	05/23/2017	13:45	1	Groundwater		AX12065
MW-21 DUP	05/23/2017	13:45	1	Sample Duplicate		AX12066
MW-6	05/23/2017	15:01	3	Groundwater		AX12067
MW-7	05/23/2017	16:24	1	Groundwater		AX12068
FB-2	05/23/2017	17:05	1	Field Blank		AX12069
MW-12	05/24/2017	12:33	1	Groundwater		AX12070
MW-13	05/24/2017	13:54	1	Groundwater		AX12071
MW-14	05/24/2017	15:15	1	Groundwater		AX12072
FB-3	05/24/2017	15:55	1	Field Blank		AX12073

Relinquished By	Received By	Date/Time
<i>Ben Rothschild</i>	Sarah Copeland <small>Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o.ou, email=sgcopella@southernco.com, c=US Date: 2017.05.25 08:26:01 -05'00'</small>	05/25/2017 08:26

SmarTroll ID	5151-26193-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	3901-20010-2-2	Cooler Temp
		Thermometer ID
		pH Strip ID
		NA
		NA
		5521-28268-20-12

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

 Alabama Power



Sample Group : WMWGASAP_1106
Project/Site : Gaston Ash Pond
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:

Supervision:



Anions

Gaston Ash Pond

WMWGASAP_1106

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 anions were outsourced to Test America, Pensacola for analysis. Listed below is the job narrative provided by Test America.

Job Narrative
400-139785-1
General Chemistry

Method(s) SM 4500 Cl- E: The following sample was diluted to bring the concentration of target analytes within the calibration range: AX14374 MW-22 (400-139785-22). Elevated reporting limits (RLs) are provided.

Method(s) SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 359889 were outside control limits. Sample matrix interference is 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: AX14309 MW-16 (400-139785-1), AX14310 MW-16 DUP (400-139785-2), AX14312 MW-18 (400-139785-4), AX14313 MW-20 (400-139785-5), AX14372 MW-5 (400-139785-20[MS]) and AX14372 MW-5 (400-139785-20[MSD]). Elevated reporting limits (RLs) are provided.

Method(s) SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 359576 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: AX14372 MW-5 (400-139785-20), AX14373 MW-5 DUP (400-139785-21), AX14374 MW-22 (400-139785-22), AX14375 MW-21 (400-139785-23), AX14376 MW-6 (400-139785-24), AX14377 MW-7 (400-139785-25), AX14378 MW-14 (400-139785-26), AX14381 MW-12 (400-139785-29), AX14381 MW-12 (400-139785-29[MS]) and AX14381 MW-12 (400-139785-29[MSD]). Elevated reporting limits (RLs) are provided.

Method(s) SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 359580 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.



Metals ICP

Gaston Ash Pond

WMWGASAP_1106

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>
AX14309	20170623C_20170626D	WMWGASAP_1106
AX14310	20170623C_20170626D	WMWGASAP_1106
AX14311	20170623C_20170626D	WMWGASAP_1106
AX14312	20170623C_20170626D	WMWGASAP_1106
AX14313	20170623C_20170626D	WMWGASAP_1106
AX14314	20170623C_20170626D	WMWGASAP_1106
AX14359	20170623C_20170626D	WMWGASAP_1106
AX14360	20170623C_20170626D	WMWGASAP_1106
AX14361	20170623C_20170626D	WMWGASAP_1106
AX14362	20170623C_20170626D	WMWGASAP_1106
AX14363	20170623D	WMWGASAP_1106
AX14364	20170623D	WMWGASAP_1106
AX14365	20170623D	WMWGASAP_1106
AX14366	20170623D	WMWGASAP_1106
AX14367	20170623D	WMWGASAP_1106
AX14368	20170623D	WMWGASAP_1106
AX14369	20170623D	WMWGASAP_1106
AX14370	20170623D	WMWGASAP_1106
AX14371	20170623D	WMWGASAP_1106
AX14372	20170623D	WMWGASAP_1106
AX14373	20170623E	WMWGASAP_1106
AX14374	20170623E_20170626E	WMWGASAP_1106
AX14375	20170623E	WMWGASAP_1106
AX14376	20170623E	WMWGASAP_1106
AX14377	20170623E_20170626E	WMWGASAP_1106
AX14378	20170623E	WMWGASAP_1106
AX14379	20170623E	WMWGASAP_1106
AX14380	20170623E	WMWGASAP_1106
AX14381	20170623E	WMWGASAP_1106



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

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analytes. An additional rinse was added between samples for monitoring Li due to possible matrix issues.
- 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, with the following exception:

<u>Analyte</u>	<u>Sample ID</u>
Calcium	AX14372

The concentrations of the matrix spike/matrix spike duplicate added before digestion is less than 30 percent of the sample concentration, causing inaccurate spike recovery information. The laboratory control sample indicates that the digestion and analysis were in control.

- 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 dilution to compensate for potential matrix effects, with the exception of the following: 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>
AX14312	Calcium	x10
AX14313	Calcium	x10
AX14374	Calcium	x10
AX14375	Calcium	x10

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



Metals ICPMS

Gaston Ash Pond

WMWGASAP_1106

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>
AX14309	597938	WMWGASAP_1106
AX14310	597938	WMWGASAP_1106
AX14311	597938	WMWGASAP_1106
AX14312	597938	WMWGASAP_1106
AX14313	597938	WMWGASAP_1106
AX14314	597938	WMWGASAP_1106
AX14359	597938	WMWGASAP_1106
AX14360	597938	WMWGASAP_1106
AX14361	597938	WMWGASAP_1106
AX14362	597938	WMWGASAP_1106
AX14363	597939	WMWGASAP_1106
AX14364	597939	WMWGASAP_1106
AX14365	597939	WMWGASAP_1106
AX14366	597939	WMWGASAP_1106
AX14367	597939	WMWGASAP_1106
AX14368	597939	WMWGASAP_1106
AX14369	597939	WMWGASAP_1106
AX14370	597939	WMWGASAP_1106
AX14371	597939	WMWGASAP_1106
AX14372	597939	WMWGASAP_1106
AX14373	597940	WMWGASAP_1106
AX14374	597940	WMWGASAP_1106
AX14375	597940	WMWGASAP_1106
AX14376	597940	WMWGASAP_1106
AX14377	597940	WMWGASAP_1106
AX14378	597940	WMWGASAP_1106
AX14379	597940	WMWGASAP_1106
AX14380	597940	WMWGASAP_1106
AX14381	597940	WMWGASAP_1106



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 Ash Pond

WMWGASAP_1106

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>
AX14309	598675	WMWGASAP_1106
AX14310	598675	WMWGASAP_1106
AX14311	598675	WMWGASAP_1106
AX14312	598675	WMWGASAP_1106
AX14313	598675	WMWGASAP_1106
AX14314	598675	WMWGASAP_1106
AX14359	598675	WMWGASAP_1106
AX14360	598675	WMWGASAP_1106
AX14361	598675	WMWGASAP_1106
AX14362	598675	WMWGASAP_1106
AX14363	598135	WMWGASAP_1106
AX14364	598135	WMWGASAP_1106
AX14365	598135	WMWGASAP_1106
AX14366	598135	WMWGASAP_1106
AX14367	598135	WMWGASAP_1106
AX14368	598135	WMWGASAP_1106
AX14369	598135	WMWGASAP_1106
AX14370	598135	WMWGASAP_1106
AX14371	598135	WMWGASAP_1106
AX14372	598135	WMWGASAP_1106
AX14373	598143	WMWGASAP_1106
AX14374	598143	WMWGASAP_1106
AX14375	598143	WMWGASAP_1106
AX14376	598143	WMWGASAP_1106
AX14377	598143	WMWGASAP_1106
AX14378	598143	WMWGASAP_1106
AX14379	598143	WMWGASAP_1106
AX14380	598143	WMWGASAP_1106
AX14381	598143	WMWGASAP_1106



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

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory.
- The rinse solution ran out sometime during the batch of samples AX14363-AX14372. All samples were rerun and the 2nd run's results were reported in LabWorks.

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 Ash Pond

WMWGASAP_1106

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>
AX14309	597866	WMWGASAP_1106
AX14310	597866	WMWGASAP_1106
AX14311	597866	WMWGASAP_1106
AX14312	597866	WMWGASAP_1106
AX14313	597866	WMWGASAP_1106
AX14314	597866	WMWGASAP_1106
AX14359	597866	WMWGASAP_1106
AX14360	597866	WMWGASAP_1106
AX14361	597866	WMWGASAP_1106
AX14362	597866	WMWGASAP_1106
AX14363	597867	WMWGASAP_1106
AX14364	597867	WMWGASAP_1106
AX14365	597867	WMWGASAP_1106
AX14366	598140	WMWGASAP_1106
AX14367	598140	WMWGASAP_1106
AX14368	598140	WMWGASAP_1106
AX14369	598297	WMWGASAP_1106
AX14370	597867	WMWGASAP_1106
AX14371	597867	WMWGASAP_1106
AX14372	597867	WMWGASAP_1106
AX14373	597867	WMWGASAP_1106
AX14374	597867	WMWGASAP_1106
AX14375	597867	WMWGASAP_1106
AX14376	597867	WMWGASAP_1106
AX14377	598140	WMWGASAP_1106
AX14378	598297	WMWGASAP_1106
AX14379	598297	WMWGASAP_1106
AX14380	598297	WMWGASAP_1106
AX14381	598140	WMWGASAP_1106



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 0.5 mg of the previous weight.
- A sample duplicate was analyzed with each batch. RPD/2 was less than 5%, with the exception of the duplicate for AX14378, which failed and was re-prepared, re-analyzed and reported in batch 598297.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- All samples were between 2.5 mg and 200 mg residue with the exception of AX14314, AX14367, AX14369 and AX14380, which did not meet the 2.5mg requirement. Samples AX14369 and AX14380 were originally greater than -25ppm, so were re-prepared and re-analyzed a second time. Results from the second analysis in batch 598297 were reported.

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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 21-Jun-17

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AX14309

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8		5	0.0010	0.005	J 0.00424	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	0.0279	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/23/2017	EPA 200.7		2	0.02	0.1	1.26	mg/L
* Calcium, Total	HRG	6/23/2017	EPA 200.7		2	0.10	0.5	40.2	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/23/2017	EPA 200.7		2	0.010	0.05	0.0693	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	0.260	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/27/2017	SM 2540C		1		25	258	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E		1	0.60	2.00	11	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C		1	0.032	0.10	0.13	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E		15	21.0	75	110	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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 21-Jun-17

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AX14309

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX14362	Molybdenum, Total	mg/L	0.0000109	0.0044	0.10	0.0954	0.102	0.0922	0.085 to 0.115		88.6	70 to 130	6.50	20
AX14362	Beryllium, Total	mg/L	0.0000124	0.00132	0.10	0.101	0.113	0.104	0.085 to 0.115		101	70 to 130	11.6	20
AX14362	Mercury, Total by CVAA	mg/L	0.0000886	0.0005	0.004	0.00385	0.00383	0.00382	0.0034 to 0.0046		96.2	70 to 130	0.584	20
AX14362	Lithium, Total	mg/L	-0.0000282	0.022	0.20	0.194	0.192	0.176	0.17 to 0.23		96.8	70 to 130	1.01	20
AX14362	Antimony, Total	mg/L	0.0000482	0.00132	0.10	0.0807	0.0882	0.0917	0.085 to 0.115		80.7	70 to 130	8.83	20
AX14362	Arsenic, Total	mg/L	0.0000140	0.0022	0.10	0.0928	0.101	0.101	0.085 to 0.115		92.8	70 to 130	8.35	20
AX14362	Chromium, Total	mg/L	0.0000295	0.0044	0.10	0.0920	0.0992	0.0959	0.085 to 0.115		92.0	70 to 130	7.57	20
AX14362	Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0889	0.0952	0.0989	0.085 to 0.115		88.9	70 to 130	6.81	20
AX14362	Barium, Total	mg/L	0.00000250	0.0044	0.10	0.0887	0.0946	0.0927	0.085 to 0.115		82.0	70 to 130	6.37	20
AX14362	Cadmium, Total	mg/L	0.00000155	0.00044	0.10	0.0867	0.0919	0.0955	0.085 to 0.115		86.7	70 to 130	5.78	20
AX14362	Thallium, Total	mg/L	0.0000195	0.00044	0.10	0.0930	0.101	0.0960	0.085 to 0.115		93.0	70 to 130	8.47	20
AX14362	Boron, Total	mg/L	0.00154	0.044	1.00	0.954	0.942	1.00	0.85 to 1.15		95.4	70 to 130	1.25	20
AX14362	Calcium, Total	mg/L	-0.0141	0.22	5.00	34.8	34.4	4.47	4.25 to 5.75		98.0	70 to 130	1.20	20
AX14362	Cobalt, Total	mg/L	-0.00000299	0.0044	0.10	0.0964	0.104	0.0960	0.085 to 0.115		96.4	70 to 130	7.31	20
AX14362	Lead, Total	mg/L	0.0000160	0.0022	0.10	0.0925	0.101	0.0975	0.085 to 0.115		92.5	70 to 130	9.02	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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 21-Jun-17

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AX14309

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX14362	Solids, Dissolved	mg/L	9.00	25			132	50.0	40 to 60	2.33	5

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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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 21-Jun-17

Description: Gaston Ash Pond - MW-16 Dup

Laboratory ID Number: AX14310

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	J 0.00428	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	0.0275	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/23/2017	EPA 200.7	2		0.02	0.1	1.24	mg/L
* Calcium, Total	HRG	6/23/2017	EPA 200.7	2		0.10	0.5	40.0	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/23/2017	EPA 200.7	2		0.010	0.05	0.0688	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	0.261	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/27/2017	SM 2540C	1			25	244	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E	1		0.60	2.00	11	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C	1		0.032	0.10	0.13	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E	15		21.0	75	120	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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 21-Jun-17

Description: Gaston Ash Pond - MW-16 Dup

Laboratory ID Number: AX14310

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX14362	Molybdenum, Total	mg/L	0.0000109	0.0044	0.10	0.0954	0.102	0.0922	0.085 to 0.115		88.6	70 to 130	6.50	20
AX14362	Beryllium, Total	mg/L	0.0000124	0.00132	0.10	0.101	0.113	0.104	0.085 to 0.115		101	70 to 130	11.6	20
AX14362	Mercury, Total by CVAA	mg/L	0.0000886	0.0005	0.004	0.00385	0.00383	0.00382	0.0034 to 0.0046		96.2	70 to 130	0.584	20
AX14362	Antimony, Total	mg/L	0.0000482	0.00132	0.10	0.0807	0.0882	0.0917	0.085 to 0.115		80.7	70 to 130	8.83	20
AX14362	Lithium, Total	mg/L	-0.0000282	0.022	0.20	0.194	0.192	0.176	0.17 to 0.23		96.8	70 to 130	1.01	20
AX14362	Arsenic, Total	mg/L	0.0000140	0.0022	0.10	0.0928	0.101	0.101	0.085 to 0.115		92.8	70 to 130	8.35	20
AX14362	Chromium, Total	mg/L	0.0000295	0.0044	0.10	0.0920	0.0992	0.0959	0.085 to 0.115		92.0	70 to 130	7.57	20
AX14362	Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0889	0.0952	0.0989	0.085 to 0.115		88.9	70 to 130	6.81	20
AX14362	Barium, Total	mg/L	0.00000250	0.0044	0.10	0.0887	0.0946	0.0927	0.085 to 0.115		82.0	70 to 130	6.37	20
AX14362	Cadmium, Total	mg/L	0.00000155	0.00044	0.10	0.0867	0.0919	0.0955	0.085 to 0.115		86.7	70 to 130	5.78	20
AX14362	Thallium, Total	mg/L	0.0000195	0.00044	0.10	0.0930	0.101	0.0960	0.085 to 0.115		93.0	70 to 130	8.47	20
AX14362	Boron, Total	mg/L	0.00154	0.044	1.00	0.954	0.942	1.00	0.85 to 1.15		95.4	70 to 130	1.25	20
AX14362	Calcium, Total	mg/L	-0.0141	0.22	5.00	34.8	34.4	4.47	4.25 to 5.75		98.0	70 to 130	1.20	20
AX14362	Cobalt, Total	mg/L	-0.00000299	0.0044	0.10	0.0964	0.104	0.0960	0.085 to 0.115		96.4	70 to 130	7.31	20
AX14362	Lead, Total	mg/L	0.0000160	0.0022	0.10	0.0925	0.101	0.0975	0.085 to 0.115		92.5	70 to 130	9.02	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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 21-Jun-17

Description: Gaston Ash Pond - MW-16 Dup

Laboratory ID Number: AX14310

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec		
			Limit	Limit			Duplicate	LFB	Limit	Limit	Prec	Limit
AX14362	Solids, Dissolved	mg/L	9.00	25			132	50.0	40 to 60		2.33	5

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

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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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 21-Jun-17

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AX14311

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8		5	0.0010	0.005	0.0129	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	0.0767	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/23/2017	EPA 200.7		2	0.02	0.1	2.70	mg/L
* Calcium, Total	HRG	6/23/2017	EPA 200.7		2	0.10	0.5	67.7	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8		5	0.00020	0.001	J 0.000318	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8		5	0.00060	0.003	J 0.000792	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/23/2017	EPA 200.7		2	0.010	0.05	0.543	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	1.90	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/27/2017	SM 2540C		1		25	424	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E		1	0.60	2.00	16	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C		1	0.032	0.10	0.21	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E		20	28.0	100	200	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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 21-Jun-17

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AX14311

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX14362	Molybdenum, Total	mg/L	0.0000109	0.0044	0.10	0.0954	0.102	0.0922	0.085 to 0.115	88.6	70 to 130	6.50	20	
AX14362	Beryllium, Total	mg/L	0.0000124	0.00132	0.10	0.101	0.113	0.104	0.085 to 0.115	101	70 to 130	11.6	20	
AX14362	Mercury, Total by CVAA	mg/L	0.0000886	0.0005	0.004	0.00385	0.00383	0.00382	0.0034 to 0.0046	96.2	70 to 130	0.584	20	
AX14362	Lithium, Total	mg/L	-0.0000282	0.022	0.20	0.194	0.192	0.176	0.17 to 0.23	96.8	70 to 130	1.01	20	
AX14362	Antimony, Total	mg/L	0.0000482	0.00132	0.10	0.0807	0.0882	0.0917	0.085 to 0.115	80.7	70 to 130	8.83	20	
AX14362	Barium, Total	mg/L	0.00000250	0.0044	0.10	0.0887	0.0946	0.0927	0.085 to 0.115	82.0	70 to 130	6.37	20	
AX14362	Cadmium, Total	mg/L	0.00000155	0.00044	0.10	0.0867	0.0919	0.0955	0.085 to 0.115	86.7	70 to 130	5.78	20	
AX14362	Thallium, Total	mg/L	0.0000195	0.00044	0.10	0.0930	0.101	0.0960	0.085 to 0.115	93.0	70 to 130	8.47	20	
AX14362	Boron, Total	mg/L	0.00154	0.044	1.00	0.954	0.942	1.00	0.85 to 1.15	95.4	70 to 130	1.25	20	
AX14362	Calcium, Total	mg/L	-0.0141	0.22	5.00	34.8	34.4	4.47	4.25 to 5.75	98.0	70 to 130	1.20	20	
AX14362	Cobalt, Total	mg/L	-0.00000299	0.0044	0.10	0.0964	0.104	0.0960	0.085 to 0.115	96.4	70 to 130	7.31	20	
AX14362	Lead, Total	mg/L	0.0000160	0.0022	0.10	0.0925	0.101	0.0975	0.085 to 0.115	92.5	70 to 130	9.02	20	
AX14362	Arsenic, Total	mg/L	0.0000140	0.0022	0.10	0.0928	0.101	0.101	0.085 to 0.115	92.8	70 to 130	8.35	20	
AX14362	Chromium, Total	mg/L	0.0000295	0.0044	0.10	0.0920	0.0992	0.0959	0.085 to 0.115	92.0	70 to 130	7.57	20	
AX14362	Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0889	0.0952	0.0989	0.085 to 0.115	88.9	70 to 130	6.81	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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 21-Jun-17

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AX14311

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX14362	Solids, Dissolved	mg/L	9.00	25			132	50.0	40 to 60	2.33	5

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Laboratory certification ID: E571114

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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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 21-Jun-17

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AX14312

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	J 0.00248	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	0.0408	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/23/2017	EPA 200.7	2		0.02	0.1	1.24	mg/L
* Calcium, Total	HRG	6/23/2017	EPA 200.7	10		1	5	107	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/23/2017	EPA 200.7	2		0.010	0.05	J 0.0342	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	0.0173	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	J 0.000379	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/27/2017	SM 2540C	1			50	598	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E	1		0.60	2.00	12	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C	1		0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E	15		21.0	75	140	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, 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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 21-Jun-17

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AX14312

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AX14362	Beryllium, Total	mg/L	0.0000124	0.00132	0.10	0.101	0.113	0.104	0.085 to 0.115		101	70 to 130		11.6	20
AX14362	Mercury, Total by CVAA	mg/L	0.0000886	0.0005	0.004	0.00385	0.00383	0.00382	0.0034 to 0.0046		96.2	70 to 130		0.584	20
AX14362	Molybdenum, Total	mg/L	0.0000109	0.0044	0.10	0.0954	0.102	0.0922	0.085 to 0.115		88.6	70 to 130		6.50	20
AX14362	Lithium, Total	mg/L	-0.0000282	0.022	0.20	0.194	0.192	0.176	0.17 to 0.23		96.8	70 to 130		1.01	20
AX14362	Antimony, Total	mg/L	0.0000482	0.00132	0.10	0.0807	0.0882	0.0917	0.085 to 0.115		80.7	70 to 130		8.83	20
AX14362	Barium, Total	mg/L	0.00000250	0.0044	0.10	0.0887	0.0946	0.0927	0.085 to 0.115		82.0	70 to 130		6.37	20
AX14362	Cadmium, Total	mg/L	0.00000155	0.00044	0.10	0.0867	0.0919	0.0955	0.085 to 0.115		86.7	70 to 130		5.78	20
AX14362	Thallium, Total	mg/L	0.0000195	0.00044	0.10	0.0930	0.101	0.0960	0.085 to 0.115		93.0	70 to 130		8.47	20
AX14362	Boron, Total	mg/L	0.00154	0.044	1.00	0.954	0.942	1.00	0.85 to 1.15		95.4	70 to 130		1.25	20
AX14362	Calcium, Total	mg/L	-0.0141	0.22	5.00	34.8	34.4	4.47	4.25 to 5.75		98.0	70 to 130		1.20	20
AX14362	Cobalt, Total	mg/L	-0.00000299	0.0044	0.10	0.0964	0.104	0.0960	0.085 to 0.115		96.4	70 to 130		7.31	20
AX14362	Lead, Total	mg/L	0.0000160	0.0022	0.10	0.0925	0.101	0.0975	0.085 to 0.115		92.5	70 to 130		9.02	20
AX14362	Arsenic, Total	mg/L	0.0000140	0.0022	0.10	0.0928	0.101	0.101	0.085 to 0.115		92.8	70 to 130		8.35	20
AX14362	Chromium, Total	mg/L	0.0000295	0.0044	0.10	0.0920	0.0992	0.0959	0.085 to 0.115		92.0	70 to 130		7.57	20
AX14362	Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0889	0.0952	0.0989	0.085 to 0.115		88.9	70 to 130		6.81	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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 21-Jun-17

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AX14312

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX14362	Solids, Dissolved	mg/L	9.00	25			132	50.0	40 to 60	2.33	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, 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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 21-Jun-17

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AX14313

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8		5	0.0010	0.005	J 0.00397	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	0.0604	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/23/2017	EPA 200.7		2	0.02	0.1	3.48	mg/L
* Calcium, Total	HRG	6/23/2017	EPA 200.7		10	1	5	153	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/23/2017	EPA 200.7		2	0.010	0.05	0.104	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	0.667	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/27/2017	SM 2540C		1		50	924	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E		1	0.60	2.00	18	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E		30	42.0	150	510	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.

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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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 21-Jun-17

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AX14313

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	MB					Limit	Rec	Limit	Prec			
AX14362	Beryllium, Total	mg/L	0.0000124	0.00132	0.10	0.101	0.113	0.104	0.085 to 0.115		101	70 to 130		11.6	20
AX14362	Mercury, Total by CVAA	mg/L	0.0000886	0.0005	0.004	0.00385	0.00383	0.00382	0.0034 to 0.0046		96.2	70 to 130		0.584	20
AX14362	Molybdenum, Total	mg/L	0.0000109	0.0044	0.10	0.0954	0.102	0.0922	0.085 to 0.115		88.6	70 to 130		6.50	20
AX14362	Lithium, Total	mg/L	-0.0000282	0.022	0.20	0.194	0.192	0.176	0.17 to 0.23		96.8	70 to 130		1.01	20
AX14362	Antimony, Total	mg/L	0.0000482	0.00132	0.10	0.0807	0.0882	0.0917	0.085 to 0.115		80.7	70 to 130		8.83	20
AX14362	Arsenic, Total	mg/L	0.0000140	0.0022	0.10	0.0928	0.101	0.101	0.085 to 0.115		92.8	70 to 130		8.35	20
AX14362	Chromium, Total	mg/L	0.0000295	0.0044	0.10	0.0920	0.0992	0.0959	0.085 to 0.115		92.0	70 to 130		7.57	20
AX14362	Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0889	0.0952	0.0989	0.085 to 0.115		88.9	70 to 130		6.81	20
AX14362	Barium, Total	mg/L	0.00000250	0.0044	0.10	0.0887	0.0946	0.0927	0.085 to 0.115		82.0	70 to 130		6.37	20
AX14362	Cadmium, Total	mg/L	0.00000155	0.00044	0.10	0.0867	0.0919	0.0955	0.085 to 0.115		86.7	70 to 130		5.78	20
AX14362	Thallium, Total	mg/L	0.0000195	0.00044	0.10	0.0930	0.101	0.0960	0.085 to 0.115		93.0	70 to 130		8.47	20
AX14362	Boron, Total	mg/L	0.00154	0.044	1.00	0.954	0.942	1.00	0.85 to 1.15		95.4	70 to 130		1.25	20
AX14362	Calcium, Total	mg/L	-0.0141	0.22	5.00	34.8	34.4	4.47	4.25 to 5.75		98.0	70 to 130		1.20	20
AX14362	Cobalt, Total	mg/L	-0.00000299	0.0044	0.10	0.0964	0.104	0.0960	0.085 to 0.115		96.4	70 to 130		7.31	20
AX14362	Lead, Total	mg/L	0.0000160	0.0022	0.10	0.0925	0.101	0.0975	0.085 to 0.115		92.5	70 to 130		9.02	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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 21-Jun-17

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AX14313

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX14362	Solids, Dissolved	mg/L	9.00	25			132	50.0	40 to 60	2.33	5

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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: WMWGASAPFB
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 21-Jun-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX14314

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/23/2017	EPA 200.7	2		0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/23/2017	EPA 200.7	2		0.10	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/23/2017	EPA 200.7	2		0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/27/2017	SM 2540C	1			25	U Not Detected	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E	1		0.60	2.00	J 0.61	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C	1		0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E	1		1.40	5.00	U <1.4	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: WMWGASAPFB
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 21-Jun-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX14314

Sample	Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	
				Limit	Spike				Limit	Rec	Limit	Prec		
AX14362	Molybdenum, Total	mg/L	0.0000109	0.0044	0.10	0.0954	0.102	0.0922	0.085 to 0.115		88.6	70 to 130	6.50	20
AX14362	Mercury, Total by CVAA	mg/L	0.0000886	0.0005	0.004	0.00385	0.00383	0.00382	0.0034 to 0.0046		96.2	70 to 130	0.584	20
AX14362	Antimony, Total	mg/L	0.0000482	0.00132	0.10	0.0807	0.0882	0.0917	0.085 to 0.115		80.7	70 to 130	8.83	20
AX14362	Beryllium, Total	mg/L	0.0000124	0.00132	0.10	0.101	0.113	0.104	0.085 to 0.115		101	70 to 130	11.6	20
AX14362	Lithium, Total	mg/L	-0.0000282	0.022	0.20	0.194	0.192	0.176	0.17 to 0.23		96.8	70 to 130	1.01	20
AX14362	Barium, Total	mg/L	0.00000250	0.0044	0.10	0.0887	0.0946	0.0927	0.085 to 0.115		82.0	70 to 130	6.37	20
AX14362	Cadmium, Total	mg/L	0.00000155	0.00044	0.10	0.0867	0.0919	0.0955	0.085 to 0.115		86.7	70 to 130	5.78	20
AX14362	Thallium, Total	mg/L	0.0000195	0.00044	0.10	0.0930	0.101	0.0960	0.085 to 0.115		93.0	70 to 130	8.47	20
AX14362	Arsenic, Total	mg/L	0.0000140	0.0022	0.10	0.0928	0.101	0.101	0.085 to 0.115		92.8	70 to 130	8.35	20
AX14362	Chromium, Total	mg/L	0.0000295	0.0044	0.10	0.0920	0.0992	0.0959	0.085 to 0.115		92.0	70 to 130	7.57	20
AX14362	Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0889	0.0952	0.0989	0.085 to 0.115		88.9	70 to 130	6.81	20
AX14362	Boron, Total	mg/L	0.00154	0.044	1.00	0.954	0.942	1.00	0.85 to 1.15		95.4	70 to 130	1.25	20
AX14362	Calcium, Total	mg/L	-0.0141	0.22	5.00	34.8	34.4	4.47	4.25 to 5.75		98.0	70 to 130	1.20	20
AX14362	Cobalt, Total	mg/L	-0.00000299	0.0044	0.10	0.0964	0.104	0.0960	0.085 to 0.115		96.4	70 to 130	7.31	20
AX14362	Lead, Total	mg/L	0.0000160	0.0022	0.10	0.0925	0.101	0.0975	0.085 to 0.115		92.5	70 to 130	9.02	20

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: 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: WMWGASAPFB
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 21-Jun-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX14314

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX14362	Solids, Dissolved	mg/L	9.00	25			132	50.0	40 to 60	2.33	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, 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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AX14359

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8		5	0.0010	0.005	0.00513	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	0.0172	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/23/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/23/2017	EPA 200.7		2	0.10	0.5	55.1	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/23/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	0.0128	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/27/2017	SM 2540C		1		25	270	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E		1	0.60	2.00	3.2	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C		1	0.032	0.10	J 0.080	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E		1	1.40	5.00	13	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, 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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AX14359

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	MB					Limit	Rec	Limit	Prec		
AX14362	Molybdenum, Total	mg/L	0.0000109	0.0044	0.10	0.0954	0.102	0.0922	0.085 to 0.115		88.6	70 to 130	6.50	20
AX14362	Beryllium, Total	mg/L	0.0000124	0.00132	0.10	0.101	0.113	0.104	0.085 to 0.115		101	70 to 130	11.6	20
AX14362	Mercury, Total by CVAA	mg/L	0.0000886	0.0005	0.004	0.00385	0.00383	0.00382	0.0034 to 0.0046		96.2	70 to 130	0.584	20
AX14362	Antimony, Total	mg/L	0.0000482	0.00132	0.10	0.0807	0.0882	0.0917	0.085 to 0.115		80.7	70 to 130	8.83	20
AX14362	Arsenic, Total	mg/L	0.0000140	0.0022	0.10	0.0928	0.101	0.101	0.085 to 0.115		92.8	70 to 130	8.35	20
AX14362	Chromium, Total	mg/L	0.0000295	0.0044	0.10	0.0920	0.0992	0.0959	0.085 to 0.115		92.0	70 to 130	7.57	20
AX14362	Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0889	0.0952	0.0989	0.085 to 0.115		88.9	70 to 130	6.81	20
AX14362	Barium, Total	mg/L	0.00000250	0.0044	0.10	0.0887	0.0946	0.0927	0.085 to 0.115		82.0	70 to 130	6.37	20
AX14362	Cadmium, Total	mg/L	0.00000155	0.00044	0.10	0.0867	0.0919	0.0955	0.085 to 0.115		86.7	70 to 130	5.78	20
AX14362	Thallium, Total	mg/L	0.0000195	0.00044	0.10	0.0930	0.101	0.0960	0.085 to 0.115		93.0	70 to 130	8.47	20
AX14362	Boron, Total	mg/L	0.00154	0.044	1.00	0.954	0.942	1.00	0.85 to 1.15		95.4	70 to 130	1.25	20
AX14362	Calcium, Total	mg/L	-0.0141	0.22	5.00	34.8	34.4	4.47	4.25 to 5.75		98.0	70 to 130	1.20	20
AX14362	Cobalt, Total	mg/L	-0.00000299	0.0044	0.10	0.0964	0.104	0.0960	0.085 to 0.115		96.4	70 to 130	7.31	20
AX14362	Lead, Total	mg/L	0.0000160	0.0022	0.10	0.0925	0.101	0.0975	0.085 to 0.115		92.5	70 to 130	9.02	20
AX14362	Lithium, Total	mg/L	-0.0000282	0.022	0.20	0.194	0.192	0.176	0.17 to 0.23		96.8	70 to 130	1.01	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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AX14359

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX14362	Solids, Dissolved	mg/L	9.00	25			132	50.0	40 to 60	2.33	5

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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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AX14360

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	0.0164	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/23/2017	EPA 200.7	2		0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/23/2017	EPA 200.7	2		0.10	0.5	32.6	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/23/2017	EPA 200.7	2		0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	J 0.000202	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/27/2017	SM 2540C	1			25	156	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E	1		0.60	2.00	J 1.9	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C	1		0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E	1		1.40	5.00	J 2.1	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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AX14360

Sample	Analysis	Units	MB	MB			LFB			Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	
AX14362	Molybdenum, Total	mg/L	0.0000109	0.0044	0.10	0.0954	0.102	0.0922	0.085 to 0.115	88.6	70 to 130	6.50	20
AX14362	Beryllium, Total	mg/L	0.0000124	0.00132	0.10	0.101	0.113	0.104	0.085 to 0.115	101	70 to 130	11.6	20
AX14362	Mercury, Total by CVAA	mg/L	0.0000886	0.0005	0.004	0.00385	0.00383	0.00382	0.0034 to 0.0046	96.2	70 to 130	0.584	20
AX14362	Lithium, Total	mg/L	-0.0000282	0.022	0.20	0.194	0.192	0.176	0.17 to 0.23	96.8	70 to 130	1.01	20
AX14362	Antimony, Total	mg/L	0.0000482	0.00132	0.10	0.0807	0.0882	0.0917	0.085 to 0.115	80.7	70 to 130	8.83	20
AX14362	Arsenic, Total	mg/L	0.0000140	0.0022	0.10	0.0928	0.101	0.101	0.085 to 0.115	92.8	70 to 130	8.35	20
AX14362	Chromium, Total	mg/L	0.0000295	0.0044	0.10	0.0920	0.0992	0.0959	0.085 to 0.115	92.0	70 to 130	7.57	20
AX14362	Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0889	0.0952	0.0989	0.085 to 0.115	88.9	70 to 130	6.81	20
AX14362	Barium, Total	mg/L	0.00000250	0.0044	0.10	0.0887	0.0946	0.0927	0.085 to 0.115	82.0	70 to 130	6.37	20
AX14362	Cadmium, Total	mg/L	0.00000155	0.00044	0.10	0.0867	0.0919	0.0955	0.085 to 0.115	86.7	70 to 130	5.78	20
AX14362	Thallium, Total	mg/L	0.0000195	0.00044	0.10	0.0930	0.101	0.0960	0.085 to 0.115	93.0	70 to 130	8.47	20
AX14362	Boron, Total	mg/L	0.00154	0.044	1.00	0.954	0.942	1.00	0.85 to 1.15	95.4	70 to 130	1.25	20
AX14362	Calcium, Total	mg/L	-0.0141	0.22	5.00	34.8	34.4	4.47	4.25 to 5.75	98.0	70 to 130	1.20	20
AX14362	Cobalt, Total	mg/L	-0.00000299	0.0044	0.10	0.0964	0.104	0.0960	0.085 to 0.115	96.4	70 to 130	7.31	20
AX14362	Lead, Total	mg/L	0.0000160	0.0022	0.10	0.0925	0.101	0.0975	0.085 to 0.115	92.5	70 to 130	9.02	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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AX14360

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX14362	Solids, Dissolved	mg/L	9.00	25			132	50.0	40 to 60	2.33	5

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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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-2 Dup

Laboratory ID Number: AX14361

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	0.0162	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/23/2017	EPA 200.7	2		0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/23/2017	EPA 200.7	2		0.10	0.5	32.3	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/23/2017	EPA 200.7	2		0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	J 0.000216	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/27/2017	SM 2540C	1			25	155	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E	1		0.60	2.00	2.0	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C	1		0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E	1		1.40	5.00	J 2.0	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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-2 Dup

Laboratory ID Number: AX14361

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX14362	Molybdenum, Total	mg/L	0.0000109	0.0044	0.10	0.0954	0.102	0.0922	0.085 to 0.115		88.6	70 to 130	6.50	20
AX14362	Mercury, Total by CVAA	mg/L	0.0000886	0.0005	0.004	0.00385	0.00383	0.00382	0.0034 to 0.0046		96.2	70 to 130	0.584	20
AX14362	Beryllium, Total	mg/L	0.0000124	0.00132	0.10	0.101	0.113	0.104	0.085 to 0.115		101	70 to 130	11.6	20
AX14362	Lithium, Total	mg/L	-0.0000282	0.022	0.20	0.194	0.192	0.176	0.17 to 0.23		96.8	70 to 130	1.01	20
AX14362	Antimony, Total	mg/L	0.0000482	0.00132	0.10	0.0807	0.0882	0.0917	0.085 to 0.115		80.7	70 to 130	8.83	20
AX14362	Arsenic, Total	mg/L	0.0000140	0.0022	0.10	0.0928	0.101	0.101	0.085 to 0.115		92.8	70 to 130	8.35	20
AX14362	Chromium, Total	mg/L	0.0000295	0.0044	0.10	0.0920	0.0992	0.0959	0.085 to 0.115		92.0	70 to 130	7.57	20
AX14362	Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0889	0.0952	0.0989	0.085 to 0.115		88.9	70 to 130	6.81	20
AX14362	Boron, Total	mg/L	0.00154	0.044	1.00	0.954	0.942	1.00	0.85 to 1.15		95.4	70 to 130	1.25	20
AX14362	Calcium, Total	mg/L	-0.0141	0.22	5.00	34.8	34.4	4.47	4.25 to 5.75		98.0	70 to 130	1.20	20
AX14362	Cobalt, Total	mg/L	-0.00000299	0.0044	0.10	0.0964	0.104	0.0960	0.085 to 0.115		96.4	70 to 130	7.31	20
AX14362	Lead, Total	mg/L	0.0000160	0.0022	0.10	0.0925	0.101	0.0975	0.085 to 0.115		92.5	70 to 130	9.02	20
AX14362	Barium, Total	mg/L	0.00000250	0.0044	0.10	0.0887	0.0946	0.0927	0.085 to 0.115		82.0	70 to 130	6.37	20
AX14362	Cadmium, Total	mg/L	0.00000155	0.00044	0.10	0.0867	0.0919	0.0955	0.085 to 0.115		86.7	70 to 130	5.78	20
AX14362	Thallium, Total	mg/L	0.0000195	0.00044	0.10	0.0930	0.101	0.0960	0.085 to 0.115		93.0	70 to 130	8.47	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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-2 Dup

Laboratory ID Number: AX14361

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX14362	Solids, Dissolved	mg/L	9.00	25			132	50.0	40 to 60	2.33	5

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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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AX14362

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	J 0.00672	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/23/2017	EPA 200.7	2		0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/23/2017	EPA 200.7	2		0.10	0.5	29.9	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/23/2017	EPA 200.7	2		0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	J 0.00687	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/27/2017	SM 2540C	1			25	126	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E	1		0.60	2.00	J 1.7	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C	1		0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E	1		1.40	5.00	J 2.5	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, 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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AX14362

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX14362	Molybdenum, Total	mg/L	0.0000109	0.0044	0.10	0.0954	0.102	0.0922	0.085 to 0.115		88.6	70 to 130	6.50	20
AX14362	Beryllium, Total	mg/L	0.0000124	0.00132	0.10	0.101	0.113	0.104	0.085 to 0.115		101	70 to 130	11.6	20
AX14362	Mercury, Total by CVAA	mg/L	0.0000886	0.0005	0.004	0.00385	0.00383	0.00382	0.0034 to 0.0046		96.2	70 to 130	0.584	20
AX14362	Antimony, Total	mg/L	0.0000482	0.00132	0.10	0.0807	0.0882	0.0917	0.085 to 0.115		80.7	70 to 130	8.83	20
AX14362	Lithium, Total	mg/L	-0.0000282	0.022	0.20	0.194	0.192	0.176	0.17 to 0.23		96.8	70 to 130	1.01	20
AX14362	Arsenic, Total	mg/L	0.0000140	0.0022	0.10	0.0928	0.101	0.101	0.085 to 0.115		92.8	70 to 130	8.35	20
AX14362	Chromium, Total	mg/L	0.0000295	0.0044	0.10	0.0920	0.0992	0.0959	0.085 to 0.115		92.0	70 to 130	7.57	20
AX14362	Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0889	0.0952	0.0989	0.085 to 0.115		88.9	70 to 130	6.81	20
AX14362	Barium, Total	mg/L	0.00000250	0.0044	0.10	0.0887	0.0946	0.0927	0.085 to 0.115		82.0	70 to 130	6.37	20
AX14362	Cadmium, Total	mg/L	0.00000155	0.00044	0.10	0.0867	0.0919	0.0955	0.085 to 0.115		86.7	70 to 130	5.78	20
AX14362	Thallium, Total	mg/L	0.0000195	0.00044	0.10	0.0930	0.101	0.0960	0.085 to 0.115		93.0	70 to 130	8.47	20
AX14362	Boron, Total	mg/L	0.00154	0.044	1.00	0.954	0.942	1.00	0.85 to 1.15		95.4	70 to 130	1.25	20
AX14362	Calcium, Total	mg/L	-0.0141	0.22	5.00	34.8	34.4	4.47	4.25 to 5.75		98.0	70 to 130	1.20	20
AX14362	Cobalt, Total	mg/L	-0.00000299	0.0044	0.10	0.0964	0.104	0.0960	0.085 to 0.115		96.4	70 to 130	7.31	20
AX14362	Lead, Total	mg/L	0.0000160	0.0022	0.10	0.0925	0.101	0.0975	0.085 to 0.115		92.5	70 to 130	9.02	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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AX14362

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX14362	Solids, Dissolved	mg/L	9.00	25			132	50.0	40 to 60	2.33	5

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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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AX14363

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	0.0292	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/23/2017	EPA 200.7		2	0.02	0.1	0.910	mg/L
* Calcium, Total	HRG	6/23/2017	EPA 200.7		2	0.10	0.5	36.9	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/23/2017	EPA 200.7		2	0.010	0.05	J 0.0430	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	0.121	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/27/2017	SM 2540C		1		25	343	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E		1	0.60	2.00	27	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C		1	0.032	0.10	J 0.070	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E		15	21.0	75	120	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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AX14363

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AX14372	Beryllium, Total	mg/L	0.0000124	0.00132	0.10	0.111	0.110	0.104	0.085 to 0.115		111	70 to 130		0.908	20
AX14372	Cobalt, Total	mg/L	-0.00000299	0.0044	0.10	0.103	0.105	0.0960	0.085 to 0.115		103	70 to 130		2.11	20
AX14372	Cadmium, Total	mg/L	0.00000155	0.00044	0.10	0.0900	0.0931	0.0955	0.085 to 0.115		90.0	70 to 130		3.31	20
AX14372	Barium, Total	mg/L	0.00000250	0.0044	0.10	0.123	0.124	0.0927	0.085 to 0.115		86.3	70 to 130		0.636	20
AX14372	Arsenic, Total	mg/L	0.0000140	0.0022	0.10	0.100	0.103	0.101	0.085 to 0.115		100	70 to 130		2.81	20
AX14372	Mercury, Total by CVAA	mg/L	0.0000867	0.0005	0.004	0.00382	0.00385	0.00384	0.0034 to 0.0046		95.5	70 to 130		0.891	20
AX14372	Thallium, Total	mg/L	0.0000195	0.00044	0.10	0.0992	0.100	0.0960	0.085 to 0.115		99.2	70 to 130		0.941	20
AX14372	Chromium, Total	mg/L	0.0000295	0.0044	0.10	0.0966	0.0989	0.0959	0.085 to 0.115		96.6	70 to 130		2.39	20
AX14372	Antimony, Total	mg/L	0.0000482	0.00132	0.10	0.0875	0.0903	0.0917	0.085 to 0.115		87.5	70 to 130		3.17	20
AX14372	Boron, Total	mg/L	0.00101	0.044	1.00	3.11	3.18	0.942	0.85 to 1.15		90.5	70 to 130		2.22	20
AX14372	Lead, Total	mg/L	0.0000160	0.0022	0.10	0.0990	0.0994	0.0975	0.085 to 0.115		99.0	70 to 130		0.400	20
AX14372	Molybdenum, Total	mg/L	0.0000109	0.0044	0.10	0.354	0.364	0.0922	0.085 to 0.115		88.7	70 to 130		2.75	20
AX14372	Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0943	0.0960	0.0989	0.085 to 0.115		94.3	70 to 130		1.82	20
AX14372	Calcium, Total	mg/L	-0.00690	0.22	5.00	76.8	77.0	4.56	4.25 to 5.75		59.7	70 to 130		0.335	20
AX14372	Lithium, Total	mg/L	-0.0000162	0.022	0.20	0.242	0.239	0.183	0.17 to 0.23		102	70 to 130		0.980	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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AX14363

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec		
			Limit	Limit			Duplicate	LFB	Limit	Limit		
AX14376	Solids, Dissolved	mg/L	9.00	25			436	50.0	40 to 60		2.35	5

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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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AX14364

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8		5	0.0010	0.005	J 0.00155	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	0.0948	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/23/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/23/2017	EPA 200.7		2	0.10	0.5	30.8	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/23/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	J 0.00282	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/27/2017	SM 2540C		1		25	178	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E		1	0.60	2.00	7.8	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C		1	0.032	0.10	0.12	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E		1	1.40	5.00	13	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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AX14364

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX14372	Cobalt, Total	mg/L	-0.00000299	0.0044	0.10	0.103	0.105	0.0960	0.085 to 0.115	103	70 to 130	2.11	20	
AX14372	Beryllium, Total	mg/L	0.0000124	0.00132	0.10	0.111	0.110	0.104	0.085 to 0.115	111	70 to 130	0.908	20	
AX14372	Cadmium, Total	mg/L	0.00000155	0.00044	0.10	0.0900	0.0931	0.0955	0.085 to 0.115	90.0	70 to 130	3.31	20	
AX14372	Barium, Total	mg/L	0.00000250	0.0044	0.10	0.123	0.124	0.0927	0.085 to 0.115	86.3	70 to 130	0.636	20	
AX14372	Arsenic, Total	mg/L	0.0000140	0.0022	0.10	0.100	0.103	0.101	0.085 to 0.115	100	70 to 130	2.81	20	
AX14372	Mercury, Total by CVAA	mg/L	0.0000867	0.0005	0.004	0.00382	0.00385	0.00384	0.0034 to 0.0046	95.5	70 to 130	0.891	20	
AX14372	Thallium, Total	mg/L	0.0000195	0.00044	0.10	0.0992	0.100	0.0960	0.085 to 0.115	99.2	70 to 130	0.941	20	
AX14372	Chromium, Total	mg/L	0.0000295	0.0044	0.10	0.0966	0.0989	0.0959	0.085 to 0.115	96.6	70 to 130	2.39	20	
AX14372	Calcium, Total	mg/L	-0.00690	0.22	5.00	76.8	77.0	4.56	4.25 to 5.75	59.7	70 to 130	0.335	20	
AX14372	Lithium, Total	mg/L	-0.0000162	0.022	0.20	0.242	0.239	0.183	0.17 to 0.23	102	70 to 130	0.980	20	
AX14372	Antimony, Total	mg/L	0.0000482	0.00132	0.10	0.0875	0.0903	0.0917	0.085 to 0.115	87.5	70 to 130	3.17	20	
AX14372	Boron, Total	mg/L	0.00101	0.044	1.00	3.11	3.18	0.942	0.85 to 1.15	90.5	70 to 130	2.22	20	
AX14372	Lead, Total	mg/L	0.0000160	0.0022	0.10	0.0990	0.0994	0.0975	0.085 to 0.115	99.0	70 to 130	0.400	20	
AX14372	Molybdenum, Total	mg/L	0.0000109	0.0044	0.10	0.354	0.364	0.0922	0.085 to 0.115	88.7	70 to 130	2.75	20	
AX14372	Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0943	0.0960	0.0989	0.085 to 0.115	94.3	70 to 130	1.82	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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AX14364

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
								Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AX14376	Solids, Dissolved	mg/L	9.00	25				436	50.0	40 to 60			2.35	5

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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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AX14365

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	J 0.00298	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	0.0188	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/23/2017	EPA 200.7	2		0.02	0.1	J 0.0853	mg/L
* Calcium, Total	HRG	6/23/2017	EPA 200.7	2		0.10	0.5	49.8	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/23/2017	EPA 200.7	2		0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/27/2017	SM 2540C	1			25	273	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E	1		0.60	2.00	5.0	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C	1		0.032	0.10	J 0.080	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E	1		1.40	5.00	7.9	mg/L

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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, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AX14365

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB	Rec		Prec	Limit	
			MB	Limit					Rec	Limit			
AX14372	Cobalt, Total	mg/L	-0.00000299	0.0044	0.10	0.103	0.105	0.0960	0.085 to 0.115	103	70 to 130	2.11	20
AX14372	Beryllium, Total	mg/L	0.0000124	0.00132	0.10	0.111	0.110	0.104	0.085 to 0.115	111	70 to 130	0.908	20
AX14372	Cadmium, Total	mg/L	0.00000155	0.00044	0.10	0.0900	0.0931	0.0955	0.085 to 0.115	90.0	70 to 130	3.31	20
AX14372	Barium, Total	mg/L	0.00000250	0.0044	0.10	0.123	0.124	0.0927	0.085 to 0.115	86.3	70 to 130	0.636	20
AX14372	Chromium, Total	mg/L	0.0000295	0.0044	0.10	0.0966	0.0989	0.0959	0.085 to 0.115	96.6	70 to 130	2.39	20
AX14372	Arsenic, Total	mg/L	0.0000140	0.0022	0.10	0.100	0.103	0.101	0.085 to 0.115	100	70 to 130	2.81	20
AX14372	Mercury, Total by CVAA	mg/L	0.0000867	0.0005	0.004	0.00382	0.00385	0.00384	0.0034 to 0.0046	95.5	70 to 130	0.891	20
AX14372	Thallium, Total	mg/L	0.0000195	0.00044	0.10	0.0992	0.100	0.0960	0.085 to 0.115	99.2	70 to 130	0.941	20
AX14372	Calcium, Total	mg/L	-0.00690	0.22	5.00	76.8	77.0	4.56	4.25 to 5.75	59.7	70 to 130	0.335	20
AX14372	Lithium, Total	mg/L	-0.0000162	0.022	0.20	0.242	0.239	0.183	0.17 to 0.23	102	70 to 130	0.980	20
AX14372	Antimony, Total	mg/L	0.0000482	0.00132	0.10	0.0875	0.0903	0.0917	0.085 to 0.115	87.5	70 to 130	3.17	20
AX14372	Boron, Total	mg/L	0.00101	0.044	1.00	3.11	3.18	0.942	0.85 to 1.15	90.5	70 to 130	2.22	20
AX14372	Lead, Total	mg/L	0.0000160	0.0022	0.10	0.0990	0.0994	0.0975	0.085 to 0.115	99.0	70 to 130	0.400	20
AX14372	Molybdenum, Total	mg/L	0.0000109	0.0044	0.10	0.354	0.364	0.0922	0.085 to 0.115	88.7	70 to 130	2.75	20
AX14372	Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0943	0.0960	0.0989	0.085 to 0.115	94.3	70 to 130	1.82	20

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Laboratory certification ID: E571114

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AX14365

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX14376	Solids, Dissolved	mg/L	9.00	25			436	50.0	40 to 60	2.35	5

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AX14366

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	0.0186	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/23/2017	EPA 200.7	2		0.02	0.1	0.263	mg/L
* Calcium, Total	HRG	6/23/2017	EPA 200.7	2		0.10	0.5	51.0	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/23/2017	EPA 200.7	2		0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/29/2017	SM 2540C	1			25	241	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E	1		0.60	2.00	20	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C	1		0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E	1		1.40	5.00	25	mg/L

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Expiration: June 30, 2018

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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: WMWGASAP
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AX14366

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX14372	Cobalt, Total	mg/L	-0.00000299	0.0044	0.10	0.103	0.105	0.0960	0.085 to 0.115	103	70 to 130	2.11	20
AX14372	Beryllium, Total	mg/L	0.0000124	0.00132	0.10	0.111	0.110	0.104	0.085 to 0.115	111	70 to 130	0.908	20
AX14372	Cadmium, Total	mg/L	0.00000155	0.00044	0.10	0.0900	0.0931	0.0955	0.085 to 0.115	90.0	70 to 130	3.31	20
AX14372	Chromium, Total	mg/L	0.0000295	0.0044	0.10	0.0966	0.0989	0.0959	0.085 to 0.115	96.6	70 to 130	2.39	20
AX14372	Arsenic, Total	mg/L	0.0000140	0.0022	0.10	0.100	0.103	0.101	0.085 to 0.115	100	70 to 130	2.81	20
AX14372	Mercury, Total by CVAA	mg/L	0.0000867	0.0005	0.004	0.00382	0.00385	0.00384	0.0034 to 0.0046	95.5	70 to 130	0.891	20
AX14372	Thallium, Total	mg/L	0.0000195	0.00044	0.10	0.0992	0.100	0.0960	0.085 to 0.115	99.2	70 to 130	0.941	20
AX14372	Barium, Total	mg/L	0.00000250	0.0044	0.10	0.123	0.124	0.0927	0.085 to 0.115	86.3	70 to 130	0.636	20
AX14372	Calcium, Total	mg/L	-0.00690	0.22	5.00	76.8	77.0	4.56	4.25 to 5.75	59.7	70 to 130	0.335	20
AX14372	Lithium, Total	mg/L	-0.0000162	0.022	0.20	0.242	0.239	0.183	0.17 to 0.23	102	70 to 130	0.980	20
AX14372	Antimony, Total	mg/L	0.0000482	0.00132	0.10	0.0875	0.0903	0.0917	0.085 to 0.115	87.5	70 to 130	3.17	20
AX14372	Boron, Total	mg/L	0.00101	0.044	1.00	3.11	3.18	0.942	0.85 to 1.15	90.5	70 to 130	2.22	20
AX14372	Lead, Total	mg/L	0.0000160	0.0022	0.10	0.0990	0.0994	0.0975	0.085 to 0.115	99.0	70 to 130	0.400	20
AX14372	Molybdenum, Total	mg/L	0.0000109	0.0044	0.10	0.354	0.364	0.0922	0.085 to 0.115	88.7	70 to 130	2.75	20
AX14372	Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0943	0.0960	0.0989	0.085 to 0.115	94.3	70 to 130	1.82	20

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Laboratory certification ID: E571114

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Comments: Test America, Pensacola NELAP ID: E81010

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AX14366

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec		
			Limit	Limit			Duplicate	LFB	Limit	Limit		
AX14381	Solids, Dissolved	mg/L	9.00	25			339	53.0	40 to 60		4.64	5

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAPFB
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX14367

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/23/2017	EPA 200.7	2		0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/23/2017	EPA 200.7	2		0.10	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/23/2017	EPA 200.7	2		0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/29/2017	SM 2540C	1			25	U Not Detected	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E	1		0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C	1		0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E	1		1.40	5.00	U <1.4	mg/L

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAPFB
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX14367

Sample	Analysis	Units	MB				LFB			Rec		Prec	
			MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	
AX14372	Cobalt, Total	mg/L	-0.00000299	0.0044	0.10	0.103	0.105	0.0960	0.085 to 0.115	103	70 to 130	2.11	20
AX14372	Beryllium, Total	mg/L	0.0000124	0.00132	0.10	0.111	0.110	0.104	0.085 to 0.115	111	70 to 130	0.908	20
AX14372	Cadmium, Total	mg/L	0.00000155	0.00044	0.10	0.0900	0.0931	0.0955	0.085 to 0.115	90.0	70 to 130	3.31	20
AX14372	Barium, Total	mg/L	0.00000250	0.0044	0.10	0.123	0.124	0.0927	0.085 to 0.115	86.3	70 to 130	0.636	20
AX14372	Chromium, Total	mg/L	0.0000295	0.0044	0.10	0.0966	0.0989	0.0959	0.085 to 0.115	96.6	70 to 130	2.39	20
AX14372	Arsenic, Total	mg/L	0.0000140	0.0022	0.10	0.100	0.103	0.101	0.085 to 0.115	100	70 to 130	2.81	20
AX14372	Mercury, Total by CVAA	mg/L	0.0000867	0.0005	0.004	0.00382	0.00385	0.00384	0.0034 to 0.0046	95.5	70 to 130	0.891	20
AX14372	Thallium, Total	mg/L	0.0000195	0.00044	0.10	0.0992	0.100	0.0960	0.085 to 0.115	99.2	70 to 130	0.941	20
AX14372	Antimony, Total	mg/L	0.0000482	0.00132	0.10	0.0875	0.0903	0.0917	0.085 to 0.115	87.5	70 to 130	3.17	20
AX14372	Boron, Total	mg/L	0.00101	0.044	1.00	3.11	3.18	0.942	0.85 to 1.15	90.5	70 to 130	2.22	20
AX14372	Lead, Total	mg/L	0.0000160	0.0022	0.10	0.0990	0.0994	0.0975	0.085 to 0.115	99.0	70 to 130	0.400	20
AX14372	Molybdenum, Total	mg/L	0.0000109	0.0044	0.10	0.354	0.364	0.0922	0.085 to 0.115	88.7	70 to 130	2.75	20
AX14372	Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0943	0.0960	0.0989	0.085 to 0.115	94.3	70 to 130	1.82	20
AX14372	Calcium, Total	mg/L	-0.00690	0.22	5.00	76.8	77.0	4.56	4.25 to 5.75	59.7	70 to 130	0.335	20
AX14372	Lithium, Total	mg/L	-0.0000162	0.022	0.20	0.242	0.239	0.183	0.17 to 0.23	102	70 to 130	0.980	20

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAPFB
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX14367

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX14381	Solids, Dissolved	mg/L	9.00	25			339	53.0	40 to 60	4.64	5

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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: WMWGASAP
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AX14368

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	J 0.00314	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	0.0240	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/23/2017	EPA 200.7	2		0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/23/2017	EPA 200.7	2		0.10	0.5	41.8	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/23/2017	EPA 200.7	2		0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	0.0123	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/29/2017	SM 2540C	1			25	164	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E	1		0.60	2.00	12	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C	1		0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E	1		1.40	5.00	20	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: WMWGASAP
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AX14368

Sample	Analysis	Units	MB	MB			MS	MSD	LFB		Rec		Prec	Limit
				Limit	Spike	MS			MSD	LFB	Limit	Rec		
AX14372	Beryllium, Total	mg/L	0.0000124	0.00132	0.10	0.111	0.110	0.104	0.085 to 0.115	111	70 to 130	0.908	20	
AX14372	Cobalt, Total	mg/L	-0.00000299	0.0044	0.10	0.103	0.105	0.0960	0.085 to 0.115	103	70 to 130	2.11	20	
AX14372	Cadmium, Total	mg/L	0.00000155	0.00044	0.10	0.0900	0.0931	0.0955	0.085 to 0.115	90.0	70 to 130	3.31	20	
AX14372	Barium, Total	mg/L	0.00000250	0.0044	0.10	0.123	0.124	0.0927	0.085 to 0.115	86.3	70 to 130	0.636	20	
AX14372	Arsenic, Total	mg/L	0.0000140	0.0022	0.10	0.100	0.103	0.101	0.085 to 0.115	100	70 to 130	2.81	20	
AX14372	Mercury, Total by CVAA	mg/L	0.0000867	0.0005	0.004	0.00382	0.00385	0.00384	0.0034 to 0.0046	95.5	70 to 130	0.891	20	
AX14372	Thallium, Total	mg/L	0.0000195	0.00044	0.10	0.0992	0.100	0.0960	0.085 to 0.115	99.2	70 to 130	0.941	20	
AX14372	Calcium, Total	mg/L	-0.00690	0.22	5.00	76.8	77.0	4.56	4.25 to 5.75	59.7	70 to 130	0.335	20	
AX14372	Lithium, Total	mg/L	-0.0000162	0.022	0.20	0.242	0.239	0.183	0.17 to 0.23	102	70 to 130	0.980	20	
AX14372	Antimony, Total	mg/L	0.0000482	0.00132	0.10	0.0875	0.0903	0.0917	0.085 to 0.115	87.5	70 to 130	3.17	20	
AX14372	Boron, Total	mg/L	0.00101	0.044	1.00	3.11	3.18	0.942	0.85 to 1.15	90.5	70 to 130	2.22	20	
AX14372	Lead, Total	mg/L	0.0000160	0.0022	0.10	0.0990	0.0994	0.0975	0.085 to 0.115	99.0	70 to 130	0.400	20	
AX14372	Molybdenum, Total	mg/L	0.0000109	0.0044	0.10	0.354	0.364	0.0922	0.085 to 0.115	88.7	70 to 130	2.75	20	
AX14372	Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0943	0.0960	0.0989	0.085 to 0.115	94.3	70 to 130	1.82	20	
AX14372	Chromium, Total	mg/L	0.0000295	0.0044	0.10	0.0966	0.0989	0.0959	0.085 to 0.115	96.6	70 to 130	2.39	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: WMWGASAP
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AX14368

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX14381	Solids, Dissolved	mg/L	9.00	25			339	53.0	40 to 60			4.64	5

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Alabama Power General Test Laboratory
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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAPEB
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AX14369

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/23/2017	EPA 200.7	2		0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/23/2017	EPA 200.7	2		0.10	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/23/2017	EPA 200.7	2		0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/30/2017	SM 2540C	1			25	U Not Detected	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E	1		0.60	2.00	J 1.4	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C	1		0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E	1		1.40	5.00	U <1.4	mg/L

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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: WMWGASAPEB
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AX14369

Sample	Analysis	Units	MB	MB			LFB	LFB		Rec		Prec	Limit
				Limit	Spike	MS		MSD	Limit	Rec	Limit		
AX14372	Cobalt, Total	mg/L	-0.00000299	0.0044	0.10	0.103	0.105	0.0960	0.085 to 0.115	103	70 to 130	2.11	20
AX14372	Beryllium, Total	mg/L	0.0000124	0.00132	0.10	0.111	0.110	0.104	0.085 to 0.115	111	70 to 130	0.908	20
AX14372	Cadmium, Total	mg/L	0.00000155	0.00044	0.10	0.0900	0.0931	0.0955	0.085 to 0.115	90.0	70 to 130	3.31	20
AX14372	Chromium, Total	mg/L	0.0000295	0.0044	0.10	0.0966	0.0989	0.0959	0.085 to 0.115	96.6	70 to 130	2.39	20
AX14372	Arsenic, Total	mg/L	0.0000140	0.0022	0.10	0.100	0.103	0.101	0.085 to 0.115	100	70 to 130	2.81	20
AX14372	Mercury, Total by CVAA	mg/L	0.0000867	0.0005	0.004	0.00382	0.00385	0.00384	0.0034 to 0.0046	95.5	70 to 130	0.891	20
AX14372	Thallium, Total	mg/L	0.0000195	0.00044	0.10	0.0992	0.100	0.0960	0.085 to 0.115	99.2	70 to 130	0.941	20
AX14372	Antimony, Total	mg/L	0.0000482	0.00132	0.10	0.0875	0.0903	0.0917	0.085 to 0.115	87.5	70 to 130	3.17	20
AX14372	Boron, Total	mg/L	0.00101	0.044	1.00	3.11	3.18	0.942	0.85 to 1.15	90.5	70 to 130	2.22	20
AX14372	Lead, Total	mg/L	0.0000160	0.0022	0.10	0.0990	0.0994	0.0975	0.085 to 0.115	99.0	70 to 130	0.400	20
AX14372	Molybdenum, Total	mg/L	0.0000109	0.0044	0.10	0.354	0.364	0.0922	0.085 to 0.115	88.7	70 to 130	2.75	20
AX14372	Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0943	0.0960	0.0989	0.085 to 0.115	94.3	70 to 130	1.82	20
AX14372	Calcium, Total	mg/L	-0.00690	0.22	5.00	76.8	77.0	4.56	4.25 to 5.75	59.7	70 to 130	0.335	20
AX14372	Lithium, Total	mg/L	-0.0000162	0.022	0.20	0.242	0.239	0.183	0.17 to 0.23	102	70 to 130	0.980	20
AX14372	Barium, Total	mg/L	0.00000250	0.0044	0.10	0.123	0.124	0.0927	0.085 to 0.115	86.3	70 to 130	0.636	20

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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: WMWGASAPEB
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AX14369

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX14379	Solids, Dissolved	mg/L	19.0	25			213	47.0	40 to 60			1.16	5

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 Calera, AL 35040
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 FAX (205) 257-1654

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AX14370

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	0.0113	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/23/2017	EPA 200.7	2		0.02	0.1	J 0.0204	mg/L
* Calcium, Total	HRG	6/23/2017	EPA 200.7	2		0.10	0.5	37.4	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/23/2017	EPA 200.7	2		0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/27/2017	SM 2540C	1			25	165	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E	1		0.60	2.00	3.7	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C	1		0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E	1		1.40	5.00	J 2.8	mg/L

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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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AX14370

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AX14372	Cobalt, Total	mg/L	-0.00000299	0.0044	0.10	0.103	0.105	0.0960	0.085 to 0.115		103	70 to 130		2.11	20
AX14372	Beryllium, Total	mg/L	0.0000124	0.00132	0.10	0.111	0.110	0.104	0.085 to 0.115		111	70 to 130		0.908	20
AX14372	Chromium, Total	mg/L	0.0000295	0.0044	0.10	0.0966	0.0989	0.0959	0.085 to 0.115		96.6	70 to 130		2.39	20
AX14372	Cadmium, Total	mg/L	0.00000155	0.00044	0.10	0.0900	0.0931	0.0955	0.085 to 0.115		90.0	70 to 130		3.31	20
AX14372	Arsenic, Total	mg/L	0.0000140	0.0022	0.10	0.100	0.103	0.101	0.085 to 0.115		100	70 to 130		2.81	20
AX14372	Mercury, Total by CVAA	mg/L	0.0000867	0.0005	0.004	0.00382	0.00385	0.00384	0.0034 to 0.0046		95.5	70 to 130		0.891	20
AX14372	Thallium, Total	mg/L	0.0000195	0.00044	0.10	0.0992	0.100	0.0960	0.085 to 0.115		99.2	70 to 130		0.941	20
AX14372	Barium, Total	mg/L	0.00000250	0.0044	0.10	0.123	0.124	0.0927	0.085 to 0.115		86.3	70 to 130		0.636	20
AX14372	Antimony, Total	mg/L	0.0000482	0.00132	0.10	0.0875	0.0903	0.0917	0.085 to 0.115		87.5	70 to 130		3.17	20
AX14372	Boron, Total	mg/L	0.00101	0.044	1.00	3.11	3.18	0.942	0.85 to 1.15		90.5	70 to 130		2.22	20
AX14372	Lead, Total	mg/L	0.0000160	0.0022	0.10	0.0990	0.0994	0.0975	0.085 to 0.115		99.0	70 to 130		0.400	20
AX14372	Molybdenum, Total	mg/L	0.0000109	0.0044	0.10	0.354	0.364	0.0922	0.085 to 0.115		88.7	70 to 130		2.75	20
AX14372	Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0943	0.0960	0.0989	0.085 to 0.115		94.3	70 to 130		1.82	20
AX14372	Calcium, Total	mg/L	-0.00690	0.22	5.00	76.8	77.0	4.56	4.25 to 5.75		59.7	70 to 130		0.335	20
AX14372	Lithium, Total	mg/L	-0.0000162	0.022	0.20	0.242	0.239	0.183	0.17 to 0.23		102	70 to 130		0.980	20

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AX14370

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX14376	Solids, Dissolved	mg/L	9.00	25			436	50.0	40 to 60	2.35	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, 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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AX14371

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	J 0.00908	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/23/2017	EPA 200.7	2		0.02	0.1	0.120	mg/L
* Calcium, Total	HRG	6/23/2017	EPA 200.7	2		0.10	0.5	34.8	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/23/2017	EPA 200.7	2		0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/27/2017	SM 2540C	1			25	189	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E	1		0.60	2.00	6.2	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C	1		0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E	1		1.40	5.00	33	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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AX14371

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX14372	Cobalt, Total	mg/L	-0.00000299	0.0044	0.10	0.103	0.105	0.0960	0.085 to 0.115	103	70 to 130	2.11	20	
AX14372	Beryllium, Total	mg/L	0.0000124	0.00132	0.10	0.111	0.110	0.104	0.085 to 0.115	111	70 to 130	0.908	20	
AX14372	Cadmium, Total	mg/L	0.00000155	0.00044	0.10	0.0900	0.0931	0.0955	0.085 to 0.115	90.0	70 to 130	3.31	20	
AX14372	Barium, Total	mg/L	0.00000250	0.0044	0.10	0.123	0.124	0.0927	0.085 to 0.115	86.3	70 to 130	0.636	20	
AX14372	Arsenic, Total	mg/L	0.0000140	0.0022	0.10	0.100	0.103	0.101	0.085 to 0.115	100	70 to 130	2.81	20	
AX14372	Mercury, Total by CVAA	mg/L	0.0000867	0.0005	0.004	0.00382	0.00385	0.00384	0.0034 to 0.0046	95.5	70 to 130	0.891	20	
AX14372	Thallium, Total	mg/L	0.0000195	0.00044	0.10	0.0992	0.100	0.0960	0.085 to 0.115	99.2	70 to 130	0.941	20	
AX14372	Chromium, Total	mg/L	0.0000295	0.0044	0.10	0.0966	0.0989	0.0959	0.085 to 0.115	96.6	70 to 130	2.39	20	
AX14372	Calcium, Total	mg/L	-0.00690	0.22	5.00	76.8	77.0	4.56	4.25 to 5.75	59.7	70 to 130	0.335	20	
AX14372	Lithium, Total	mg/L	-0.0000162	0.022	0.20	0.242	0.239	0.183	0.17 to 0.23	102	70 to 130	0.980	20	
AX14372	Antimony, Total	mg/L	0.0000482	0.00132	0.10	0.0875	0.0903	0.0917	0.085 to 0.115	87.5	70 to 130	3.17	20	
AX14372	Boron, Total	mg/L	0.00101	0.044	1.00	3.11	3.18	0.942	0.85 to 1.15	90.5	70 to 130	2.22	20	
AX14372	Lead, Total	mg/L	0.0000160	0.0022	0.10	0.0990	0.0994	0.0975	0.085 to 0.115	99.0	70 to 130	0.400	20	
AX14372	Molybdenum, Total	mg/L	0.0000109	0.0044	0.10	0.354	0.364	0.0922	0.085 to 0.115	88.7	70 to 130	2.75	20	
AX14372	Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0943	0.0960	0.0989	0.085 to 0.115	94.3	70 to 130	1.82	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: WMWGASAP
 Sample Date: 19-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AX14371

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX14376	Solids, Dissolved	mg/L	9.00	25			436	50.0	40 to 60	2.35	5

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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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AX14372

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	0.0367	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/23/2017	EPA 200.7	2		0.02	0.1	2.20	mg/L
* Calcium, Total	HRG	6/23/2017	EPA 200.7	2		0.10	0.5	73.8	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/23/2017	EPA 200.7	2		0.010	0.05	J 0.0376	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	0.265	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/27/2017	SM 2540C	1			25	437	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E	1		0.60	2.00	44	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C	1		0.032	0.10	J 0.060	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E	15		21.0	75	150	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
 Recovery for Calcium is out of spec. The spike amount was less than 30% of the sample amount.

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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AX14372

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX14372	Cobalt, Total	mg/L	-0.00000299	0.0044	0.10	0.103	0.105	0.0960	0.085 to 0.115	103	70 to 130	2.11	20	
AX14372	Beryllium, Total	mg/L	0.0000124	0.00132	0.10	0.111	0.110	0.104	0.085 to 0.115	111	70 to 130	0.908	20	
AX14372	Cadmium, Total	mg/L	0.00000155	0.00044	0.10	0.0900	0.0931	0.0955	0.085 to 0.115	90.0	70 to 130	3.31	20	
AX14372	Barium, Total	mg/L	0.00000250	0.0044	0.10	0.123	0.124	0.0927	0.085 to 0.115	86.3	70 to 130	0.636	20	
AX14372	Chromium, Total	mg/L	0.0000295	0.0044	0.10	0.0966	0.0989	0.0959	0.085 to 0.115	96.6	70 to 130	2.39	20	
AX14372	Calcium, Total	mg/L	-0.00690	0.22	5.00	76.8	77.0	4.56	4.25 to 5.75	59.7	70 to 130	0.335	20	
AX14372	Lithium, Total	mg/L	-0.0000162	0.022	0.20	0.242	0.239	0.183	0.17 to 0.23	102	70 to 130	0.980	20	
AX14372	Arsenic, Total	mg/L	0.0000140	0.0022	0.10	0.100	0.103	0.101	0.085 to 0.115	100	70 to 130	2.81	20	
AX14372	Mercury, Total by CVAA	mg/L	0.0000867	0.0005	0.004	0.00382	0.00385	0.00384	0.0034 to 0.0046	95.5	70 to 130	0.891	20	
AX14372	Thallium, Total	mg/L	0.0000195	0.00044	0.10	0.0992	0.100	0.0960	0.085 to 0.115	99.2	70 to 130	0.941	20	
AX14372	Antimony, Total	mg/L	0.0000482	0.00132	0.10	0.0875	0.0903	0.0917	0.085 to 0.115	87.5	70 to 130	3.17	20	
AX14372	Boron, Total	mg/L	0.00101	0.044	1.00	3.11	3.18	0.942	0.85 to 1.15	90.5	70 to 130	2.22	20	
AX14372	Lead, Total	mg/L	0.0000160	0.0022	0.10	0.0990	0.0994	0.0975	0.085 to 0.115	99.0	70 to 130	0.400	20	
AX14372	Molybdenum, Total	mg/L	0.0000109	0.0044	0.10	0.354	0.364	0.0922	0.085 to 0.115	88.7	70 to 130	2.75	20	
AX14372	Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0943	0.0960	0.0989	0.085 to 0.115	94.3	70 to 130	1.82	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
 Recovery for Calcium is out of spec. The spike amount was less than 30% of the sample amount.

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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AX14372

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX14376	Solids, Dissolved	mg/L	9.00	25			436	50.0	40 to 60	2.35	5

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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
 Recovery for Calcium is out of spec. The spike amount was less than 30% of the sample amount.

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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-5 Dup

Laboratory ID Number: AX14373

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	0.0354	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	2.23	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5	76.1	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	J 0.0385	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	0.261	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/27/2017	SM 2540C		1		25	438	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E		1	0.60	2.00	44	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C		1	0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E		15	21.0	75	150	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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-5 Dup

Laboratory ID Number: AX14373

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX14381	Barium, Total	mg/L	-0.00000176	0.0044	0.10	0.154	0.157	0.0917	0.085 to 0.115		91.1	70 to 130	1.67	20
AX14381	Cadmium, Total	mg/L	0.00000297	0.00044	0.10	0.0945	0.0952	0.0990	0.085 to 0.115		94.5	70 to 130	0.747	20
AX14381	Lead, Total	mg/L	0.0000141	0.0022	0.10	0.0984	0.101	0.0995	0.085 to 0.115		98.4	70 to 130	2.13	20
AX14381	Antimony, Total	mg/L	0.0000593	0.00132	0.10	0.0907	0.0911	0.0921	0.085 to 0.115		90.7	70 to 130	0.483	20
AX14381	Calcium, Total	mg/L	-0.0000347	0.22	5.00	67.4	66.8	5.30	4.25 to 5.75		87.3	70 to 130	0.786	20
AX14381	Lithium, Total	mg/L	-0.0000784	0.022	0.20	0.196	0.196	0.195	0.17 to 0.23		98.1	70 to 130	0.0632	20
AX14381	Beryllium, Total	mg/L	0.0000192	0.00132	0.10	0.110	0.113	0.114	0.085 to 0.115		110	70 to 130	2.36	20
AX14381	Molybdenum, Total	mg/L	0.0000120	0.0044	0.10	0.0981	0.0989	0.0959	0.085 to 0.115		98.1	70 to 130	0.822	20
AX14381	Selenium, Total	mg/L	0.000114	0.0044	0.10	0.0972	0.0985	0.102	0.085 to 0.115		97.2	70 to 130	1.28	20
AX14381	Thallium, Total	mg/L	0.0000153	0.00044	0.10	0.0994	0.101	0.0972	0.085 to 0.115		99.4	70 to 130	1.90	20
AX14381	Arsenic, Total	mg/L	0.0000149	0.0022	0.10	0.105	0.106	0.106	0.085 to 0.115		102	70 to 130	1.32	20
AX14381	Boron, Total	mg/L	-0.00372	0.044	1.00	1.31	1.28	0.967	0.85 to 1.15		96.5	70 to 130	1.88	20
AX14381	Cobalt, Total	mg/L	-0.00000134	0.0044	0.10	0.104	0.105	0.105	0.085 to 0.115		104	70 to 130	1.12	20
AX14381	Chromium, Total	mg/L	0.0000204	0.0044	0.10	0.0986	0.100	0.101	0.085 to 0.115		98.6	70 to 130	1.49	20
AX14381	Mercury, Total by CVAA	mg/L	0.0000872	0.0005	0.004	0.00377	0.00382	0.00374	0.0034 to 0.0046		94.3	70 to 130	1.19	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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-5 Dup

Laboratory ID Number: AX14373

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AX14376	Solids, Dissolved	mg/L	9.00	25				436	50.0	40 to 60			2.35	5

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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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AX14374

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	0.0396	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	1.88	mg/L
* Calcium, Total	HRG	6/23/2017	EPA 200.7		10	1	5	83.6	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	0.0637	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/27/2017	SM 2540C		1		25	485	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E		2	1.20	4.0	58	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C		1	0.032	0.10	J 0.060	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E		15	21.0	75	160	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.

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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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AX14374

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX14381	Barium, Total	mg/L	-0.00000176	0.0044	0.10	0.154	0.157	0.0917	0.085 to 0.115	91.1	70 to 130	1.67	20	
AX14381	Cadmium, Total	mg/L	0.00000297	0.00044	0.10	0.0945	0.0952	0.0990	0.085 to 0.115	94.5	70 to 130	0.747	20	
AX14381	Lead, Total	mg/L	0.0000141	0.0022	0.10	0.0984	0.101	0.0995	0.085 to 0.115	98.4	70 to 130	2.13	20	
AX14381	Chromium, Total	mg/L	0.0000204	0.0044	0.10	0.0986	0.100	0.101	0.085 to 0.115	98.6	70 to 130	1.49	20	
AX14381	Mercury, Total by CVAA	mg/L	0.0000872	0.0005	0.004	0.00377	0.00382	0.00374	0.0034 to 0.0046	94.3	70 to 130	1.19	20	
AX14381	Arsenic, Total	mg/L	0.0000149	0.0022	0.10	0.105	0.106	0.106	0.085 to 0.115	102	70 to 130	1.32	20	
AX14381	Boron, Total	mg/L	-0.00372	0.044	1.00	1.31	1.28	0.967	0.85 to 1.15	96.5	70 to 130	1.88	20	
AX14381	Cobalt, Total	mg/L	-0.00000134	0.0044	0.10	0.104	0.105	0.105	0.085 to 0.115	104	70 to 130	1.12	20	
AX14381	Beryllium, Total	mg/L	0.0000192	0.00132	0.10	0.110	0.113	0.114	0.085 to 0.115	110	70 to 130	2.36	20	
AX14381	Molybdenum, Total	mg/L	0.0000120	0.0044	0.10	0.0981	0.0989	0.0959	0.085 to 0.115	98.1	70 to 130	0.822	20	
AX14381	Selenium, Total	mg/L	0.000114	0.0044	0.10	0.0972	0.0985	0.102	0.085 to 0.115	97.2	70 to 130	1.28	20	
AX14381	Thallium, Total	mg/L	0.0000153	0.00044	0.10	0.0994	0.101	0.0972	0.085 to 0.115	99.4	70 to 130	1.90	20	
AX14381	Antimony, Total	mg/L	0.0000593	0.00132	0.10	0.0907	0.0911	0.0921	0.085 to 0.115	90.7	70 to 130	0.483	20	
AX14381	Calcium, Total	mg/L	-0.0000347	0.22	5.00	67.4	66.8	5.30	4.25 to 5.75	87.3	70 to 130	0.786	20	
AX14381	Lithium, Total	mg/L	-0.0000784	0.022	0.20	0.196	0.196	0.195	0.17 to 0.23	98.1	70 to 130	0.0632	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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AX14374

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX14376	Solids, Dissolved	mg/L	9.00	25			436	50.0	40 to 60	2.35	5

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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  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AX14375

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	J 0.00286	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	0.0255	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7	2		0.02	0.1	1.38	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7	2		0.10	0.5	56.8	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7	2		0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	J 0.00392	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/27/2017	SM 2540C	1			25	363	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E	1		0.60	2.00	22	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C	1		0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E	15		21.0	75	130	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AX14375

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec Limit	
			MB	Limit					Limit	Rec	Limit	Prec		
AX14381	Barium, Total	mg/L	-0.00000176	0.0044	0.10	0.154	0.157	0.0917	0.085 to 0.115		91.1	70 to 130	1.67	20
AX14381	Chromium, Total	mg/L	0.0000204	0.0044	0.10	0.0986	0.100	0.101	0.085 to 0.115		98.6	70 to 130	1.49	20
AX14381	Mercury, Total by CVAA	mg/L	0.0000872	0.0005	0.004	0.00377	0.00382	0.00374	0.0034 to 0.0046		94.3	70 to 130	1.19	20
AX14381	Antimony, Total	mg/L	0.0000593	0.00132	0.10	0.0907	0.0911	0.0921	0.085 to 0.115		90.7	70 to 130	0.483	20
AX14381	Calcium, Total	mg/L	-0.0000347	0.22	5.00	67.4	66.8	5.30	4.25 to 5.75		87.3	70 to 130	0.786	20
AX14381	Lithium, Total	mg/L	-0.0000784	0.022	0.20	0.196	0.196	0.195	0.17 to 0.23		98.1	70 to 130	0.0632	20
AX14381	Beryllium, Total	mg/L	0.0000192	0.00132	0.10	0.110	0.113	0.114	0.085 to 0.115		110	70 to 130	2.36	20
AX14381	Molybdenum, Total	mg/L	0.0000120	0.0044	0.10	0.0981	0.0989	0.0959	0.085 to 0.115		98.1	70 to 130	0.822	20
AX14381	Selenium, Total	mg/L	0.000114	0.0044	0.10	0.0972	0.0985	0.102	0.085 to 0.115		97.2	70 to 130	1.28	20
AX14381	Thallium, Total	mg/L	0.0000153	0.00044	0.10	0.0994	0.101	0.0972	0.085 to 0.115		99.4	70 to 130	1.90	20
AX14381	Cadmium, Total	mg/L	0.00000297	0.00044	0.10	0.0945	0.0952	0.0990	0.085 to 0.115		94.5	70 to 130	0.747	20
AX14381	Lead, Total	mg/L	0.0000141	0.0022	0.10	0.0984	0.101	0.0995	0.085 to 0.115		98.4	70 to 130	2.13	20
AX14381	Arsenic, Total	mg/L	0.0000149	0.0022	0.10	0.105	0.106	0.106	0.085 to 0.115		102	70 to 130	1.32	20
AX14381	Boron, Total	mg/L	-0.00372	0.044	1.00	1.31	1.28	0.967	0.85 to 1.15		96.5	70 to 130	1.88	20
AX14381	Cobalt, Total	mg/L	-0.00000134	0.0044	0.10	0.104	0.105	0.105	0.085 to 0.115		104	70 to 130	1.12	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AX14375

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX14376	Solids, Dissolved	mg/L	9.00	25			436	50.0	40 to 60	2.35	5

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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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AX14376

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	0.0200	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	2.50	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5	67.9	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	0.0148	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/27/2017	SM 2540C		1		25	416	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E		1	0.60	2.00	40	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C		1	0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E		15	21.0	75	160	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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AX14376

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX14381	Barium, Total	mg/L	-0.00000176	0.0044	0.10	0.154	0.157	0.0917	0.085 to 0.115		91.1	70 to 130	1.67	20
AX14381	Chromium, Total	mg/L	0.0000204	0.0044	0.10	0.0986	0.100	0.101	0.085 to 0.115		98.6	70 to 130	1.49	20
AX14381	Mercury, Total by CVAA	mg/L	0.0000872	0.0005	0.004	0.00377	0.00382	0.00374	0.0034 to 0.0046		94.3	70 to 130	1.19	20
AX14381	Arsenic, Total	mg/L	0.0000149	0.0022	0.10	0.105	0.106	0.106	0.085 to 0.115		102	70 to 130	1.32	20
AX14381	Boron, Total	mg/L	-0.00372	0.044	1.00	1.31	1.28	0.967	0.85 to 1.15		96.5	70 to 130	1.88	20
AX14381	Cobalt, Total	mg/L	-0.00000134	0.0044	0.10	0.104	0.105	0.105	0.085 to 0.115		104	70 to 130	1.12	20
AX14381	Beryllium, Total	mg/L	0.0000192	0.00132	0.10	0.110	0.113	0.114	0.085 to 0.115		110	70 to 130	2.36	20
AX14381	Molybdenum, Total	mg/L	0.0000120	0.0044	0.10	0.0981	0.0989	0.0959	0.085 to 0.115		98.1	70 to 130	0.822	20
AX14381	Selenium, Total	mg/L	0.000114	0.0044	0.10	0.0972	0.0985	0.102	0.085 to 0.115		97.2	70 to 130	1.28	20
AX14381	Thallium, Total	mg/L	0.0000153	0.00044	0.10	0.0994	0.101	0.0972	0.085 to 0.115		99.4	70 to 130	1.90	20
AX14381	Antimony, Total	mg/L	0.0000593	0.00132	0.10	0.0907	0.0911	0.0921	0.085 to 0.115		90.7	70 to 130	0.483	20
AX14381	Calcium, Total	mg/L	-0.0000347	0.22	5.00	67.4	66.8	5.30	4.25 to 5.75		87.3	70 to 130	0.786	20
AX14381	Lithium, Total	mg/L	-0.0000784	0.022	0.20	0.196	0.196	0.195	0.17 to 0.23		98.1	70 to 130	0.0632	20
AX14381	Cadmium, Total	mg/L	0.00000297	0.00044	0.10	0.0945	0.0952	0.0990	0.085 to 0.115		94.5	70 to 130	0.747	20
AX14381	Lead, Total	mg/L	0.0000141	0.0022	0.10	0.0984	0.101	0.0995	0.085 to 0.115		98.4	70 to 130	2.13	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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AX14376

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX14376	Solids, Dissolved	mg/L	9.00	25			436	50.0	40 to 60	2.35	5

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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
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 (205) 664-6032 or 6171
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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AX14377

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	0.0244	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	1.75	mg/L
* Calcium, Total	HRG	6/23/2017	EPA 200.7		10	1	5	87.5	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/29/2017	SM 2540C		1		25	421	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E		1	0.60	2.00	18	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E		15	21.0	75	180	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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AX14377

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX14381	Barium, Total	mg/L	-0.00000176	0.0044	0.10	0.154	0.157	0.0917	0.085 to 0.115		91.1	70 to 130	1.67	20
AX14381	Cadmium, Total	mg/L	0.00000297	0.00044	0.10	0.0945	0.0952	0.0990	0.085 to 0.115		94.5	70 to 130	0.747	20
AX14381	Lead, Total	mg/L	0.0000141	0.0022	0.10	0.0984	0.101	0.0995	0.085 to 0.115		98.4	70 to 130	2.13	20
AX14381	Chromium, Total	mg/L	0.0000204	0.0044	0.10	0.0986	0.100	0.101	0.085 to 0.115		98.6	70 to 130	1.49	20
AX14381	Mercury, Total by CVAA	mg/L	0.0000872	0.0005	0.004	0.00377	0.00382	0.00374	0.0034 to 0.0046		94.3	70 to 130	1.19	20
AX14381	Antimony, Total	mg/L	0.0000593	0.00132	0.10	0.0907	0.0911	0.0921	0.085 to 0.115		90.7	70 to 130	0.483	20
AX14381	Calcium, Total	mg/L	-0.0000347	0.22	5.00	67.4	66.8	5.30	4.25 to 5.75		87.3	70 to 130	0.786	20
AX14381	Lithium, Total	mg/L	-0.0000784	0.022	0.20	0.196	0.196	0.195	0.17 to 0.23		98.1	70 to 130	0.0632	20
AX14381	Beryllium, Total	mg/L	0.0000192	0.00132	0.10	0.110	0.113	0.114	0.085 to 0.115		110	70 to 130	2.36	20
AX14381	Molybdenum, Total	mg/L	0.0000120	0.0044	0.10	0.0981	0.0989	0.0959	0.085 to 0.115		98.1	70 to 130	0.822	20
AX14381	Selenium, Total	mg/L	0.000114	0.0044	0.10	0.0972	0.0985	0.102	0.085 to 0.115		97.2	70 to 130	1.28	20
AX14381	Thallium, Total	mg/L	0.0000153	0.00044	0.10	0.0994	0.101	0.0972	0.085 to 0.115		99.4	70 to 130	1.90	20
AX14381	Arsenic, Total	mg/L	0.0000149	0.0022	0.10	0.105	0.106	0.106	0.085 to 0.115		102	70 to 130	1.32	20
AX14381	Boron, Total	mg/L	-0.00372	0.044	1.00	1.31	1.28	0.967	0.85 to 1.15		96.5	70 to 130	1.88	20
AX14381	Cobalt, Total	mg/L	-0.00000134	0.0044	0.10	0.104	0.105	0.105	0.085 to 0.115		104	70 to 130	1.12	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 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: WMWGASAP
 Sample Date: 20-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AX14377

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec		
			Limit	Limit			Duplicate	LFB	Limit	Limit		
AX14381	Solids, Dissolved	mg/L	9.00	25			339	53.0	40 to 60		4.64	5

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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: WMWGASAP
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AX14378

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	0.0481	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5	80.0	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/30/2017	SM 2540C		1		25	376	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E		1	0.60	2.00	3.6	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C		1	0.032	0.10	0.10	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E		5	7.00	25	75	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: WMWGASAP
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AX14378

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX14381	Barium, Total	mg/L	-0.00000176	0.0044	0.10	0.154	0.157	0.0917	0.085 to 0.115		91.1	70 to 130	1.67	20
AX14381	Cadmium, Total	mg/L	0.00000297	0.00044	0.10	0.0945	0.0952	0.0990	0.085 to 0.115		94.5	70 to 130	0.747	20
AX14381	Lead, Total	mg/L	0.0000141	0.0022	0.10	0.0984	0.101	0.0995	0.085 to 0.115		98.4	70 to 130	2.13	20
AX14381	Antimony, Total	mg/L	0.0000593	0.00132	0.10	0.0907	0.0911	0.0921	0.085 to 0.115		90.7	70 to 130	0.483	20
AX14381	Calcium, Total	mg/L	-0.0000347	0.22	5.00	67.4	66.8	5.30	4.25 to 5.75		87.3	70 to 130	0.786	20
AX14381	Lithium, Total	mg/L	-0.0000784	0.022	0.20	0.196	0.196	0.195	0.17 to 0.23		98.1	70 to 130	0.0632	20
AX14381	Arsenic, Total	mg/L	0.0000149	0.0022	0.10	0.105	0.106	0.106	0.085 to 0.115		102	70 to 130	1.32	20
AX14381	Boron, Total	mg/L	-0.00372	0.044	1.00	1.31	1.28	0.967	0.85 to 1.15		96.5	70 to 130	1.88	20
AX14381	Cobalt, Total	mg/L	-0.00000134	0.0044	0.10	0.104	0.105	0.105	0.085 to 0.115		104	70 to 130	1.12	20
AX14381	Chromium, Total	mg/L	0.0000204	0.0044	0.10	0.0986	0.100	0.101	0.085 to 0.115		98.6	70 to 130	1.49	20
AX14381	Mercury, Total by CVAA	mg/L	0.0000872	0.0005	0.004	0.00377	0.00382	0.00374	0.0034 to 0.0046		94.3	70 to 130	1.19	20
AX14381	Beryllium, Total	mg/L	0.0000192	0.00132	0.10	0.110	0.113	0.114	0.085 to 0.115		110	70 to 130	2.36	20
AX14381	Molybdenum, Total	mg/L	0.0000120	0.0044	0.10	0.0981	0.0989	0.0959	0.085 to 0.115		98.1	70 to 130	0.822	20
AX14381	Selenium, Total	mg/L	0.000114	0.0044	0.10	0.0972	0.0985	0.102	0.085 to 0.115		97.2	70 to 130	1.28	20
AX14381	Thallium, Total	mg/L	0.0000153	0.00044	0.10	0.0994	0.101	0.0972	0.085 to 0.115		99.4	70 to 130	1.90	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: WMWGASAP
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AX14378

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AX14379	Solids, Dissolved	mg/L	19.0	25				213	47.0	40 to 60			1.16	5

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Laboratory certification ID: E571114

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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: WMWGASAP
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AX14379

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	0.0302	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7	2		0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7	2		0.10	0.5	44.7	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7	2		0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/30/2017	SM 2540C	1			25	218	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E	1		0.60	2.00	5.2	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C	1		0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E	1		1.40	5.00	U <1.4	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: WMWGASAP
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AX14379

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX14381	Barium, Total	mg/L	-0.00000176	0.0044	0.10	0.154	0.157	0.0917	0.085 to 0.115	91.1	70 to 130	1.67	20
AX14381	Cadmium, Total	mg/L	0.00000297	0.00044	0.10	0.0945	0.0952	0.0990	0.085 to 0.115	94.5	70 to 130	0.747	20
AX14381	Lead, Total	mg/L	0.0000141	0.0022	0.10	0.0984	0.101	0.0995	0.085 to 0.115	98.4	70 to 130	2.13	20
AX14381	Chromium, Total	mg/L	0.0000204	0.0044	0.10	0.0986	0.100	0.101	0.085 to 0.115	98.6	70 to 130	1.49	20
AX14381	Mercury, Total by CVAA	mg/L	0.0000872	0.0005	0.004	0.00377	0.00382	0.00374	0.0034 to 0.0046	94.3	70 to 130	1.19	20
AX14381	Antimony, Total	mg/L	0.0000593	0.00132	0.10	0.0907	0.0911	0.0921	0.085 to 0.115	90.7	70 to 130	0.483	20
AX14381	Calcium, Total	mg/L	-0.0000347	0.22	5.00	67.4	66.8	5.30	4.25 to 5.75	87.3	70 to 130	0.786	20
AX14381	Lithium, Total	mg/L	-0.0000784	0.022	0.20	0.196	0.196	0.195	0.17 to 0.23	98.1	70 to 130	0.0632	20
AX14381	Beryllium, Total	mg/L	0.0000192	0.00132	0.10	0.110	0.113	0.114	0.085 to 0.115	110	70 to 130	2.36	20
AX14381	Molybdenum, Total	mg/L	0.0000120	0.0044	0.10	0.0981	0.0989	0.0959	0.085 to 0.115	98.1	70 to 130	0.822	20
AX14381	Selenium, Total	mg/L	0.000114	0.0044	0.10	0.0972	0.0985	0.102	0.085 to 0.115	97.2	70 to 130	1.28	20
AX14381	Thallium, Total	mg/L	0.0000153	0.00044	0.10	0.0994	0.101	0.0972	0.085 to 0.115	99.4	70 to 130	1.90	20
AX14381	Arsenic, Total	mg/L	0.0000149	0.0022	0.10	0.105	0.106	0.106	0.085 to 0.115	102	70 to 130	1.32	20
AX14381	Boron, Total	mg/L	-0.00372	0.044	1.00	1.31	1.28	0.967	0.85 to 1.15	96.5	70 to 130	1.88	20
AX14381	Cobalt, Total	mg/L	-0.00000134	0.0044	0.10	0.104	0.105	0.105	0.085 to 0.115	104	70 to 130	1.12	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: WMWGASAP
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AX14379

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit
				Limit				Duplicate	LFB	Limit	Limit	Prec	Limit
AX14379	Solids, Dissolved	mg/L	19.0	25				213	47.0	40 to 60		1.16	5

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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: WMWGASAPFB
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX14380

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7	2		0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7	2		0.10	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7	2		0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/30/2017	SM 2540C	1			25	U Not Detected	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E	1		0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C	1		0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E	1		1.40	5.00	U <1.4	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: WMWGASAPFB
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX14380

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec
			MB	Limit					Limit	Rec	Limit	Prec	
AX14381	Barium, Total	mg/L	-0.00000176	0.0044	0.10	0.154	0.157	0.0917	0.085 to 0.115	91.1	70 to 130	1.67	20
AX14381	Cadmium, Total	mg/L	0.00000297	0.00044	0.10	0.0945	0.0952	0.0990	0.085 to 0.115	94.5	70 to 130	0.747	20
AX14381	Lead, Total	mg/L	0.0000141	0.0022	0.10	0.0984	0.101	0.0995	0.085 to 0.115	98.4	70 to 130	2.13	20
AX14381	Antimony, Total	mg/L	0.0000593	0.00132	0.10	0.0907	0.0911	0.0921	0.085 to 0.115	90.7	70 to 130	0.483	20
AX14381	Calcium, Total	mg/L	-0.0000347	0.22	5.00	67.4	66.8	5.30	4.25 to 5.75	87.3	70 to 130	0.786	20
AX14381	Lithium, Total	mg/L	-0.0000784	0.022	0.20	0.196	0.196	0.195	0.17 to 0.23	98.1	70 to 130	0.0632	20
AX14381	Chromium, Total	mg/L	0.0000204	0.0044	0.10	0.0986	0.100	0.101	0.085 to 0.115	98.6	70 to 130	1.49	20
AX14381	Mercury, Total by CVAA	mg/L	0.0000872	0.0005	0.004	0.00377	0.00382	0.00374	0.0034 to 0.0046	94.3	70 to 130	1.19	20
AX14381	Arsenic, Total	mg/L	0.0000149	0.0022	0.10	0.105	0.106	0.106	0.085 to 0.115	102	70 to 130	1.32	20
AX14381	Boron, Total	mg/L	-0.00372	0.044	1.00	1.31	1.28	0.967	0.85 to 1.15	96.5	70 to 130	1.88	20
AX14381	Cobalt, Total	mg/L	-0.00000134	0.0044	0.10	0.104	0.105	0.105	0.085 to 0.115	104	70 to 130	1.12	20
AX14381	Beryllium, Total	mg/L	0.0000192	0.00132	0.10	0.110	0.113	0.114	0.085 to 0.115	110	70 to 130	2.36	20
AX14381	Molybdenum, Total	mg/L	0.0000120	0.0044	0.10	0.0981	0.0989	0.0959	0.085 to 0.115	98.1	70 to 130	0.822	20
AX14381	Selenium, Total	mg/L	0.000114	0.0044	0.10	0.0972	0.0985	0.102	0.085 to 0.115	97.2	70 to 130	1.28	20
AX14381	Thallium, Total	mg/L	0.0000153	0.00044	0.10	0.0994	0.101	0.0972	0.085 to 0.115	99.4	70 to 130	1.90	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: WMWGASAPFB
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX14380

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX14379	Solids, Dissolved	mg/L	19.0	25			213	47.0	40 to 60			1.16	5

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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: WMWGASAP
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AX14381

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	J 0.00257	mg/L
* Barium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	0.0629	mg/L
* Beryllium, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7	2		0.02	0.1	0.342	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7	2		0.10	0.5	63.0	mg/L
* Cadmium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/28/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/7/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7	2		0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/28/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/28/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/28/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/29/2017	SM 2540C	1			25	372	mg/L
* Chloride, Total, by Test America	SGC	7/13/2017	SM 4500 Cl_E	1		0.60	2.00	21	mg/L
* Fluoride, Total, by Test America	SGC	7/13/2017	SM 4500 F_C	1		0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	SGC	7/13/2017	SM 4500 SO4_E	5		7.00	25	88	mg/L

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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: WMWGASAP
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AX14381

Sample	Analysis	Units	MB	MB			MS	MSD	LFB		Rec		Prec	Limit
				Limit	Spike	MS			Limit	Rec	Limit	Prec		
AX14381	Barium, Total	mg/L	-0.00000176	0.0044	0.10	0.154	0.157	0.0917	0.085 to 0.115	91.1	70 to 130	1.67	20	
AX14381	Cadmium, Total	mg/L	0.00000297	0.00044	0.10	0.0945	0.0952	0.0990	0.085 to 0.115	94.5	70 to 130	0.747	20	
AX14381	Lead, Total	mg/L	0.0000141	0.0022	0.10	0.0984	0.101	0.0995	0.085 to 0.115	98.4	70 to 130	2.13	20	
AX14381	Arsenic, Total	mg/L	0.0000149	0.0022	0.10	0.105	0.106	0.106	0.085 to 0.115	102	70 to 130	1.32	20	
AX14381	Boron, Total	mg/L	-0.00372	0.044	1.00	1.31	1.28	0.967	0.85 to 1.15	96.5	70 to 130	1.88	20	
AX14381	Cobalt, Total	mg/L	-0.00000134	0.0044	0.10	0.104	0.105	0.105	0.085 to 0.115	104	70 to 130	1.12	20	
AX14381	Antimony, Total	mg/L	0.0000593	0.00132	0.10	0.0907	0.0911	0.0921	0.085 to 0.115	90.7	70 to 130	0.483	20	
AX14381	Calcium, Total	mg/L	-0.0000347	0.22	5.00	67.4	66.8	5.30	4.25 to 5.75	87.3	70 to 130	0.786	20	
AX14381	Lithium, Total	mg/L	-0.0000784	0.022	0.20	0.196	0.196	0.195	0.17 to 0.23	98.1	70 to 130	0.0632	20	
AX14381	Chromium, Total	mg/L	0.0000204	0.0044	0.10	0.0986	0.100	0.101	0.085 to 0.115	98.6	70 to 130	1.49	20	
AX14381	Mercury, Total by CVAA	mg/L	0.0000872	0.0005	0.004	0.00377	0.00382	0.00374	0.0034 to 0.0046	94.3	70 to 130	1.19	20	
AX14381	Beryllium, Total	mg/L	0.0000192	0.00132	0.10	0.110	0.113	0.114	0.085 to 0.115	110	70 to 130	2.36	20	
AX14381	Molybdenum, Total	mg/L	0.0000120	0.0044	0.10	0.0981	0.0989	0.0959	0.085 to 0.115	98.1	70 to 130	0.822	20	
AX14381	Selenium, Total	mg/L	0.000114	0.0044	0.10	0.0972	0.0985	0.102	0.085 to 0.115	97.2	70 to 130	1.28	20	
AX14381	Thallium, Total	mg/L	0.0000153	0.00044	0.10	0.0994	0.101	0.0972	0.085 to 0.115	99.4	70 to 130	1.90	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
 (205) 664-6032 or 6171
 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 21-Jun-17
 Customer ID:
 Delivery Date: 22-Jun-17

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AX14381

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX14381	Solids, Dissolved	mg/L	9.00	25			339	53.0	40 to 60	4.64	5

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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:

Definitions



Abbreviation	Description
DF	Dilution Factor
LFB	Lab Fortified Blank
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 06/21/2017 10:00

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer		
	Site Representative		Hagen Kaylor	Requested By	Greg Dyer
	Collector		Nick Pitts		Location

Analysis Requested	Bottle 1 (500mL): Metals, Bottle 2 (250mL): Hg, Bottle 3 (500mL): TDS, Bottle 4 (250mL): Anions
Comments	All anions outsourced to Test America, Pensacola.

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-16	06/19/2017	15:30	4	Groundwater		AX14309
MW-16 Dup	06/19/2017	15:30	4	Sample Duplicate		AX14310
MW-17	06/19/2017	16:45	4	Groundwater		AX14311
MW-18	06/19/2017	14:10	4	Groundwater		AX14312
MW-20	06/19/2017	11:35	4	Groundwater		AX14313
FB-2	06/19/2017	14:00	4	Field Blank		AX14314

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: 2017.06.21 15:07:02 -0500</small>	06/21/2017 15:07

SmarTroll ID	4696-23441-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	4677-23343-4-2	
Cooler Temp	1.0 degrees C	
Thermometer ID	5408-27568-2-2	
pH Strip ID	5881-30147-10-1	



Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

- Field Complete
- Lab Complete

Lab ETA 06/22/2017 08:00

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Jason Rouss	Location	Gaston Ash Pond
Analysis Requested	Bottle 1 (500mL): Metals, Bottle 2 (250mL): Hg, Bottle 3 (500mL): TDS, Bottle 4 (250mL): Anions		
Comments	All anions outsourced to Test America, Pensacola.		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-1	06/19/2017	11:08	4	Groundwater		AX14359
MW-2	06/19/2017	14:19	4	Groundwater		AX14360
MW-2 Dup	06/19/2017	14:19	4	Sample Duplicate		AX14361
MW-3	06/19/2017	16:13	4	Groundwater		AX14362
MW-15R	06/20/2017	09:40	4	Groundwater		AX14363
MW-9	06/20/2017	13:16	4	Groundwater		AX14364
MW-8	06/20/2017	14:50	4	Groundwater		AX14365
MW-4	06/21/2017	14:15	4	Groundwater		AX14366
FB-3	06/21/2017	14:33	4	Field Blank		AX14367
MW-19	06/21/2017	17:10	4	Groundwater		AX14368
EB-1	06/21/2017	17:40	4	Equipment Blank		AX14369

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: 2017.06.22 08:11:07 -05'00'</small>	06/22/2017 08:11

SmarTroll ID	4696-23443-3-2	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	4677-23342-4-1	Cooler Temp
		0.3 degrees C
		Thermometer ID
		5408-27568-2-2
		pH Strip ID
		5881-30147-10-1



Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

- Field Complete
- Lab Complete

Lab ETA 06/22/2017 08:30

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Ben Rothschild	Location	Gaston Ash Pond
Analysis Requested	Bottle 1 (500mL): Metals, Bottle 2 (250mL): Hg, Bottle 3 (500mL): TDS, Bottle 4 (250mL): Anions		
Comments	All anions outsourced to Test America, Pensacola.		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-10	06/19/2017	11:40	4	Groundwater		AX14370
MW-11	06/19/2017	14:32	4	Groundwater		AX14371
MW-5	06/20/2017	09:58	4	Groundwater		AX14372
MW-5 DUP	06/20/2017	09:58	4	Sample Duplicate		AX14373
MW-22	06/20/2017	11:18	4	Groundwater		AX14374
MW-21	06/20/2017	12:21	4	Groundwater		AX14375
MW-6	06/20/2017	13:39	4	Groundwater		AX14376
MW-7	06/20/2017	15:15	4	Groundwater		AX14377
MW-14	06/21/2017	14:26	4	Groundwater		AX14378
MW-13	06/21/2017	17:14	4	Groundwater		AX14379
FB-1	06/21/2017	17:45	4	Field Blank		AX14380
MW-12	06/21/2017	18:48	4	Groundwater		AX14381

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: 2017.06.22 08:17:03 -05'00'</small>	06/22/2017 08:17

SmarTroll ID	5151-26193-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/> Cooler Temp Thermometer ID pH Strip ID
Turbidity ID	3901-20010-2-2	

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: 400-139785-1

TestAmerica Sample Delivery Group: Gaston Ash Pond (8)

Client Project/Site: CCR Plant Gaston

For:

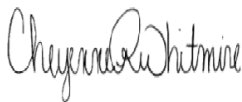
Alabama Power General Test Laboratory

744 County Rd 87

GSC #8

Calera, Alabama 35040

Attn: Sarah Copeland



Authorized for release by:

7/12/2017 10:52:19 AM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

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

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

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Case Narrative

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

TestAmerica Job ID: 400-139785-1
SDG: Gaston Ash Pond (8)

Job ID: 400-139785-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-139785-1

General Chemistry

Method(s) SM 4500 Cl- E: The following sample was diluted to bring the concentration of target analytes within the calibration range: AX14374 MW-22 (400-139785-22). Elevated reporting limits (RLs) are provided.

Method(s) SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 359889 were outside control limits. Sample matrix interference is 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: AX14309 MW-16 (400-139785-1), AX14310 MW-16 DUP (400-139785-2), AX14312 MW-18 (400-139785-4), AX14313 MW-20 (400-139785-5), AX14372 MW-5 (400-139785-20[MS]) and AX14372 MW-5 (400-139785-20[MSD]). Elevated reporting limits (RLs) are provided.

Method(s) SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 359576 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: AX14372 MW-5 (400-139785-20), AX14373 MW-5 DUP (400-139785-21), AX14374 MW-22 (400-139785-22), AX14375 MW-21 (400-139785-23), AX14376 MW-6 (400-139785-24), AX14377 MW-7 (400-139785-25), AX14378 MW-14 (400-139785-26), AX14381 MW-12 (400-139785-29), AX14381 MW-12 (400-139785-29[MS]) and AX14381 MW-12 (400-139785-29[MSD]). Elevated reporting limits (RLs) are provided.

Method(s) SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 359580 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.

Detection Summary

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

TestAmerica Job ID: 400-139785-1
SDG: Gaston Ash Pond (8)

Client Sample ID: AX14309 MW-16

Lab Sample ID: 400-139785-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	11		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	110		75	21	mg/L	15		SM 4500 SO4 E	Total/NA

Client Sample ID: AX14310 MW-16 DUP

Lab Sample ID: 400-139785-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	11		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	120		75	21	mg/L	15		SM 4500 SO4 E	Total/NA

Client Sample ID: AX14311 MW-17

Lab Sample ID: 400-139785-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	16		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.21		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	200		100	28	mg/L	20		SM 4500 SO4 E	Total/NA

Client Sample ID: AX14312 MW-18

Lab Sample ID: 400-139785-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	12		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	140		75	21	mg/L	15		SM 4500 SO4 E	Total/NA

Client Sample ID: AX14313 MW-20

Lab Sample ID: 400-139785-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	18		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	510		150	42	mg/L	30		SM 4500 SO4 E	Total/NA

Client Sample ID: AX14314 FB-2

Lab Sample ID: 400-139785-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	0.61	J	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: AX14359 MW-1

Lab Sample ID: 400-139785-7

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
Fluoride	0.080	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	13		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX14360 MW-2

Lab Sample ID: 400-139785-8

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
Sulfate	2.1	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: 400-139785-1
SDG: Gaston Ash Pond (8)

Client Sample ID: AX14361 MW-2 DUP

Lab Sample ID: 400-139785-9

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	2.0	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX14362 MW-3

Lab Sample ID: 400-139785-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.7	J	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	2.5	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX14363 MW-15R

Lab Sample ID: 400-139785-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	27		2.0	0.60	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	120		75	21	mg/L	15		SM 4500 SO4 E	Total/NA

Client Sample ID: AX14364 MW-9

Lab Sample ID: 400-139785-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	7.8		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.12		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	13		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX14365 MW-8

Lab Sample ID: 400-139785-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.0		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.080	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	7.9		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX14366 MW-4

Lab Sample ID: 400-139785-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	20		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	25		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX14367 FB-3

Lab Sample ID: 400-139785-15

No Detections.

Client Sample ID: AX14368 MW-19

Lab Sample ID: 400-139785-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	12		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	20		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX14369 EB-1

Lab Sample ID: 400-139785-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.4	J	2.0	0.60	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: 400-139785-1
SDG: Gaston Ash Pond (8)

Client Sample ID: AX14370 MW-10

Lab Sample ID: 400-139785-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.7		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	2.8	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX14371 MW-11

Lab Sample ID: 400-139785-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	6.2		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	33		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX14372 MW-5

Lab Sample ID: 400-139785-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	44		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	150	F1	75	21	mg/L	15		SM 4500 SO4 E	Total/NA

Client Sample ID: AX14373 MW-5 DUP

Lab Sample ID: 400-139785-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	44		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	150		75	21	mg/L	15		SM 4500 SO4 E	Total/NA

Client Sample ID: AX14374 MW-22

Lab Sample ID: 400-139785-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	58		4.0	1.2	mg/L	2		SM 4500 Cl- E	Total/NA
Fluoride	0.060	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	160		75	21	mg/L	15		SM 4500 SO4 E	Total/NA

Client Sample ID: AX14375 MW-21

Lab Sample ID: 400-139785-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	22		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	130	F1	75	21	mg/L	15		SM 4500 SO4 E	Total/NA

Client Sample ID: AX14376 MW-6

Lab Sample ID: 400-139785-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	40		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	160		75	21	mg/L	15		SM 4500 SO4 E	Total/NA

Client Sample ID: AX14377 MW-7

Lab Sample ID: 400-139785-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	18		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

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: 400-139785-1
SDG: Gaston Ash Pond (8)

Client Sample ID: AX14377 MW-7 (Continued)

Lab Sample ID: 400-139785-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	180		75	21	mg/L	15		SM 4500 SO4 E	Total/NA

Client Sample ID: AX14378 MW-14

Lab Sample ID: 400-139785-26

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	0.10		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	75		25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: AX14379 MW-13

Lab Sample ID: 400-139785-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.2		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

Client Sample ID: AX14380 FB-1

Lab Sample ID: 400-139785-28

No Detections.

Client Sample ID: AX14381 MW-12

Lab Sample ID: 400-139785-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	21		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	88	F1	25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA

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: 400-139785-1
SDG: Gaston Ash Pond (8)

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: 400-139785-1
SDG: Gaston Ash Pond (8)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-139785-1	AX14309 MW-16	Water	06/19/17 15:30	06/27/17 08:46
400-139785-2	AX14310 MW-16 DUP	Water	06/19/17 15:30	06/27/17 08:46
400-139785-3	AX14311 MW-17	Water	06/19/17 16:45	06/27/17 08:46
400-139785-4	AX14312 MW-18	Water	06/19/17 14:10	06/27/17 08:46
400-139785-5	AX14313 MW-20	Water	06/19/17 11:35	06/27/17 08:46
400-139785-6	AX14314 FB-2	Water	06/19/17 14:00	06/27/17 08:46
400-139785-7	AX14359 MW-1	Water	06/19/17 11:08	06/27/17 08:46
400-139785-8	AX14360 MW-2	Water	06/19/17 14:19	06/27/17 08:46
400-139785-9	AX14361 MW-2 DUP	Water	06/19/17 14:19	06/27/17 08:46
400-139785-10	AX14362 MW-3	Water	06/19/17 16:13	06/27/17 08:46
400-139785-11	AX14363 MW-15R	Water	06/20/17 09:40	06/27/17 08:46
400-139785-12	AX14364 MW-9	Water	06/20/17 13:16	06/27/17 08:46
400-139785-13	AX14365 MW-8	Water	06/20/17 14:50	06/27/17 08:46
400-139785-14	AX14366 MW-4	Water	06/21/17 14:15	06/27/17 08:46
400-139785-15	AX14367 FB-3	Water	06/21/17 14:33	06/27/17 08:46
400-139785-16	AX14368 MW-19	Water	06/21/17 17:10	06/27/17 08:46
400-139785-17	AX14369 EB-1	Water	06/21/17 17:40	06/27/17 08:46
400-139785-18	AX14370 MW-10	Water	06/19/17 11:40	06/27/17 08:46
400-139785-19	AX14371 MW-11	Water	06/19/17 14:32	06/27/17 08:46
400-139785-20	AX14372 MW-5	Water	06/20/17 09:58	06/27/17 08:46
400-139785-21	AX14373 MW-5 DUP	Water	06/20/17 09:58	06/27/17 08:46
400-139785-22	AX14374 MW-22	Water	06/20/17 11:18	06/27/17 08:46
400-139785-23	AX14375 MW-21	Water	06/20/17 12:21	06/27/17 08:46
400-139785-24	AX14376 MW-6	Water	06/20/17 13:39	06/27/17 08:46
400-139785-25	AX14377 MW-7	Water	06/20/17 15:15	06/27/17 08:46
400-139785-26	AX14378 MW-14	Water	06/21/17 14:26	06/27/17 08:46
400-139785-27	AX14379 MW-13	Water	06/21/17 17:14	06/27/17 08:46
400-139785-28	AX14380 FB-1	Water	06/21/17 17:45	06/27/17 08:46
400-139785-29	AX14381 MW-12	Water	06/21/17 18:48	06/27/17 08:46

Client Sample Results

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

TestAmerica Job ID: 400-139785-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14309 MW-16

Date Collected: 06/19/17 15:30

Date Received: 06/27/17 08:46

Lab Sample ID: 400-139785-1

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11		2.0	0.60	mg/L			07/09/17 12:17	1
Fluoride	0.13		0.10	0.032	mg/L			07/06/17 16:10	1
Sulfate	110		75	21	mg/L			07/06/17 09:57	15

Client Sample ID: AX14310 MW-16 DUP

Date Collected: 06/19/17 15:30

Date Received: 06/27/17 08:46

Lab Sample ID: 400-139785-2

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11		2.0	0.60	mg/L			07/09/17 12:15	1
Fluoride	0.13		0.10	0.032	mg/L			07/06/17 16:13	1
Sulfate	120		75	21	mg/L			07/06/17 09:57	15

Client Sample ID: AX14311 MW-17

Date Collected: 06/19/17 16:45

Date Received: 06/27/17 08:46

Lab Sample ID: 400-139785-3

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16		2.0	0.60	mg/L			07/09/17 12:15	1
Fluoride	0.21		0.10	0.032	mg/L			07/06/17 16:08	1
Sulfate	200		100	28	mg/L			07/06/17 09:19	20

Client Sample ID: AX14312 MW-18

Date Collected: 06/19/17 14:10

Date Received: 06/27/17 08:46

Lab Sample ID: 400-139785-4

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		2.0	0.60	mg/L			07/09/17 12:15	1
Fluoride	0.050	J	0.10	0.032	mg/L			07/06/17 16:01	1
Sulfate	140		75	21	mg/L			07/06/17 09:57	15

Client Sample ID: AX14313 MW-20

Date Collected: 06/19/17 11:35

Date Received: 06/27/17 08:46

Lab Sample ID: 400-139785-5

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		2.0	0.60	mg/L			07/09/17 12:15	1
Fluoride	0.040	J	0.10	0.032	mg/L			07/06/17 16:03	1
Sulfate	510		150	42	mg/L			07/06/17 09:21	30

Client Sample Results

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

TestAmerica Job ID: 400-139785-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14314 FB-2

Lab Sample ID: 400-139785-6

Date Collected: 06/19/17 14:00

Matrix: Water

Date Received: 06/27/17 08:46

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.61	J	2.0	0.60	mg/L			07/09/17 12:15	1
Fluoride	<0.032		0.10	0.032	mg/L			07/06/17 16:06	1
Sulfate	<1.4		5.0	1.4	mg/L			07/06/17 08:15	1

Client Sample ID: AX14359 MW-1

Lab Sample ID: 400-139785-7

Date Collected: 06/19/17 11:08

Matrix: Water

Date Received: 06/27/17 08:46

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.2		2.0	0.60	mg/L			07/09/17 12:15	1
Fluoride	0.080	J	0.10	0.032	mg/L			07/07/17 14:44	1
Sulfate	13		5.0	1.4	mg/L			07/06/17 09:14	1

Client Sample ID: AX14360 MW-2

Lab Sample ID: 400-139785-8

Date Collected: 06/19/17 14:19

Matrix: Water

Date Received: 06/27/17 08:46

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.9	J	2.0	0.60	mg/L			07/09/17 12:15	1
Fluoride	<0.032		0.10	0.032	mg/L			07/07/17 14:47	1
Sulfate	2.1	J	5.0	1.4	mg/L			07/06/17 09:12	1

Client Sample ID: AX14361 MW-2 DUP

Lab Sample ID: 400-139785-9

Date Collected: 06/19/17 14:19

Matrix: Water

Date Received: 06/27/17 08:46

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.0		2.0	0.60	mg/L			07/09/17 12:17	1
Fluoride	<0.032		0.10	0.032	mg/L			07/07/17 14:51	1
Sulfate	2.0	J	5.0	1.4	mg/L			07/06/17 09:12	1

Client Sample ID: AX14362 MW-3

Lab Sample ID: 400-139785-10

Date Collected: 06/19/17 16:13

Matrix: Water

Date Received: 06/27/17 08:46

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.7	J	2.0	0.60	mg/L			07/09/17 12:15	1
Fluoride	<0.032		0.10	0.032	mg/L			07/07/17 15:05	1
Sulfate	2.5	J	5.0	1.4	mg/L			07/06/17 08:13	1

Client Sample ID: AX14363 MW-15R

Lab Sample ID: 400-139785-11

Date Collected: 06/20/17 09:40

Matrix: Water

Date Received: 06/27/17 08:46

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27		2.0	0.60	mg/L			07/09/17 12:31	1

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-139785-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14363 MW-15R

Lab Sample ID: 400-139785-11

Date Collected: 06/20/17 09:40

Matrix: Water

Date Received: 06/27/17 08:46

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.070	J	0.10	0.032	mg/L			07/07/17 15:16	1
Sulfate	120		75	21	mg/L			07/06/17 10:01	15

Client Sample ID: AX14364 MW-9

Lab Sample ID: 400-139785-12

Date Collected: 06/20/17 13:16

Matrix: Water

Date Received: 06/27/17 08:46

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.8		2.0	0.60	mg/L			07/09/17 12:31	1
Fluoride	0.12		0.10	0.032	mg/L			07/10/17 17:16	1
Sulfate	13		5.0	1.4	mg/L			07/06/17 09:12	1

Client Sample ID: AX14365 MW-8

Lab Sample ID: 400-139785-13

Date Collected: 06/20/17 14:50

Matrix: Water

Date Received: 06/27/17 08:46

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.0		2.0	0.60	mg/L			07/09/17 12:31	1
Fluoride	0.080	J	0.10	0.032	mg/L			07/07/17 14:49	1
Sulfate	7.9		5.0	1.4	mg/L			07/06/17 09:14	1

Client Sample ID: AX14366 MW-4

Lab Sample ID: 400-139785-14

Date Collected: 06/21/17 14:15

Matrix: Water

Date Received: 06/27/17 08:46

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20		2.0	0.60	mg/L			07/06/17 15:06	1
Fluoride	<0.032		0.10	0.032	mg/L			07/07/17 15:23	1
Sulfate	25		5.0	1.4	mg/L			07/06/17 10:42	1

Client Sample ID: AX14367 FB-3

Lab Sample ID: 400-139785-15

Date Collected: 06/21/17 14:33

Matrix: Water

Date Received: 06/27/17 08:46

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			07/06/17 15:06	1
Fluoride	<0.032		0.10	0.032	mg/L			07/07/17 15:20	1
Sulfate	<1.4		5.0	1.4	mg/L			07/06/17 10:42	1

Client Sample ID: AX14368 MW-19

Lab Sample ID: 400-139785-16

Date Collected: 06/21/17 17:10

Matrix: Water

Date Received: 06/27/17 08:46

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		2.0	0.60	mg/L			07/06/17 15:06	1
Fluoride	0.050	J	0.10	0.032	mg/L			07/10/17 17:18	1

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-139785-1
SDG: Gaston Ash Pond (8)

Client Sample ID: AX14368 MW-19

Lab Sample ID: 400-139785-16

Date Collected: 06/21/17 17:10

Matrix: Water

Date Received: 06/27/17 08:46

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	20		5.0	1.4	mg/L			07/06/17 10:42	1

Client Sample ID: AX14369 EB-1

Lab Sample ID: 400-139785-17

Date Collected: 06/21/17 17:40

Matrix: Water

Date Received: 06/27/17 08:46

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.4	J	2.0	0.60	mg/L			07/06/17 15:06	1
Fluoride	<0.032		0.10	0.032	mg/L			07/10/17 17:20	1
Sulfate	<1.4		5.0	1.4	mg/L			07/06/17 10:44	1

Client Sample ID: AX14370 MW-10

Lab Sample ID: 400-139785-18

Date Collected: 06/19/17 11:40

Matrix: Water

Date Received: 06/27/17 08:46

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.7		2.0	0.60	mg/L			07/09/17 12:31	1
Fluoride	0.040	J	0.10	0.032	mg/L			07/07/17 15:14	1
Sulfate	2.8	J	5.0	1.4	mg/L			07/06/17 09:12	1

Client Sample ID: AX14371 MW-11

Lab Sample ID: 400-139785-19

Date Collected: 06/19/17 14:32

Matrix: Water

Date Received: 06/27/17 08:46

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.2		2.0	0.60	mg/L			07/09/17 12:31	1
Fluoride	<0.032		0.10	0.032	mg/L			07/07/17 14:56	1
Sulfate	33		5.0	1.4	mg/L			07/10/17 07:30	1

Client Sample ID: AX14372 MW-5

Lab Sample ID: 400-139785-20

Date Collected: 06/20/17 09:58

Matrix: Water

Date Received: 06/27/17 08:46

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44		2.0	0.60	mg/L			07/09/17 12:31	1
Fluoride	0.060	J	0.10	0.032	mg/L			07/07/17 14:39	1
Sulfate	150	F1	75	21	mg/L			07/06/17 09:57	15

Client Sample ID: AX14373 MW-5 DUP

Lab Sample ID: 400-139785-21

Date Collected: 06/20/17 09:58

Matrix: Water

Date Received: 06/27/17 08:46

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44		2.0	0.60	mg/L			07/09/17 12:31	1
Fluoride	0.050	J	0.10	0.032	mg/L			07/07/17 15:11	1
Sulfate	150		75	21	mg/L			07/06/17 11:14	15

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-139785-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14374 MW-22

Date Collected: 06/20/17 11:18

Date Received: 06/27/17 08:46

Lab Sample ID: 400-139785-22

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	58		4.0	1.2	mg/L			07/09/17 12:33	2
Fluoride	0.060	J	0.10	0.032	mg/L			07/07/17 14:58	1
Sulfate	160		75	21	mg/L			07/06/17 11:09	15

Client Sample ID: AX14375 MW-21

Date Collected: 06/20/17 12:21

Date Received: 06/27/17 08:46

Lab Sample ID: 400-139785-23

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22		2.0	0.60	mg/L			07/09/17 12:31	1
Fluoride	0.040	J	0.10	0.032	mg/L			07/07/17 14:53	1
Sulfate	130	F1	75	21	mg/L			07/06/17 11:09	15

Client Sample ID: AX14376 MW-6

Date Collected: 06/20/17 13:39

Date Received: 06/27/17 08:46

Lab Sample ID: 400-139785-24

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	40		2.0	0.60	mg/L			07/06/17 15:07	1
Fluoride	0.050	J	0.10	0.032	mg/L			07/07/17 15:18	1
Sulfate	160		75	21	mg/L			07/06/17 11:14	15

Client Sample ID: AX14377 MW-7

Date Collected: 06/20/17 15:15

Date Received: 06/27/17 08:46

Lab Sample ID: 400-139785-25

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		2.0	0.60	mg/L			07/06/17 15:06	1
Fluoride	0.040	J	0.10	0.032	mg/L			07/10/17 17:23	1
Sulfate	180		75	21	mg/L			07/06/17 11:14	15

Client Sample ID: AX14378 MW-14

Date Collected: 06/21/17 14:26

Date Received: 06/27/17 08:46

Lab Sample ID: 400-139785-26

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.6		2.0	0.60	mg/L			07/06/17 15:06	1
Fluoride	0.10		0.10	0.032	mg/L			07/10/17 17:25	1
Sulfate	75		25	7.0	mg/L			07/06/17 11:14	5

Client Sample Results

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

TestAmerica Job ID: 400-139785-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14379 MW-13

Lab Sample ID: 400-139785-27

Date Collected: 06/21/17 17:14

Matrix: Water

Date Received: 06/27/17 08:46

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.2		2.0	0.60	mg/L			07/06/17 15:06	1
Fluoride	0.050	J	0.10	0.032	mg/L			07/10/17 17:27	1
Sulfate	<1.4		5.0	1.4	mg/L			07/06/17 11:03	1

Client Sample ID: AX14380 FB-1

Lab Sample ID: 400-139785-28

Date Collected: 06/21/17 17:45

Matrix: Water

Date Received: 06/27/17 08:46

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			07/06/17 15:07	1
Fluoride	<0.032		0.10	0.032	mg/L			07/10/17 17:30	1
Sulfate	<1.4		5.0	1.4	mg/L			07/06/17 11:03	1

Client Sample ID: AX14381 MW-12

Lab Sample ID: 400-139785-29

Date Collected: 06/21/17 18:48

Matrix: Water

Date Received: 06/27/17 08:46

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21		2.0	0.60	mg/L			07/06/17 15:05	1
Fluoride	0.050	J	0.10	0.032	mg/L			07/10/17 17:10	1
Sulfate	88	F1	25	7.0	mg/L			07/06/17 11:26	5

Definitions/Glossary

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

TestAmerica Job ID: 400-139785-1
SDG: Gaston Ash Pond (8)

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.
F1	MS and/or MSD Recovery is outside acceptance limits.
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.

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: 400-139785-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14309 MW-16

Lab Sample ID: 400-139785-1

Date Collected: 06/19/17 15:30

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359889	07/09/17 12:17	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359578	07/06/17 16:10	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		15	359576	07/06/17 09:57	RRC	TAL PEN

Client Sample ID: AX14310 MW-16 DUP

Lab Sample ID: 400-139785-2

Date Collected: 06/19/17 15:30

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359889	07/09/17 12:15	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359578	07/06/17 16:13	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		15	359576	07/06/17 09:57	RRC	TAL PEN

Client Sample ID: AX14311 MW-17

Lab Sample ID: 400-139785-3

Date Collected: 06/19/17 16:45

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359889	07/09/17 12:15	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359578	07/06/17 16:08	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		20	359576	07/06/17 09:19	RRC	TAL PEN

Client Sample ID: AX14312 MW-18

Lab Sample ID: 400-139785-4

Date Collected: 06/19/17 14:10

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359889	07/09/17 12:15	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359578	07/06/17 16:01	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		15	359576	07/06/17 09:57	RRC	TAL PEN

Client Sample ID: AX14313 MW-20

Lab Sample ID: 400-139785-5

Date Collected: 06/19/17 11:35

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359889	07/09/17 12:15	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359578	07/06/17 16:03	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		30	359576	07/06/17 09:21	RRC	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-139785-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14314 FB-2

Lab Sample ID: 400-139785-6

Date Collected: 06/19/17 14:00

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359889	07/09/17 12:15	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359578	07/06/17 16:06	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	359576	07/06/17 08:15	RRC	TAL PEN

Client Sample ID: AX14359 MW-1

Lab Sample ID: 400-139785-7

Date Collected: 06/19/17 11:08

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359889	07/09/17 12:15	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359723	07/07/17 14:44	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	359576	07/06/17 09:14	RRC	TAL PEN

Client Sample ID: AX14360 MW-2

Lab Sample ID: 400-139785-8

Date Collected: 06/19/17 14:19

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359889	07/09/17 12:15	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359723	07/07/17 14:47	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	359576	07/06/17 09:12	RRC	TAL PEN

Client Sample ID: AX14361 MW-2 DUP

Lab Sample ID: 400-139785-9

Date Collected: 06/19/17 14:19

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359889	07/09/17 12:17	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359723	07/07/17 14:51	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	359576	07/06/17 09:12	RRC	TAL PEN

Client Sample ID: AX14362 MW-3

Lab Sample ID: 400-139785-10

Date Collected: 06/19/17 16:13

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359889	07/09/17 12:15	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359723	07/07/17 15:05	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	359576	07/06/17 08:13	RRC	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-139785-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14363 MW-15R

Lab Sample ID: 400-139785-11

Date Collected: 06/20/17 09:40

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359889	07/09/17 12:31	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359723	07/07/17 15:16	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		15	359576	07/06/17 10:01	RRC	TAL PEN

Client Sample ID: AX14364 MW-9

Lab Sample ID: 400-139785-12

Date Collected: 06/20/17 13:16

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359889	07/09/17 12:31	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359969	07/10/17 17:16	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	359576	07/06/17 09:12	RRC	TAL PEN

Client Sample ID: AX14365 MW-8

Lab Sample ID: 400-139785-13

Date Collected: 06/20/17 14:50

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359889	07/09/17 12:31	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359723	07/07/17 14:49	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	359576	07/06/17 09:14	RRC	TAL PEN

Client Sample ID: AX14366 MW-4

Lab Sample ID: 400-139785-14

Date Collected: 06/21/17 14:15

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359583	07/06/17 15:06	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359723	07/07/17 15:23	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	359580	07/06/17 10:42	RRC	TAL PEN

Client Sample ID: AX14367 FB-3

Lab Sample ID: 400-139785-15

Date Collected: 06/21/17 14:33

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359583	07/06/17 15:06	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359723	07/07/17 15:20	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	359580	07/06/17 10:42	RRC	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-139785-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14368 MW-19

Lab Sample ID: 400-139785-16

Date Collected: 06/21/17 17:10

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359583	07/06/17 15:06	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359969	07/10/17 17:18	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	359580	07/06/17 10:42	RRC	TAL PEN

Client Sample ID: AX14369 EB-1

Lab Sample ID: 400-139785-17

Date Collected: 06/21/17 17:40

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359583	07/06/17 15:06	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359969	07/10/17 17:20	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	359580	07/06/17 10:44	RRC	TAL PEN

Client Sample ID: AX14370 MW-10

Lab Sample ID: 400-139785-18

Date Collected: 06/19/17 11:40

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359889	07/09/17 12:31	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359723	07/07/17 15:14	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	359576	07/06/17 09:12	RRC	TAL PEN

Client Sample ID: AX14371 MW-11

Lab Sample ID: 400-139785-19

Date Collected: 06/19/17 14:32

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359889	07/09/17 12:31	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359723	07/07/17 14:56	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	359910	07/10/17 07:30	RRC	TAL PEN

Client Sample ID: AX14372 MW-5

Lab Sample ID: 400-139785-20

Date Collected: 06/20/17 09:58

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359889	07/09/17 12:31	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359723	07/07/17 14:39	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		15	359576	07/06/17 09:57	RRC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-139785-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14373 MW-5 DUP

Lab Sample ID: 400-139785-21

Date Collected: 06/20/17 09:58

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359889	07/09/17 12:31	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359723	07/07/17 15:11	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		15	359580	07/06/17 11:14	RRC	TAL PEN

Client Sample ID: AX14374 MW-22

Lab Sample ID: 400-139785-22

Date Collected: 06/20/17 11:18

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		2	359889	07/09/17 12:33	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359723	07/07/17 14:58	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		15	359580	07/06/17 11:09	RRC	TAL PEN

Client Sample ID: AX14375 MW-21

Lab Sample ID: 400-139785-23

Date Collected: 06/20/17 12:21

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359889	07/09/17 12:31	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359723	07/07/17 14:53	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		15	359580	07/06/17 11:09	RRC	TAL PEN

Client Sample ID: AX14376 MW-6

Lab Sample ID: 400-139785-24

Date Collected: 06/20/17 13:39

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359583	07/06/17 15:07	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359723	07/07/17 15:18	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		15	359580	07/06/17 11:14	RRC	TAL PEN

Client Sample ID: AX14377 MW-7

Lab Sample ID: 400-139785-25

Date Collected: 06/20/17 15:15

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359583	07/06/17 15:06	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359969	07/10/17 17:23	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		15	359580	07/06/17 11:14	RRC	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-139785-1
SDG: Gaston Ash Pond (8)

Client Sample ID: AX14378 MW-14

Lab Sample ID: 400-139785-26

Date Collected: 06/21/17 14:26

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359583	07/06/17 15:06	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359969	07/10/17 17:25	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	359580	07/06/17 11:14	RRC	TAL PEN

Client Sample ID: AX14379 MW-13

Lab Sample ID: 400-139785-27

Date Collected: 06/21/17 17:14

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359583	07/06/17 15:06	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359969	07/10/17 17:27	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	359580	07/06/17 11:03	RRC	TAL PEN

Client Sample ID: AX14380 FB-1

Lab Sample ID: 400-139785-28

Date Collected: 06/21/17 17:45

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359583	07/06/17 15:07	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359969	07/10/17 17:30	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	359580	07/06/17 11:03	RRC	TAL PEN

Client Sample ID: AX14381 MW-12

Lab Sample ID: 400-139785-29

Date Collected: 06/21/17 18:48

Matrix: Water

Date Received: 06/27/17 08:46

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	359583	07/06/17 15:05	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359969	07/10/17 17:10	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	359580	07/06/17 11:26	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: 400-139785-1
 SDG: Gaston Ash Pond (8)

General Chemistry

Analysis Batch: 359576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139785-1	AX14309 MW-16	Total/NA	Water	SM 4500 SO4 E	
400-139785-2	AX14310 MW-16 DUP	Total/NA	Water	SM 4500 SO4 E	
400-139785-3	AX14311 MW-17	Total/NA	Water	SM 4500 SO4 E	
400-139785-4	AX14312 MW-18	Total/NA	Water	SM 4500 SO4 E	
400-139785-5	AX14313 MW-20	Total/NA	Water	SM 4500 SO4 E	
400-139785-6	AX14314 FB-2	Total/NA	Water	SM 4500 SO4 E	
400-139785-7	AX14359 MW-1	Total/NA	Water	SM 4500 SO4 E	
400-139785-8	AX14360 MW-2	Total/NA	Water	SM 4500 SO4 E	
400-139785-9	AX14361 MW-2 DUP	Total/NA	Water	SM 4500 SO4 E	
400-139785-10	AX14362 MW-3	Total/NA	Water	SM 4500 SO4 E	
400-139785-11	AX14363 MW-15R	Total/NA	Water	SM 4500 SO4 E	
400-139785-12	AX14364 MW-9	Total/NA	Water	SM 4500 SO4 E	
400-139785-13	AX14365 MW-8	Total/NA	Water	SM 4500 SO4 E	
400-139785-18	AX14370 MW-10	Total/NA	Water	SM 4500 SO4 E	
400-139785-20	AX14372 MW-5	Total/NA	Water	SM 4500 SO4 E	
MB 400-359576/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-359576/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-359576/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-139785-10 MS	AX14362 MW-3	Total/NA	Water	SM 4500 SO4 E	
400-139785-10 MSD	AX14362 MW-3	Total/NA	Water	SM 4500 SO4 E	
400-139785-20 MS	AX14372 MW-5	Total/NA	Water	SM 4500 SO4 E	
400-139785-20 MSD	AX14372 MW-5	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 359578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139785-1	AX14309 MW-16	Total/NA	Water	SM 4500 F C	
400-139785-2	AX14310 MW-16 DUP	Total/NA	Water	SM 4500 F C	
400-139785-3	AX14311 MW-17	Total/NA	Water	SM 4500 F C	
400-139785-4	AX14312 MW-18	Total/NA	Water	SM 4500 F C	
400-139785-5	AX14313 MW-20	Total/NA	Water	SM 4500 F C	
400-139785-6	AX14314 FB-2	Total/NA	Water	SM 4500 F C	
MB 400-359578/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-359578/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-139470-A-29 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-139470-A-29 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-139817-A-1 DU	Duplicate	Total/NA	Water	SM 4500 F C	

Analysis Batch: 359580

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139785-14	AX14366 MW-4	Total/NA	Water	SM 4500 SO4 E	
400-139785-15	AX14367 FB-3	Total/NA	Water	SM 4500 SO4 E	
400-139785-16	AX14368 MW-19	Total/NA	Water	SM 4500 SO4 E	
400-139785-17	AX14369 EB-1	Total/NA	Water	SM 4500 SO4 E	
400-139785-21	AX14373 MW-5 DUP	Total/NA	Water	SM 4500 SO4 E	
400-139785-22	AX14374 MW-22	Total/NA	Water	SM 4500 SO4 E	
400-139785-23	AX14375 MW-21	Total/NA	Water	SM 4500 SO4 E	
400-139785-24	AX14376 MW-6	Total/NA	Water	SM 4500 SO4 E	
400-139785-25	AX14377 MW-7	Total/NA	Water	SM 4500 SO4 E	
400-139785-26	AX14378 MW-14	Total/NA	Water	SM 4500 SO4 E	
400-139785-27	AX14379 MW-13	Total/NA	Water	SM 4500 SO4 E	
400-139785-28	AX14380 FB-1	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: 400-139785-1
 SDG: Gaston Ash Pond (8)

General Chemistry (Continued)

Analysis Batch: 359580 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139785-29	AX14381 MW-12	Total/NA	Water	SM 4500 SO4 E	
MB 400-359580/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-359580/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-359580/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-139785-23 MS	AX14375 MW-21	Total/NA	Water	SM 4500 SO4 E	
400-139785-23 MSD	AX14375 MW-21	Total/NA	Water	SM 4500 SO4 E	
400-139785-29 MS	AX14381 MW-12	Total/NA	Water	SM 4500 SO4 E	
400-139785-29 MSD	AX14381 MW-12	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 359583

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139785-14	AX14366 MW-4	Total/NA	Water	SM 4500 Cl- E	
400-139785-15	AX14367 FB-3	Total/NA	Water	SM 4500 Cl- E	
400-139785-16	AX14368 MW-19	Total/NA	Water	SM 4500 Cl- E	
400-139785-17	AX14369 EB-1	Total/NA	Water	SM 4500 Cl- E	
400-139785-24	AX14376 MW-6	Total/NA	Water	SM 4500 Cl- E	
400-139785-25	AX14377 MW-7	Total/NA	Water	SM 4500 Cl- E	
400-139785-26	AX14378 MW-14	Total/NA	Water	SM 4500 Cl- E	
400-139785-27	AX14379 MW-13	Total/NA	Water	SM 4500 Cl- E	
400-139785-28	AX14380 FB-1	Total/NA	Water	SM 4500 Cl- E	
400-139785-29	AX14381 MW-12	Total/NA	Water	SM 4500 Cl- E	
MB 400-359583/24	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-359583/25	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-359583/21	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-139785-29 MS	AX14381 MW-12	Total/NA	Water	SM 4500 Cl- E	
400-139785-29 MSD	AX14381 MW-12	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 359723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139785-7	AX14359 MW-1	Total/NA	Water	SM 4500 F C	
400-139785-8	AX14360 MW-2	Total/NA	Water	SM 4500 F C	
400-139785-9	AX14361 MW-2 DUP	Total/NA	Water	SM 4500 F C	
400-139785-10	AX14362 MW-3	Total/NA	Water	SM 4500 F C	
400-139785-11	AX14363 MW-15R	Total/NA	Water	SM 4500 F C	
400-139785-13	AX14365 MW-8	Total/NA	Water	SM 4500 F C	
400-139785-14	AX14366 MW-4	Total/NA	Water	SM 4500 F C	
400-139785-15	AX14367 FB-3	Total/NA	Water	SM 4500 F C	
400-139785-18	AX14370 MW-10	Total/NA	Water	SM 4500 F C	
400-139785-19	AX14371 MW-11	Total/NA	Water	SM 4500 F C	
400-139785-20	AX14372 MW-5	Total/NA	Water	SM 4500 F C	
400-139785-21	AX14373 MW-5 DUP	Total/NA	Water	SM 4500 F C	
400-139785-22	AX14374 MW-22	Total/NA	Water	SM 4500 F C	
400-139785-23	AX14375 MW-21	Total/NA	Water	SM 4500 F C	
400-139785-24	AX14376 MW-6	Total/NA	Water	SM 4500 F C	
MB 400-359723/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-359723/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-139785-10 MS	AX14362 MW-3	Total/NA	Water	SM 4500 F C	
400-139785-10 MSD	AX14362 MW-3	Total/NA	Water	SM 4500 F C	
400-139785-20 MS	AX14372 MW-5	Total/NA	Water	SM 4500 F C	
400-139785-20 MSD	AX14372 MW-5	Total/NA	Water	SM 4500 F C	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-139785-1
SDG: Gaston Ash Pond (8)

General Chemistry (Continued)

Analysis Batch: 359889

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139785-1	AX14309 MW-16	Total/NA	Water	SM 4500 Cl- E	
400-139785-2	AX14310 MW-16 DUP	Total/NA	Water	SM 4500 Cl- E	
400-139785-3	AX14311 MW-17	Total/NA	Water	SM 4500 Cl- E	
400-139785-4	AX14312 MW-18	Total/NA	Water	SM 4500 Cl- E	
400-139785-5	AX14313 MW-20	Total/NA	Water	SM 4500 Cl- E	
400-139785-6	AX14314 FB-2	Total/NA	Water	SM 4500 Cl- E	
400-139785-7	AX14359 MW-1	Total/NA	Water	SM 4500 Cl- E	
400-139785-8	AX14360 MW-2	Total/NA	Water	SM 4500 Cl- E	
400-139785-9	AX14361 MW-2 DUP	Total/NA	Water	SM 4500 Cl- E	
400-139785-10	AX14362 MW-3	Total/NA	Water	SM 4500 Cl- E	
400-139785-11	AX14363 MW-15R	Total/NA	Water	SM 4500 Cl- E	
400-139785-12	AX14364 MW-9	Total/NA	Water	SM 4500 Cl- E	
400-139785-13	AX14365 MW-8	Total/NA	Water	SM 4500 Cl- E	
400-139785-18	AX14370 MW-10	Total/NA	Water	SM 4500 Cl- E	
400-139785-19	AX14371 MW-11	Total/NA	Water	SM 4500 Cl- E	
400-139785-20	AX14372 MW-5	Total/NA	Water	SM 4500 Cl- E	
400-139785-21	AX14373 MW-5 DUP	Total/NA	Water	SM 4500 Cl- E	
400-139785-22	AX14374 MW-22	Total/NA	Water	SM 4500 Cl- E	
400-139785-23	AX14375 MW-21	Total/NA	Water	SM 4500 Cl- E	
MB 400-359889/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-359889/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-359889/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-139785-10 MS	AX14362 MW-3	Total/NA	Water	SM 4500 Cl- E	
400-139785-10 MSD	AX14362 MW-3	Total/NA	Water	SM 4500 Cl- E	
400-139785-20 MS	AX14372 MW-5	Total/NA	Water	SM 4500 Cl- E	
400-139785-20 MSD	AX14372 MW-5	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 359910

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139785-19	AX14371 MW-11	Total/NA	Water	SM 4500 SO4 E	
MB 400-359910/15	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-359910/16	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-359910/12	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
480-120402-D-2 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
480-120402-D-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 359969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139785-12	AX14364 MW-9	Total/NA	Water	SM 4500 F C	
400-139785-16	AX14368 MW-19	Total/NA	Water	SM 4500 F C	
400-139785-17	AX14369 EB-1	Total/NA	Water	SM 4500 F C	
400-139785-25	AX14377 MW-7	Total/NA	Water	SM 4500 F C	
400-139785-26	AX14378 MW-14	Total/NA	Water	SM 4500 F C	
400-139785-27	AX14379 MW-13	Total/NA	Water	SM 4500 F C	
400-139785-28	AX14380 FB-1	Total/NA	Water	SM 4500 F C	
400-139785-29	AX14381 MW-12	Total/NA	Water	SM 4500 F C	
MB 400-359969/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-359969/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-139785-29 MS	AX14381 MW-12	Total/NA	Water	SM 4500 F C	
400-139785-29 MSD	AX14381 MW-12	Total/NA	Water	SM 4500 F C	
400-139868-L-1 DU	Duplicate	Total/NA	Water	SM 4500 F C	

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-139785-1
 SDG: Gaston Ash Pond (8)

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-359583/24
Matrix: Water
Analysis Batch: 359583

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			07/06/17 14:53	1

Lab Sample ID: LCS 400-359583/25
Matrix: Water
Analysis Batch: 359583

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	30.5		mg/L		102	90 - 110

Lab Sample ID: MRL 400-359583/21
Matrix: Water
Analysis Batch: 359583

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	1.89	J	mg/L		94	50 - 150

Lab Sample ID: 400-139785-29 MS
Matrix: Water
Analysis Batch: 359583

Client Sample ID: AX14381 MW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	21		10.0	31.2		mg/L		100	73 - 120

Lab Sample ID: 400-139785-29 MSD
Matrix: Water
Analysis Batch: 359583

Client Sample ID: AX14381 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	21		10.0	31.4		mg/L		101	73 - 120	0	8

Lab Sample ID: MB 400-359889/6
Matrix: Water
Analysis Batch: 359889

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			07/09/17 11:16	1

Lab Sample ID: LCS 400-359889/7
Matrix: Water
Analysis Batch: 359889

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	30.1		mg/L		100	90 - 110

Lab Sample ID: MRL 400-359889/3
Matrix: Water
Analysis Batch: 359889

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	2.01		mg/L		101	50 - 150

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-139785-1
 SDG: Gaston Ash Pond (8)

Lab Sample ID: 400-139785-10 MS
Matrix: Water
Analysis Batch: 359889

Client Sample ID: AX14362 MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.7	J	10.0	13.0		mg/L		113	73 - 120

Lab Sample ID: 400-139785-10 MSD
Matrix: Water
Analysis Batch: 359889

Client Sample ID: AX14362 MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.7	J	10.0	12.7		mg/L		110	73 - 120	2	8

Lab Sample ID: 400-139785-20 MS
Matrix: Water
Analysis Batch: 359889

Client Sample ID: AX14372 MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	44		10.0	51.4	4	mg/L		77	73 - 120

Lab Sample ID: 400-139785-20 MSD
Matrix: Water
Analysis Batch: 359889

Client Sample ID: AX14372 MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	44		10.0	51.2	4	mg/L		75	73 - 120	0	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-359578/3
Matrix: Water
Analysis Batch: 359578

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			07/06/17 14:46	1

Lab Sample ID: LCS 400-359578/4
Matrix: Water
Analysis Batch: 359578

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	4.18		mg/L		105	90 - 110

Lab Sample ID: 400-139470-A-29 MS
Matrix: Water
Analysis Batch: 359578

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	0.63		1.00	1.74		mg/L		111	75 - 125

QC Sample Results

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

TestAmerica Job ID: 400-139785-1
 SDG: Gaston Ash Pond (8)

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: 400-139470-A-29 MSD
Matrix: Water
Analysis Batch: 359578

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	0.63		1.00	1.74		mg/L		111	75 - 125	0	4

Lab Sample ID: 400-139817-A-1 DU
Matrix: Water
Analysis Batch: 359578

Client Sample ID: Duplicate
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 400-359723/3
Matrix: Water
Analysis Batch: 359723

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			07/07/17 14:31	1

Lab Sample ID: LCS 400-359723/4
Matrix: Water
Analysis Batch: 359723

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	4.18		mg/L		105	90 - 110

Lab Sample ID: 400-139785-10 MS
Matrix: Water
Analysis Batch: 359723

Client Sample ID: AX14362 MW-3
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	1.02		mg/L		102	75 - 125

Lab Sample ID: 400-139785-10 MSD
Matrix: Water
Analysis Batch: 359723

Client Sample ID: AX14362 MW-3
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	0	4

Lab Sample ID: 400-139785-20 MS
Matrix: Water
Analysis Batch: 359723

Client Sample ID: AX14372 MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.060	J	1.00	1.04		mg/L		98	75 - 125

Lab Sample ID: 400-139785-20 MSD
Matrix: Water
Analysis Batch: 359723

Client Sample ID: AX14372 MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.060	J	1.00	1.06		mg/L		100	75 - 125	2	4

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-139785-1
 SDG: Gaston Ash Pond (8)

Lab Sample ID: MB 400-359969/3
Matrix: Water
Analysis Batch: 359969

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			07/10/17 17:02	1

Lab Sample ID: LCS 400-359969/4
Matrix: Water
Analysis Batch: 359969

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	4.34		mg/L		109	90 - 110

Lab Sample ID: 400-139785-29 MS
Matrix: Water
Analysis Batch: 359969

Client Sample ID: AX14381 MW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.050	J	1.00	1.08		mg/L		103	75 - 125

Lab Sample ID: 400-139785-29 MSD
Matrix: Water
Analysis Batch: 359969

Client Sample ID: AX14381 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
Fluoride	0.050	J	1.00	1.04		mg/L		99	75 - 125	4	4

Lab Sample ID: 400-139868-L-1 DU
Matrix: Water
Analysis Batch: 359969

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride	0.14		0.140		mg/L		0	4

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-359576/6
Matrix: Water
Analysis Batch: 359576

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			07/06/17 07:47	1

Lab Sample ID: LCS 400-359576/7
Matrix: Water
Analysis Batch: 359576

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	15.5		mg/L		104	90 - 110

QC Sample Results

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

TestAmerica Job ID: 400-139785-1
 SDG: Gaston Ash Pond (8)

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: MRL 400-359576/3
Matrix: Water
Analysis Batch: 359576

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	3.89	J	mg/L		78	50 - 150

Lab Sample ID: 400-139785-10 MS
Matrix: Water
Analysis Batch: 359576

Client Sample ID: AX14362 MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	2.5	J	10.0	13.7		mg/L		112	77 - 128

Lab Sample ID: 400-139785-10 MSD
Matrix: Water
Analysis Batch: 359576

Client Sample ID: AX14362 MW-3
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	2.5	J	10.0	13.9		mg/L		114	77 - 128	1	5

Lab Sample ID: 400-139785-20 MS
Matrix: Water
Analysis Batch: 359576

Client Sample ID: AX14372 MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	150	F1	150	157	F1	mg/L		5	77 - 128

Lab Sample ID: 400-139785-20 MSD
Matrix: Water
Analysis Batch: 359576

Client Sample ID: AX14372 MW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	150	F1	150	160	F1	mg/L		7	77 - 128	2	5

Lab Sample ID: MB 400-359580/6
Matrix: Water
Analysis Batch: 359580

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			07/06/17 10:16	1

Lab Sample ID: LCS 400-359580/7
Matrix: Water
Analysis Batch: 359580

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	15.4		mg/L		102	90 - 110

Lab Sample ID: MRL 400-359580/3
Matrix: Water
Analysis Batch: 359580

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	3.84	J	mg/L		77	50 - 150

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-139785-1
 SDG: Gaston Ash Pond (8)

Lab Sample ID: 400-139785-23 MS
Matrix: Water
Analysis Batch: 359580

Client Sample ID: AX14375 MW-21
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	130	F1	150	135	F1	mg/L		4	77 - 128

Lab Sample ID: 400-139785-23 MSD
Matrix: Water
Analysis Batch: 359580

Client Sample ID: AX14375 MW-21
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	130	F1	150	130	F1	mg/L		0.7	77 - 128	4	5

Lab Sample ID: 400-139785-29 MS
Matrix: Water
Analysis Batch: 359580

Client Sample ID: AX14381 MW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	88	F1	50.0	93.6	F1	mg/L		11	77 - 128

Lab Sample ID: 400-139785-29 MSD
Matrix: Water
Analysis Batch: 359580

Client Sample ID: AX14381 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
Sulfate	88	F1	50.0	93.3	F1	mg/L		10	77 - 128	0	5

Lab Sample ID: MB 400-359910/15
Matrix: Water
Analysis Batch: 359910

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			07/10/17 07:30	1

Lab Sample ID: LCS 400-359910/16
Matrix: Water
Analysis Batch: 359910

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	16.0		mg/L		107	90 - 110

Lab Sample ID: MRL 400-359910/12
Matrix: Water
Analysis Batch: 359910

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	4.91	J	mg/L		98	50 - 150

Lab Sample ID: 480-120402-D-2 MS
Matrix: Water
Analysis Batch: 359910

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	9.5		10.0	21.9		mg/L		124	77 - 128

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-139785-1
 SDG: Gaston Ash Pond (8)

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: 480-120402-D-2 MSD
Matrix: Water
Analysis Batch: 359910

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	9.5		10.0	21.8		mg/L		122	77 - 128	1	5

- 1
- 2
- 3
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- 8
- 9
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- 11
- 12
- 13
- 14

Chain of Custody Record

Client Information		Lab PM: Whitmire, Cheyenne R		COC No: 400-56525-24537.1					
Sampler: Nick Pitts/ Jason Rouss		Carrier Tracking No(s):		Page: 1 of 3					
Company: Alabama Power General Test Laboratory		E-Mail: cheyenne.whitmire@testamericainc.com		Job #: 400-139785					
Address: 744 County Rd 87 GSC #8		Due Date Requested:		Preservation Codes:					
City: Calera		TAT Requested (days): Routine		A - HCL M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 X - EDTA Y - EDA Z - other (specify)					
State, Zip: AL, 35040		PO #:		Other:					
Phone: 205-664-6121(Tel)		WO #:		Total Number of containers:					
Email: sgcopela@southernco.com		Project #:		Special Instructions/Note:					
CCR		40007143		MW-16 MW-16 Dup (Sample Duplicate) MW-17 MW-18 MW-20 FB-2 (Field Blank) MW-1 MW-2 MW-2 Dup (Sample Duplicate) MW-3 MW-15R MW-9 MW-8					
Site: Gaston Ash Pond (8)		SSOW#:		Analysis Requested					
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastefoil, BT=biological)	Field Filtered Sample (Yes or No)	Form MS/MSD (Yes or No)	SM 4500 F _o	SM 4500 Cl _E	SM 4500 SO ₄ F _E
AX14309	6/19/17	1530	G	Water	X	X	X	X	X
AX14310	6/19/17	1530	G	Water	X	X	X	X	X
AX14311	6/19/17	1645	G	Water	X	X	X	X	X
AX14312	6/19/17	1410	G	Water	X	X	X	X	X
AX14313	6/19/17	1135	G	Water	X	X	X	X	X
AX14314	6/19/17	1400	G	Water	X	X	X	X	X
AX14359	6/19/17	1108	G	Water	X	X	X	X	X
AX14360	6/19/17	1419	G	Water	X	X	X	X	X
AX14361	6/19/17	1419	G	Water	X	X	X	X	X
AX14362	6/19/17	1613	G	Water	Y	X	X	X	X
AX14363	6/20/17	0940	G	Water	X	X	X	X	X
AX14364	6/20/17	1316	G	Water	X	X	X	X	X
AX14365	6/20/17	1450	G	Water	X	X	X	X	X
<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:									
Method of Shipment:									
Relinquished by: Sarah Copeland									
Date/Time: 06/26/2017: 0900									
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.:									
Cooler Temperature(s) °C and Other Remarks: 420C JRC									



Chain of Custody Record

Client Information		Sampler: Jason Rouss/ Ben Rothschild		Lab PM: Whitmore, Chyenenne R.		Carrier Tracking No(s):		COC No: 400-56525-24537.1	
Client Contact: Sarah Copeland		Phone:		E-Mail: chyenenne.whitmore@testamericainc.com		Page 2 of 3		Job #: 400-159785	
Company: Alabama Power General Test Laboratory		Address: 744 County Rd 87 GSC #8		City: Calera		State, Zip: AL 35040		Phone: 205-664-6121(Tel)	
Email: sgcopele@southernco.com		Project #: 40007143		Site: Gaston Ash Pond (8)		Due Date Requested:		TAT Requested (days): Routine	
CCR		SSOW#:		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Matrix (Water, Soil, Organics, etc.)		Preservation Code:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		SM 4500 F.C	
SM 4500 C.E		SM 4500 S.O.4.E		Total Number of Containers		Special Instructions/Note:		Preservation Codes:	
AX14366		6/21/17 1415		G		Water		M - Hexane	
AX14367		6/21/17 1433		G		Water		N - None	
AX14368		6/21/17 1710		G		Water		O - AsNaO2	
AX14369		6/21/17 1740		G		Water		P - Na2O4S	
AX14370		6/19/17 1140		G		Water		Q - Na2SO3	
AX14371		6/19/17 1432		G		Water		R - MeOH	
AX14372		6/20/17 0958		G		Water		S - H2SO4	
AX14373		6/20/17 0958		G		Water		T - TSP Dodecahydrate	
AX14374		6/20/17 1118		G		Water		U - Acetone	
AX14375		6/20/17 1221		G		Water		V - MCAA	
AX14376		6/20/17 1339		G		Water		W - ph 4-5	
AX14377		6/20/17 1515		G		Water		Z - other (specify)	
AX14378		6/21/17 1426		G		Water		Other:	
<p><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</p> <p>Deliverable Requested: I, II, III, IV, Other (specify)</p> <p>Empty Kit Relinquished by: _____ Date: _____</p> <p>Relinquished by: Sarah Copeland Date/Time: 06/26/2017, 0900</p> <p>Relinquished by: _____ Date/Time: _____</p> <p>Relinquished by: _____ Date/Time: _____</p> <p>Custody Seals Intact: _____ Custody Seal No.: _____</p> <p>Δ Yes Δ No</p>									
<p>Special Instructions/QC Requirements:</p> <p>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</p> <p><input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months</p> <p>Method of Shipment: _____</p> <p>Received by: _____ Date/Time: 6/27/17 0846</p> <p>Received by: _____ Date/Time: _____</p> <p>Received by: _____ Date/Time: _____</p> <p>Cooler Temperature(s) °C and Other Remarks:</p>									



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-139785-1
SDG Number: Gaston Ash Pond (8)

Login Number: 139785

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.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.2°C IR-2
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: 400-139785-1
 SDG: Gaston Ash Pond (8)

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	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
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	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17 *
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-18
Michigan	State Program	5	9912	06-30-17 *
New Jersey	NELAP	2	FL006	06-30-18
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17 *
Tennessee	State Program	4	TN02907	06-30-18
Texas	NELAP	6	T104704286-16-10	09-30-17
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.



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: 400-139866-1

TestAmerica Sample Delivery Group: Gaston Ash Pond (8)

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:

7/28/2017 5:57:20 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: 400-139866-1
SDG: Gaston Ash Pond (8)

Job ID: 400-139866-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-139866-1

RAD

Method(s) PrecSep_0: Radium 228 Prep Batch 160-316464. The following samples were reduced due to limited volume: AX14395 MW-5 (400-139866-20), AX14396 MW-5 DUP (400-139866-21), AX14397 MW-22 (400-139866-22), AX14398 MW-21 (400-139866-23), AX14399 MW-6 (400-139866-24), AX14399 MW-6 (400-139866-24[DU]), AX14400 MW-7 (400-139866-25), AX14401 MW-14 (400-139866-26), AX14402 MW-13 (400-139866-27), AX14403 FB-1 (400-139866-28) and AX14404 MW-12 (400-139866-29).

Method(s) PrecSep_0: Radium 228 Prep Batch 160-316514. The following samples were reduced due to limited volume: AX14315 MW-16 (400-139866-1), AX14316 MW-16 DUP (400-139866-2), AX14317 MW-17 (400-139866-3), AX14318 MW-18 (400-139866-4), AX14319 MW-20 (400-139866-5), AX14320 FB-2 (400-139866-6), AX14382 MW-1 (400-139866-7), AX14383 MW-2 (400-139866-8), AX14384 MW-2 DUP (400-139866-9), AX14385 MW-3 (400-139866-10), AX14386 MW-15R (400-139866-11), AX14387 MW-9 (400-139866-12), AX14388 MW-8 (400-139866-13), AX14389 MW-4 (400-139866-14), AX14390 FB-3 (400-139866-15), AX14391 MW-19 (400-139866-16), AX14392 EB-1 (400-139866-17), AX14393 MW-10 (400-139866-18), AX14393 MW-10 (400-139866-18[DU]) and AX14394 MW-11 (400-139866-19).

Method(s) PrecSep-21: Radium 226 Prep Batch 160-316332. The following samples were reduced due to limited volume: AX14395 MW-5 (400-139866-20), AX14396 MW-5 DUP (400-139866-21), AX14397 MW-22 (400-139866-22), AX14398 MW-21 (400-139866-23), AX14399 MW-6 (400-139866-24), AX14399 MW-6 (400-139866-24[DU]), AX14400 MW-7 (400-139866-25), AX14401 MW-14 (400-139866-26), AX14402 MW-13 (400-139866-27), AX14403 FB-1 (400-139866-28) and AX14404 MW-12 (400-139866-29).

Method(s) PrecSep-21: Radium 226 Prep Batch 160-316503. The following samples were reduced due to limited volume: AX14315 MW-16 (400-139866-1), AX14316 MW-16 DUP (400-139866-2), AX14317 MW-17 (400-139866-3), AX14318 MW-18 (400-139866-4), AX14319 MW-20 (400-139866-5), AX14320 FB-2 (400-139866-6), AX14382 MW-1 (400-139866-7), AX14383 MW-2 (400-139866-8), AX14384 MW-2 DUP (400-139866-9), AX14385 MW-3 (400-139866-10), AX14386 MW-15R (400-139866-11), AX14387 MW-9 (400-139866-12), AX14388 MW-8 (400-139866-13), AX14389 MW-4 (400-139866-14), AX14390 FB-3 (400-139866-15), AX14391 MW-19 (400-139866-16), AX14392 EB-1 (400-139866-17), AX14393 MW-10 (400-139866-18), AX14393 MW-10 (400-139866-18[DU]) and AX14394 MW-11 (400-139866-19).

Method Summary

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

TestAmerica Job ID: 400-139866-1
SDG: Gaston Ash Pond (8)

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: 400-139866-1
SDG: Gaston Ash Pond (8)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-139866-1	AX14315 MW-16	Water	06/19/17 15:30	06/27/17 16:00
400-139866-2	AX14316 MW-16 DUP	Water	06/19/17 15:30	06/27/17 16:00
400-139866-3	AX14317 MW-17	Water	06/19/17 16:45	06/27/17 16:00
400-139866-4	AX14318 MW-18	Water	06/19/17 14:10	06/27/17 16:00
400-139866-5	AX14319 MW-20	Water	06/19/17 11:35	06/27/17 16:00
400-139866-6	AX14320 FB-2	Water	06/19/17 14:00	06/27/17 16:00
400-139866-7	AX14382 MW-1	Water	06/19/17 11:08	06/27/17 16:00
400-139866-8	AX14383 MW-2	Water	06/19/17 14:19	06/27/17 16:00
400-139866-9	AX14384 MW-2 DUP	Water	06/19/17 14:19	06/27/17 16:00
400-139866-10	AX14385 MW-3	Water	06/19/17 16:13	06/27/17 16:00
400-139866-11	AX14386 MW-15R	Water	06/20/17 09:40	06/27/17 16:00
400-139866-12	AX14387 MW-9	Water	06/20/17 13:16	06/27/17 16:00
400-139866-13	AX14388 MW-8	Water	06/20/17 14:50	06/27/17 16:00
400-139866-14	AX14389 MW-4	Water	06/21/17 14:15	06/27/17 16:00
400-139866-15	AX14390 FB-3	Water	06/21/17 14:33	06/27/17 16:00
400-139866-16	AX14391 MW-19	Water	06/21/17 17:10	06/27/17 16:00
400-139866-17	AX14392 EB-1	Water	06/21/17 17:40	06/27/17 16:00
400-139866-18	AX14393 MW-10	Water	06/19/17 11:40	06/27/17 16:00
400-139866-19	AX14394 MW-11	Water	06/19/17 14:32	06/27/17 16:00
400-139866-20	AX14395 MW-5	Water	06/20/17 09:58	06/27/17 16:00
400-139866-21	AX14396 MW-5 DUP	Water	06/20/17 09:58	06/27/17 16:00
400-139866-22	AX14397 MW-22	Water	06/20/17 11:18	06/27/17 16:00
400-139866-23	AX14398 MW-21	Water	06/20/17 12:21	06/27/17 16:00
400-139866-24	AX14399 MW-6	Water	06/20/17 13:39	06/27/17 16:00
400-139866-25	AX14400 MW-7	Water	06/20/17 15:15	06/27/17 16:00
400-139866-26	AX14401 MW-14	Water	06/21/17 14:26	06/27/17 16:00
400-139866-27	AX14402 MW-13	Water	06/21/17 17:14	06/27/17 16:00
400-139866-28	AX14403 FB-1	Water	06/21/17 17:45	06/27/17 16:00
400-139866-29	AX14404 MW-12	Water	06/21/17 18:48	06/27/17 16:00

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14315 MW-16

Lab Sample ID: 400-139866-1

Date Collected: 06/19/17 15:30

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.94		0.266	0.318	1.00	0.104	pCi/L	07/06/17 10:51	07/28/17 06:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					07/06/17 10:51	07/28/17 06:02	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.06		0.317	0.332	1.00	0.403	pCi/L	07/06/17 12:55	07/18/17 11:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					07/06/17 12:55	07/18/17 11:00	1
Y Carrier	99.7		40 - 110					07/06/17 12:55	07/18/17 11:00	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	3.00		0.414	0.460	5.00	0.403	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14316 MW-16 DUP

Lab Sample ID: 400-139866-2

Date Collected: 06/19/17 15:30

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	2.30		0.293	0.359	1.00	0.118	pCi/L	07/06/17 10:51	07/28/17 06:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					07/06/17 10:51	07/28/17 06:02	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.12		0.322	0.338	1.00	0.398	pCi/L	07/06/17 12:55	07/18/17 11:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					07/06/17 12:55	07/18/17 11:00	1
Y Carrier	95.9		40 - 110					07/06/17 12:55	07/18/17 11:00	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	3.42		0.435	0.493	5.00	0.398	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14317 MW-17

Lab Sample ID: 400-139866-3

Date Collected: 06/19/17 16:45

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.219		0.101	0.103	1.00	0.107	pCi/L	07/06/17 10:51	07/28/17 06:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					07/06/17 10:51	07/28/17 06:02	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0980	U	0.246	0.246	1.00	0.425	pCi/L	07/06/17 12:55	07/18/17 11:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					07/06/17 12:55	07/18/17 11:01	1
Y Carrier	94.6		40 - 110					07/06/17 12:55	07/18/17 11:01	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	0.317	U	0.265	0.266	5.00	0.425	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14318 MW-18

Lab Sample ID: 400-139866-4

Date Collected: 06/19/17 14:10

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.527		0.153	0.160	1.00	0.129	pCi/L	07/06/17 10:51	07/28/17 06:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					07/06/17 10:51	07/28/17 06:02	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.454		0.278	0.281	1.00	0.419	pCi/L	07/06/17 12:55	07/18/17 11:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					07/06/17 12:55	07/18/17 11:01	1
Y Carrier	93.2		40 - 110					07/06/17 12:55	07/18/17 11:01	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	0.980		0.317	0.323	5.00	0.419	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14319 MW-20

Lab Sample ID: 400-139866-5

Date Collected: 06/19/17 11:35

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	14.7		0.739	1.52	1.00	0.134	pCi/L	07/06/17 10:51	07/28/17 06:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					07/06/17 10:51	07/28/17 06:02	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.868		0.330	0.339	1.00	0.451	pCi/L	07/06/17 12:55	07/18/17 11:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					07/06/17 12:55	07/18/17 11:01	1
Y Carrier	90.5		40 - 110					07/06/17 12:55	07/18/17 11:01	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	15.6		0.809	1.55	5.00	0.451	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14320 FB-2

Lab Sample ID: 400-139866-6

Date Collected: 06/19/17 14:00

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0150	U	0.0515	0.0515	1.00	0.103	pCi/L	07/06/17 10:51	07/28/17 11:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					07/06/17 10:51	07/28/17 11:57	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0690	U	0.279	0.279	1.00	0.509	pCi/L	07/06/17 12:55	07/18/17 11:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					07/06/17 12:55	07/18/17 11:01	1
Y Carrier	92.6		40 - 110					07/06/17 12:55	07/18/17 11:01	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	-0.0540	U	0.283	0.283	5.00	0.509	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14382 MW-1

Lab Sample ID: 400-139866-7

Date Collected: 06/19/17 11:08

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.500		0.145	0.151	1.00	0.118	pCi/L	07/06/17 10:51	07/28/17 06:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.2		40 - 110					07/06/17 10:51	07/28/17 06:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.519		0.281	0.285	1.00	0.418	pCi/L	07/06/17 12:55	07/18/17 11:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.2		40 - 110					07/06/17 12:55	07/18/17 11:01	1
Y Carrier	94.9		40 - 110					07/06/17 12:55	07/18/17 11:01	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	1.02		0.316	0.323	5.00	0.418	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14383 MW-2

Lab Sample ID: 400-139866-8

Date Collected: 06/19/17 14:19

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0912	U	0.0759	0.0763	1.00	0.108	pCi/L	07/06/17 10:51	07/28/17 06:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					07/06/17 10:51	07/28/17 06:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.266	U	0.249	0.250	1.00	0.399	pCi/L	07/06/17 12:55	07/18/17 11:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					07/06/17 12:55	07/18/17 11:01	1
Y Carrier	95.6		40 - 110					07/06/17 12:55	07/18/17 11:01	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	0.357	U	0.260	0.261	5.00	0.399	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14384 MW-2 DUP

Lab Sample ID: 400-139866-9

Date Collected: 06/19/17 14:19

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.105	U	0.0814	0.0820	1.00	0.114	pCi/L	07/06/17 10:51	07/28/17 06:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					07/06/17 10:51	07/28/17 06:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.200	U	0.218	0.219	1.00	0.357	pCi/L	07/06/17 12:55	07/18/17 11:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					07/06/17 12:55	07/18/17 11:01	1
Y Carrier	100		40 - 110					07/06/17 12:55	07/18/17 11:01	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	0.306	U	0.233	0.234	5.00	0.357	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14385 MW-3

Lab Sample ID: 400-139866-10

Date Collected: 06/19/17 16:13

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0616	U	0.0725	0.0727	1.00	0.118	pCi/L	07/06/17 10:51	07/28/17 06:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					07/06/17 10:51	07/28/17 06:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.133	U	0.254	0.255	1.00	0.435	pCi/L	07/06/17 12:55	07/18/17 11:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					07/06/17 12:55	07/18/17 11:02	1
Y Carrier	90.5		40 - 110					07/06/17 12:55	07/18/17 11:02	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	0.194	U	0.264	0.265	5.00	0.435	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14386 MW-15R

Lab Sample ID: 400-139866-11

Date Collected: 06/20/17 09:40

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0771	U	0.0727	0.0731	1.00	0.108	pCi/L	07/06/17 10:51	07/28/17 06:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.2		40 - 110					07/06/17 10:51	07/28/17 06:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.285	U	0.293	0.294	1.00	0.477	pCi/L	07/06/17 12:55	07/18/17 11:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.2		40 - 110					07/06/17 12:55	07/18/17 11:02	1
Y Carrier	91.9		40 - 110					07/06/17 12:55	07/18/17 11:02	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	0.362	U	0.302	0.303	5.00	0.477	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14387 MW-9

Lab Sample ID: 400-139866-12

Date Collected: 06/20/17 13:16

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.210		0.107	0.109	1.00	0.130	pCi/L	07/06/17 10:51	07/28/17 06:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.7		40 - 110					07/06/17 10:51	07/28/17 06:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.321	U	0.259	0.261	1.00	0.409	pCi/L	07/06/17 12:55	07/18/17 11:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.7		40 - 110					07/06/17 12:55	07/18/17 11:02	1
Y Carrier	92.2		40 - 110					07/06/17 12:55	07/18/17 11:02	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	0.530		0.281	0.283	5.00	0.409	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14388 MW-8

Lab Sample ID: 400-139866-13

Date Collected: 06/20/17 14:50

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0141	U	0.0657	0.0657	1.00	0.143	pCi/L	07/06/17 10:51	07/28/17 06:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		40 - 110					07/06/17 10:51	07/28/17 06:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.234	U	0.255	0.256	1.00	0.418	pCi/L	07/06/17 12:55	07/18/17 11:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		40 - 110					07/06/17 12:55	07/18/17 11:02	1
Y Carrier	91.2		40 - 110					07/06/17 12:55	07/18/17 11:02	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	0.220	U	0.264	0.265	5.00	0.418	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14389 MW-4

Lab Sample ID: 400-139866-14

Date Collected: 06/21/17 14:15

Matrix: Water

Date Received: 06/27/17 16:00

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		0.0867	0.0874	1.00	0.117	pCi/L	07/06/17 10:51	07/28/17 06:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		40 - 110					07/06/17 10:51	07/28/17 06:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0430	U	0.267	0.267	1.00	0.487	pCi/L	07/06/17 12:55	07/18/17 11:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.0		40 - 110					07/06/17 12:55	07/18/17 11:02	1
Y Carrier	97.3		40 - 110					07/06/17 12:55	07/18/17 11:02	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	0.0763	U	0.281	0.281	5.00	0.487	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14390 FB-3

Lab Sample ID: 400-139866-15

Date Collected: 06/21/17 14:33

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0235	U	0.0584	0.0585	1.00	0.111	pCi/L	07/06/17 10:51	07/28/17 06:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					07/06/17 10:51	07/28/17 06:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0935	U	0.290	0.290	1.00	0.502	pCi/L	07/06/17 12:55	07/18/17 11:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					07/06/17 12:55	07/18/17 11:02	1
Y Carrier	93.6		40 - 110					07/06/17 12:55	07/18/17 11:02	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.117	U	0.295	0.296	5.00	0.502	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14391 MW-19

Lab Sample ID: 400-139866-16

Date Collected: 06/21/17 17:10

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.236		0.105	0.108	1.00	0.0963	pCi/L	07/06/17 10:51	07/28/17 06:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.9		40 - 110					07/06/17 10:51	07/28/17 06:04	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0928	U	0.228	0.228	1.00	0.434	pCi/L	07/06/17 12:55	07/18/17 11:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.9		40 - 110					07/06/17 12:55	07/18/17 11:02	1
Y Carrier	96.6		40 - 110					07/06/17 12:55	07/18/17 11:02	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	0.143	U	0.251	0.252	5.00	0.434	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14392 EB-1

Lab Sample ID: 400-139866-17

Date Collected: 06/21/17 17:40

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0678	U	0.0706	0.0708	1.00	0.108	pCi/L	07/06/17 10:51	07/28/17 06:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.8		40 - 110					07/06/17 10:51	07/28/17 06:04	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.659		0.394	0.399	1.00	0.608	pCi/L	07/06/17 12:55	07/18/17 11:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.8		40 - 110					07/06/17 12:55	07/18/17 11:02	1
Y Carrier	95.6		40 - 110					07/06/17 12:55	07/18/17 11:02	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	0.727		0.400	0.405	5.00	0.608	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14393 MW-10

Lab Sample ID: 400-139866-18

Date Collected: 06/19/17 11:40

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0418	U	0.0780	0.0780	1.00	0.139	pCi/L	07/06/17 10:51	07/28/17 06:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					07/06/17 10:51	07/28/17 06:04	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.573		0.340	0.344	1.00	0.517	pCi/L	07/06/17 12:55	07/18/17 11:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					07/06/17 12:55	07/18/17 11:02	1
Y Carrier	88.9		40 - 110					07/06/17 12:55	07/18/17 11:02	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	0.614		0.349	0.353	5.00	0.517	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14394 MW-11

Lab Sample ID: 400-139866-19

Date Collected: 06/19/17 14:32

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0996	U	0.0967	0.0971	1.00	0.148	pCi/L	07/06/17 10:51	07/28/17 06:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.1		40 - 110					07/06/17 10:51	07/28/17 06:04	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.318	U	0.301	0.303	1.00	0.485	pCi/L	07/06/17 12:55	07/18/17 11:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.1		40 - 110					07/06/17 12:55	07/18/17 11:03	1
Y Carrier	94.3		40 - 110					07/06/17 12:55	07/18/17 11:03	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	0.418	U	0.317	0.318	5.00	0.485	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14395 MW-5

Lab Sample ID: 400-139866-20

Date Collected: 06/20/17 09:58

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.269		0.118	0.121	1.00	0.135	pCi/L	07/06/17 07:43	07/28/17 06:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		40 - 110					07/06/17 07:43	07/28/17 06:08	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.467		0.262	0.266	1.00	0.387	pCi/L	07/06/17 08:26	07/14/17 14:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		40 - 110					07/06/17 08:26	07/14/17 14:37	1
Y Carrier	97.3		40 - 110					07/06/17 08:26	07/14/17 14:37	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	0.737		0.288	0.292	5.00	0.387	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14396 MW-5 DUP

Lab Sample ID: 400-139866-21

Date Collected: 06/20/17 09:58

Matrix: Water

Date Received: 06/27/17 16:00

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		0.108	0.110	1.00	0.112	pCi/L	07/06/17 07:43	07/28/17 06:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					07/06/17 07:43	07/28/17 06:08	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.123	U	0.248	0.248	1.00	0.424	pCi/L	07/06/17 08:26	07/14/17 14:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					07/06/17 08:26	07/14/17 14:37	1
Y Carrier	105		40 - 110					07/06/17 08:26	07/14/17 14:37	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.375	U	0.270	0.271	5.00	0.424	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14397 MW-22

Lab Sample ID: 400-139866-22

Date Collected: 06/20/17 11:18

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.203		0.102	0.104	1.00	0.123	pCi/L	07/06/17 07:43	07/28/17 06:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		40 - 110					07/06/17 07:43	07/28/17 06:08	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.141	U	0.262	0.262	1.00	0.445	pCi/L	07/06/17 08:26	07/14/17 14:37	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.0		40 - 110					07/06/17 08:26	07/14/17 14:37	1
Y Carrier	105		40 - 110					07/06/17 08:26	07/14/17 14:37	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	0.344	U	0.281	0.282	5.00	0.445	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14398 MW-21

Lab Sample ID: 400-139866-23

Date Collected: 06/20/17 12:21

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0897	U	0.0732	0.0737	1.00	0.105	pCi/L	07/06/17 07:43	07/28/17 06:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					07/06/17 07:43	07/28/17 06:09	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.135	U	0.206	0.206	1.00	0.347	pCi/L	07/06/17 08:26	07/14/17 14:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					07/06/17 08:26	07/14/17 14:38	1
Y Carrier	101		40 - 110					07/06/17 08:26	07/14/17 14:38	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	0.224	U	0.218	0.219	5.00	0.347	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14399 MW-6

Lab Sample ID: 400-139866-24

Date Collected: 06/20/17 13:39

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.198		0.0956	0.0973	1.00	0.102	pCi/L	07/06/17 07:43	07/28/17 06:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.6		40 - 110					07/06/17 07:43	07/28/17 06:09	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.286	U	0.264	0.265	1.00	0.424	pCi/L	07/06/17 08:26	07/14/17 14:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.6		40 - 110					07/06/17 08:26	07/14/17 14:38	1
Y Carrier	101		40 - 110					07/06/17 08:26	07/14/17 14:38	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	0.484		0.280	0.282	5.00	0.424	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14400 MW-7

Lab Sample ID: 400-139866-25

Date Collected: 06/20/17 15:15

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0829	U	0.0837	0.0840	1.00	0.131	pCi/L	07/06/17 07:43	07/28/17 06:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.1		40 - 110					07/06/17 07:43	07/28/17 06:14	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0774	U	0.229	0.230	1.00	0.400	pCi/L	07/06/17 08:26	07/14/17 14:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.1		40 - 110					07/06/17 08:26	07/14/17 14:38	1
Y Carrier	101		40 - 110					07/06/17 08:26	07/14/17 14:38	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	0.160	U	0.244	0.244	5.00	0.400	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14401 MW-14

Lab Sample ID: 400-139866-26

Date Collected: 06/21/17 14:26

Matrix: Water

Date Received: 06/27/17 16:00

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		0.124	0.127	1.00	0.128	pCi/L	07/06/17 07:43	07/28/17 06:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					07/06/17 07:43	07/28/17 06:14	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.213	U	0.266	0.267	1.00	0.441	pCi/L	07/06/17 08:26	07/14/17 14:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					07/06/17 08:26	07/14/17 14:38	1
Y Carrier	97.3		40 - 110					07/06/17 08:26	07/14/17 14:38	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	0.529		0.294	0.296	5.00	0.441	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14402 MW-13

Lab Sample ID: 400-139866-27

Date Collected: 06/21/17 17:14

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.276		0.121	0.124	1.00	0.137	pCi/L	07/06/17 07:43	07/28/17 06:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					07/06/17 07:43	07/28/17 06:14	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.362	U	0.291	0.292	1.00	0.460	pCi/L	07/06/17 08:26	07/14/17 14:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					07/06/17 08:26	07/14/17 14:38	1
Y Carrier	93.6		40 - 110					07/06/17 08:26	07/14/17 14:38	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	0.637		0.315	0.318	5.00	0.460	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14403 FB-1

Lab Sample ID: 400-139866-28

Date Collected: 06/21/17 17:45

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.288		0.124	0.127	1.00	0.138	pCi/L	07/06/17 07:43	07/28/17 06:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.1		40 - 110					07/06/17 07:43	07/28/17 06:14	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.644		0.278	0.285	1.00	0.391	pCi/L	07/06/17 08:26	07/14/17 14:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.1		40 - 110					07/06/17 08:26	07/14/17 14:40	1
Y Carrier	100		40 - 110					07/06/17 08:26	07/14/17 14:40	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	0.932		0.305	0.312	5.00	0.391	pCi/L		07/28/17 15:26	1

Client Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14404 MW-12

Lab Sample ID: 400-139866-29

Date Collected: 06/21/17 18:48

Matrix: Water

Date Received: 06/27/17 16:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.518		0.152	0.159	1.00	0.121	pCi/L	07/06/17 07:43	07/28/17 06:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					07/06/17 07:43	07/28/17 06:14	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.535		0.295	0.299	1.00	0.437	pCi/L	07/06/17 08:26	07/14/17 14:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					07/06/17 08:26	07/14/17 14:40	1
Y Carrier	86.1		40 - 110					07/06/17 08:26	07/14/17 14:40	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	1.05		0.332	0.338	5.00	0.437	pCi/L		07/28/17 15:26	1

Definitions/Glossary

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

TestAmerica Job ID: 400-139866-1
SDG: Gaston Ash Pond (8)

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: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14315 MW-16
Date Collected: 06/19/17 15:30
Date Received: 06/27/17 16:00

Lab Sample ID: 400-139866-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316503	07/06/17 10:51	LDE	TAL SL
Total/NA	Analysis	9315		1	319582	07/28/17 06:02	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316514	07/06/17 12:55	LDE	TAL SL
Total/NA	Analysis	9320		1	317955	07/18/17 11:00	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Client Sample ID: AX14316 MW-16 DUP
Date Collected: 06/19/17 15:30
Date Received: 06/27/17 16:00

Lab Sample ID: 400-139866-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316503	07/06/17 10:51	LDE	TAL SL
Total/NA	Analysis	9315		1	319582	07/28/17 06:02	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316514	07/06/17 12:55	LDE	TAL SL
Total/NA	Analysis	9320		1	317955	07/18/17 11:00	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Client Sample ID: AX14317 MW-17
Date Collected: 06/19/17 16:45
Date Received: 06/27/17 16:00

Lab Sample ID: 400-139866-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316503	07/06/17 10:51	LDE	TAL SL
Total/NA	Analysis	9315		1	319582	07/28/17 06:02	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316514	07/06/17 12:55	LDE	TAL SL
Total/NA	Analysis	9320		1	317955	07/18/17 11:01	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Client Sample ID: AX14318 MW-18
Date Collected: 06/19/17 14:10
Date Received: 06/27/17 16:00

Lab Sample ID: 400-139866-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316503	07/06/17 10:51	LDE	TAL SL
Total/NA	Analysis	9315		1	319582	07/28/17 06:02	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316514	07/06/17 12:55	LDE	TAL SL
Total/NA	Analysis	9320		1	317955	07/18/17 11:01	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-139866-1
SDG: Gaston Ash Pond (8)

Client Sample ID: AX14319 MW-20

Lab Sample ID: 400-139866-5

Date Collected: 06/19/17 11:35

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316503	07/06/17 10:51	LDE	TAL SL
Total/NA	Analysis	9315		1	319582	07/28/17 06:02	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316514	07/06/17 12:55	LDE	TAL SL
Total/NA	Analysis	9320		1	317955	07/18/17 11:01	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Client Sample ID: AX14320 FB-2

Lab Sample ID: 400-139866-6

Date Collected: 06/19/17 14:00

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316503	07/06/17 10:51	LDE	TAL SL
Total/NA	Analysis	9315		1	319585	07/28/17 11:57	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316514	07/06/17 12:55	LDE	TAL SL
Total/NA	Analysis	9320		1	317955	07/18/17 11:01	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Client Sample ID: AX14382 MW-1

Lab Sample ID: 400-139866-7

Date Collected: 06/19/17 11:08

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316503	07/06/17 10:51	LDE	TAL SL
Total/NA	Analysis	9315		1	319582	07/28/17 06:01	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316514	07/06/17 12:55	LDE	TAL SL
Total/NA	Analysis	9320		1	317955	07/18/17 11:01	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Client Sample ID: AX14383 MW-2

Lab Sample ID: 400-139866-8

Date Collected: 06/19/17 14:19

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316503	07/06/17 10:51	LDE	TAL SL
Total/NA	Analysis	9315		1	319582	07/28/17 06:01	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316514	07/06/17 12:55	LDE	TAL SL
Total/NA	Analysis	9320		1	317955	07/18/17 11:01	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14384 MW-2 DUP

Lab Sample ID: 400-139866-9

Date Collected: 06/19/17 14:19

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316503	07/06/17 10:51	LDE	TAL SL
Total/NA	Analysis	9315		1	319582	07/28/17 06:01	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316514	07/06/17 12:55	LDE	TAL SL
Total/NA	Analysis	9320		1	317955	07/18/17 11:01	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Client Sample ID: AX14385 MW-3

Lab Sample ID: 400-139866-10

Date Collected: 06/19/17 16:13

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316503	07/06/17 10:51	LDE	TAL SL
Total/NA	Analysis	9315		1	319582	07/28/17 06:01	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316514	07/06/17 12:55	LDE	TAL SL
Total/NA	Analysis	9320		1	317955	07/18/17 11:02	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Client Sample ID: AX14386 MW-15R

Lab Sample ID: 400-139866-11

Date Collected: 06/20/17 09:40

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316503	07/06/17 10:51	LDE	TAL SL
Total/NA	Analysis	9315		1	319582	07/28/17 06:01	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316514	07/06/17 12:55	LDE	TAL SL
Total/NA	Analysis	9320		1	317955	07/18/17 11:02	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Client Sample ID: AX14387 MW-9

Lab Sample ID: 400-139866-12

Date Collected: 06/20/17 13:16

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316503	07/06/17 10:51	LDE	TAL SL
Total/NA	Analysis	9315		1	319582	07/28/17 06:01	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316514	07/06/17 12:55	LDE	TAL SL
Total/NA	Analysis	9320		1	317955	07/18/17 11:02	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14388 MW-8

Lab Sample ID: 400-139866-13

Date Collected: 06/20/17 14:50

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316503	07/06/17 10:51	LDE	TAL SL
Total/NA	Analysis	9315		1	319582	07/28/17 06:01	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316514	07/06/17 12:55	LDE	TAL SL
Total/NA	Analysis	9320		1	317955	07/18/17 11:02	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Client Sample ID: AX14389 MW-4

Lab Sample ID: 400-139866-14

Date Collected: 06/21/17 14:15

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316503	07/06/17 10:51	LDE	TAL SL
Total/NA	Analysis	9315		1	319582	07/28/17 06:01	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316514	07/06/17 12:55	LDE	TAL SL
Total/NA	Analysis	9320		1	317955	07/18/17 11:02	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Client Sample ID: AX14390 FB-3

Lab Sample ID: 400-139866-15

Date Collected: 06/21/17 14:33

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316503	07/06/17 10:51	LDE	TAL SL
Total/NA	Analysis	9315		1	319582	07/28/17 06:01	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316514	07/06/17 12:55	LDE	TAL SL
Total/NA	Analysis	9320		1	317955	07/18/17 11:02	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Client Sample ID: AX14391 MW-19

Lab Sample ID: 400-139866-16

Date Collected: 06/21/17 17:10

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316503	07/06/17 10:51	LDE	TAL SL
Total/NA	Analysis	9315		1	319585	07/28/17 06:04	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316514	07/06/17 12:55	LDE	TAL SL
Total/NA	Analysis	9320		1	317955	07/18/17 11:02	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Client Sample ID: AX14392 EB-1

Lab Sample ID: 400-139866-17

Date Collected: 06/21/17 17:40

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316503	07/06/17 10:51	LDE	TAL SL
Total/NA	Analysis	9315		1	319585	07/28/17 06:04	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316514	07/06/17 12:55	LDE	TAL SL
Total/NA	Analysis	9320		1	317955	07/18/17 11:02	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Client Sample ID: AX14393 MW-10

Lab Sample ID: 400-139866-18

Date Collected: 06/19/17 11:40

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316503	07/06/17 10:51	LDE	TAL SL
Total/NA	Analysis	9315		1	319585	07/28/17 06:04	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316514	07/06/17 12:55	LDE	TAL SL
Total/NA	Analysis	9320		1	317955	07/18/17 11:02	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Client Sample ID: AX14394 MW-11

Lab Sample ID: 400-139866-19

Date Collected: 06/19/17 14:32

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316503	07/06/17 10:51	LDE	TAL SL
Total/NA	Analysis	9315		1	319585	07/28/17 06:04	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316514	07/06/17 12:55	LDE	TAL SL
Total/NA	Analysis	9320		1	317955	07/18/17 11:03	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Client Sample ID: AX14395 MW-5

Lab Sample ID: 400-139866-20

Date Collected: 06/20/17 09:58

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316332	07/06/17 07:43	LDE	TAL SL
Total/NA	Analysis	9315		1	319585	07/28/17 06:08	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316464	07/06/17 08:26	LDE	TAL SL
Total/NA	Analysis	9320		1	317417	07/14/17 14:37	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-139866-1
SDG: Gaston Ash Pond (8)

Client Sample ID: AX14396 MW-5 DUP

Lab Sample ID: 400-139866-21

Date Collected: 06/20/17 09:58

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316332	07/06/17 07:43	LDE	TAL SL
Total/NA	Analysis	9315		1	319585	07/28/17 06:08	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316464	07/06/17 08:26	LDE	TAL SL
Total/NA	Analysis	9320		1	317417	07/14/17 14:37	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Client Sample ID: AX14397 MW-22

Lab Sample ID: 400-139866-22

Date Collected: 06/20/17 11:18

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316332	07/06/17 07:43	LDE	TAL SL
Total/NA	Analysis	9315		1	319585	07/28/17 06:08	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316464	07/06/17 08:26	LDE	TAL SL
Total/NA	Analysis	9320		1	317417	07/14/17 14:37	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Client Sample ID: AX14398 MW-21

Lab Sample ID: 400-139866-23

Date Collected: 06/20/17 12:21

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316332	07/06/17 07:43	LDE	TAL SL
Total/NA	Analysis	9315		1	319585	07/28/17 06:09	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316464	07/06/17 08:26	LDE	TAL SL
Total/NA	Analysis	9320		1	317417	07/14/17 14:38	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Client Sample ID: AX14399 MW-6

Lab Sample ID: 400-139866-24

Date Collected: 06/20/17 13:39

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316332	07/06/17 07:43	LDE	TAL SL
Total/NA	Analysis	9315		1	319585	07/28/17 06:09	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316464	07/06/17 08:26	LDE	TAL SL
Total/NA	Analysis	9320		1	317417	07/14/17 14:38	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-139866-1
SDG: Gaston Ash Pond (8)

Client Sample ID: AX14400 MW-7

Lab Sample ID: 400-139866-25

Date Collected: 06/20/17 15:15

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316332	07/06/17 07:43	LDE	TAL SL
Total/NA	Analysis	9315		1	319586	07/28/17 06:14	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316464	07/06/17 08:26	LDE	TAL SL
Total/NA	Analysis	9320		1	317417	07/14/17 14:38	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Client Sample ID: AX14401 MW-14

Lab Sample ID: 400-139866-26

Date Collected: 06/21/17 14:26

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316332	07/06/17 07:43	LDE	TAL SL
Total/NA	Analysis	9315		1	319586	07/28/17 06:14	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316464	07/06/17 08:26	LDE	TAL SL
Total/NA	Analysis	9320		1	317417	07/14/17 14:38	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Client Sample ID: AX14402 MW-13

Lab Sample ID: 400-139866-27

Date Collected: 06/21/17 17:14

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316332	07/06/17 07:43	LDE	TAL SL
Total/NA	Analysis	9315		1	319586	07/28/17 06:14	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316464	07/06/17 08:26	LDE	TAL SL
Total/NA	Analysis	9320		1	317417	07/14/17 14:38	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

Client Sample ID: AX14403 FB-1

Lab Sample ID: 400-139866-28

Date Collected: 06/21/17 17:45

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316332	07/06/17 07:43	LDE	TAL SL
Total/NA	Analysis	9315		1	319586	07/28/17 06:14	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316464	07/06/17 08:26	LDE	TAL SL
Total/NA	Analysis	9320		1	317427	07/14/17 14:40	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	RTM	TAL SL

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-139866-1
SDG: Gaston Ash Pond (8)

Client Sample ID: AX14404 MW-12

Lab Sample ID: 400-139866-29

Date Collected: 06/21/17 18:48

Matrix: Water

Date Received: 06/27/17 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			316332	07/06/17 07:43	LDE	TAL SL
Total/NA	Analysis	9315		1	319586	07/28/17 06:14	RTM	TAL SL
Total/NA	Prep	PrecSep_0			316464	07/06/17 08:26	LDE	TAL SL
Total/NA	Analysis	9320		1	317427	07/14/17 14:40	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319718	07/28/17 15:26	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: 400-139866-1
 SDG: Gaston Ash Pond (8)

Rad

Prep Batch: 316332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139866-20	AX14395 MW-5	Total/NA	Water	PrecSep-21	
400-139866-21	AX14396 MW-5 DUP	Total/NA	Water	PrecSep-21	
400-139866-22	AX14397 MW-22	Total/NA	Water	PrecSep-21	
400-139866-23	AX14398 MW-21	Total/NA	Water	PrecSep-21	
400-139866-24	AX14399 MW-6	Total/NA	Water	PrecSep-21	
400-139866-25	AX14400 MW-7	Total/NA	Water	PrecSep-21	
400-139866-26	AX14401 MW-14	Total/NA	Water	PrecSep-21	
400-139866-27	AX14402 MW-13	Total/NA	Water	PrecSep-21	
400-139866-28	AX14403 FB-1	Total/NA	Water	PrecSep-21	
400-139866-29	AX14404 MW-12	Total/NA	Water	PrecSep-21	
MB 160-316332/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-316332/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-139866-24 DU	AX14399 MW-6	Total/NA	Water	PrecSep-21	

Prep Batch: 316464

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139866-20	AX14395 MW-5	Total/NA	Water	PrecSep_0	
400-139866-21	AX14396 MW-5 DUP	Total/NA	Water	PrecSep_0	
400-139866-22	AX14397 MW-22	Total/NA	Water	PrecSep_0	
400-139866-23	AX14398 MW-21	Total/NA	Water	PrecSep_0	
400-139866-24	AX14399 MW-6	Total/NA	Water	PrecSep_0	
400-139866-25	AX14400 MW-7	Total/NA	Water	PrecSep_0	
400-139866-26	AX14401 MW-14	Total/NA	Water	PrecSep_0	
400-139866-27	AX14402 MW-13	Total/NA	Water	PrecSep_0	
400-139866-28	AX14403 FB-1	Total/NA	Water	PrecSep_0	
400-139866-29	AX14404 MW-12	Total/NA	Water	PrecSep_0	
MB 160-316464/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-316464/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-139866-24 DU	AX14399 MW-6	Total/NA	Water	PrecSep_0	

Prep Batch: 316503

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139866-1	AX14315 MW-16	Total/NA	Water	PrecSep-21	
400-139866-2	AX14316 MW-16 DUP	Total/NA	Water	PrecSep-21	
400-139866-3	AX14317 MW-17	Total/NA	Water	PrecSep-21	
400-139866-4	AX14318 MW-18	Total/NA	Water	PrecSep-21	
400-139866-5	AX14319 MW-20	Total/NA	Water	PrecSep-21	
400-139866-6	AX14320 FB-2	Total/NA	Water	PrecSep-21	
400-139866-7	AX14382 MW-1	Total/NA	Water	PrecSep-21	
400-139866-8	AX14383 MW-2	Total/NA	Water	PrecSep-21	
400-139866-9	AX14384 MW-2 DUP	Total/NA	Water	PrecSep-21	
400-139866-10	AX14385 MW-3	Total/NA	Water	PrecSep-21	
400-139866-11	AX14386 MW-15R	Total/NA	Water	PrecSep-21	
400-139866-12	AX14387 MW-9	Total/NA	Water	PrecSep-21	
400-139866-13	AX14388 MW-8	Total/NA	Water	PrecSep-21	
400-139866-14	AX14389 MW-4	Total/NA	Water	PrecSep-21	
400-139866-15	AX14390 FB-3	Total/NA	Water	PrecSep-21	
400-139866-16	AX14391 MW-19	Total/NA	Water	PrecSep-21	
400-139866-17	AX14392 EB-1	Total/NA	Water	PrecSep-21	
400-139866-18	AX14393 MW-10	Total/NA	Water	PrecSep-21	
400-139866-19	AX14394 MW-11	Total/NA	Water	PrecSep-21	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Rad (Continued)

Prep Batch: 316503 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 160-316503/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-316503/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-139866-18 DU	AX14393 MW-10	Total/NA	Water	PrecSep-21	

Prep Batch: 316514

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139866-1	AX14315 MW-16	Total/NA	Water	PrecSep_0	
400-139866-2	AX14316 MW-16 DUP	Total/NA	Water	PrecSep_0	
400-139866-3	AX14317 MW-17	Total/NA	Water	PrecSep_0	
400-139866-4	AX14318 MW-18	Total/NA	Water	PrecSep_0	
400-139866-5	AX14319 MW-20	Total/NA	Water	PrecSep_0	
400-139866-6	AX14320 FB-2	Total/NA	Water	PrecSep_0	
400-139866-7	AX14382 MW-1	Total/NA	Water	PrecSep_0	
400-139866-8	AX14383 MW-2	Total/NA	Water	PrecSep_0	
400-139866-9	AX14384 MW-2 DUP	Total/NA	Water	PrecSep_0	
400-139866-10	AX14385 MW-3	Total/NA	Water	PrecSep_0	
400-139866-11	AX14386 MW-15R	Total/NA	Water	PrecSep_0	
400-139866-12	AX14387 MW-9	Total/NA	Water	PrecSep_0	
400-139866-13	AX14388 MW-8	Total/NA	Water	PrecSep_0	
400-139866-14	AX14389 MW-4	Total/NA	Water	PrecSep_0	
400-139866-15	AX14390 FB-3	Total/NA	Water	PrecSep_0	
400-139866-16	AX14391 MW-19	Total/NA	Water	PrecSep_0	
400-139866-17	AX14392 EB-1	Total/NA	Water	PrecSep_0	
400-139866-18	AX14393 MW-10	Total/NA	Water	PrecSep_0	
400-139866-19	AX14394 MW-11	Total/NA	Water	PrecSep_0	
MB 160-316514/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-316514/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-139866-18 DU	AX14393 MW-10	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-316332/1-A
Matrix: Water
Analysis Batch: 319585

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 316332

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.06527	U	0.0666	0.0669	1.00	0.103	pCi/L	07/06/17 07:43	07/28/17 06:07	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		Prepared	Analyzed					
Ba Carrier	95.9		40 - 110	07/06/17 07:43	07/28/17 06:07	1				

Lab Sample ID: LCS 160-316332/2-A
Matrix: Water
Analysis Batch: 319585

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316332

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	15.1	14.74		1.50	1.00	0.0681	pCi/L	97	68 - 137
Carrier	LCS LCS		Limits			Prepared	Analyzed	Dil Fac	
Ba Carrier	%Yield	Qualifier		Prepared	Analyzed				
Ba Carrier	96.8		40 - 110	07/06/17 07:43	07/28/17 06:07	1			

Lab Sample ID: 400-139866-24 DU
Matrix: Water
Analysis Batch: 319586

Client Sample ID: AX14399 MW-6
Prep Type: Total/NA
Prep Batch: 316332

Analyte	Sample Sample		DU	DU	Total	RL	MDC	Unit	RER	RER Limit
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					
Radium-226	0.198		0.3678		0.133	1.00	0.124	pCi/L	0.74	1
Carrier	DU DU		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		Prepared	Analyzed					
Ba Carrier	99.7		40 - 110	07/06/17 10:51	07/28/17 06:02	1				

Lab Sample ID: MB 160-316503/1-A
Matrix: Water
Analysis Batch: 319582

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 316503

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.07609	U	0.0785	0.0788	1.00	0.123	pCi/L	07/06/17 10:51	07/28/17 06:02	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		Prepared	Analyzed					
Ba Carrier	94.7		40 - 110	07/06/17 10:51	07/28/17 06:02	1				

Lab Sample ID: LCS 160-316503/2-A
Matrix: Water
Analysis Batch: 319582

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316503

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	15.1	13.67		1.43	1.00	0.138	pCi/L	90	68 - 137

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

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

Lab Sample ID: LCS 160-316503/2-A
Matrix: Water
Analysis Batch: 319582

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316503

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	88.8		40 - 110

Lab Sample ID: 400-139866-18 DU
Matrix: Water
Analysis Batch: 319585

Client Sample ID: AX14393 MW-10
Prep Type: Total/NA
Prep Batch: 316503

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.0418	U	0.07855	U	0.0794	1.00	0.121	pCi/L	0.23	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	89.7		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-316464/1-A
Matrix: Water
Analysis Batch: 317417

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 316464

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.2540	U	0.227	0.228	1.00	0.449	pCi/L	07/06/17 08:26	07/14/17 14:36	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110	07/06/17 08:26	07/14/17 14:36	1
Y Carrier	103		40 - 110	07/06/17 08:26	07/14/17 14:36	1

Lab Sample ID: LCS 160-316464/2-A
Matrix: Water
Analysis Batch: 317417

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316464

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	17.6	17.52		1.86	1.00	0.404	pCi/L	100	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	96.8		40 - 110
Y Carrier	103		40 - 110

Lab Sample ID: 400-139866-24 DU
Matrix: Water
Analysis Batch: 317417

Client Sample ID: AX14399 MW-6
Prep Type: Total/NA
Prep Batch: 316464

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.286	U	0.2107	U	0.239	1.00	0.391	pCi/L	0.15	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

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

Lab Sample ID: 400-139866-24 DU
Matrix: Water
Analysis Batch: 317417

Client Sample ID: AX14399 MW-6
Prep Type: Total/NA
Prep Batch: 316464

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	99.7		40 - 110
Y Carrier	102		40 - 110

Lab Sample ID: MB 160-316514/1-A
Matrix: Water
Analysis Batch: 317955

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 316514

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.1264	U	0.242	0.242	1.00	0.412	pCi/L	07/06/17 12:55	07/18/17 11:00	1
Carrier	MB	MB	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier			40 - 110					07/06/17 12:55	07/18/17 11:00	1
Y Carrier			40 - 110					07/06/17 12:55	07/18/17 11:00	1

Lab Sample ID: LCS 160-316514/2-A
Matrix: Water
Analysis Batch: 317955

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 316514

Analyte	Spike	LCS	LCS	Total	RL	MDC	Unit	%Rec	%Rec.
	Added	Result	Qual	Uncert.					Limits
				(2σ+/-)					
Radium-228	17.6	18.02		1.93	1.00	0.392	pCi/L	103	56 - 140
Carrier	LCS	LCS	Limits						
Ba Carrier			40 - 110						
Y Carrier			40 - 110						

Lab Sample ID: 400-139866-18 DU
Matrix: Water
Analysis Batch: 317955

Client Sample ID: AX14393 MW-10
Prep Type: Total/NA
Prep Batch: 316514

Analyte	Sample	Sample	DU	DU	Total	RL	MDC	Unit	RER	RER	Limit
	Result	Qual	Result	Qual	Uncert.						
					(2σ+/-)						
Radium-228	0.573		0.8686		0.356	1.00	0.477	pCi/L	0.42		1
Carrier	DU	DU	Limits								
Ba Carrier			40 - 110								
Y Carrier			40 - 110								

QC Sample Results

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

TestAmerica Job ID: 400-139866-1
 SDG: Gaston Ash Pond (8)

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

Lab Sample ID: 400-139866-18 DU
Matrix: Water
Analysis Batch: 319718

Client Sample ID: AX14393 MW-10
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	0.614		0.9471		0.365	5.00	0.477	pCi/L	0.46	

Lab Sample ID: 400-139866-24 DU
Matrix: Water
Analysis Batch: 319718

Client Sample ID: AX14399 MW-6
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	0.484		0.5785		0.273	5.00	0.391	pCi/L	0.17	



Chain of Custody Record

Client Information		Sampler: Nick Pitts/ Jason Rouss		Lab PM: Whitmire, Cheyenne R		Carrier Tracking No(s):		COC No: 400-56925-24537.1	
Client Contact: Sarah Copeland		Phone:		E-Mail: cheyenne.whitmire@testamericainc.com		Page 1 of 3		Job #: 400-139866	
Company: Alabama Power General Test Laboratory		Due Date Requested:		Analysis Requested		Preservation Codes:		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA Y - EDTA Z - other (specify)	
Address: 744 County Rd 87 GSC #8		TAT Requested (days): Routine		Perform MS/MSD (Yes or No)		Field Filtered Sample (Yes or No)		Total Number of containers	
City: Calera		State, Zip: AL, 35040		PO #:		9315_Ra226, 9320_Ra228, Ra226Ra228_GPPC		9315_Ra226, 9320_Ra228, Ra226Ra228_GPPC	
Phone: 205-664-6121(Tel)		WO #:		Project #:		40007143		SSOW#:	
Email: sgcopela@southerncco.com		CCR		Site: Gaston Ash Pond (8)		Sample Identification		Special Instructions/Note:	
Sample ID		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)		Matrix (W=water, S=solid, O=water/oil, BT=Tissue, A=Air)	
AX14315		6/19/17		1530		G		Water	
AX14316		6/19/17		1530		G		Water	
AX14317		6/19/17		1645		G		Water	
AX14318		6/19/17		1410		G		Water	
AX14319		6/19/17		1135		G		Water	
AX14320		6/19/17		1400		G		Water	
AX14382		6/19/17		1108		G		Water	
AX14383		6/19/17		1419		G		Water	
AX14384		6/19/17		1419		G		Water	
AX14385		6/19/17		1613		G		Water	
AX14386		6/20/17		0940		G		Water	
AX14387		6/20/17		1316		G		Water	
Possible Hazard Identification		<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"/> Unknown		<input type="checkbox"/> Radiological		<input type="checkbox"/> Radiological		<input type="checkbox"/> Radiological	
Deliverable Requested: I, II, III, IV, Other (specify)		Date: 06/26/2017, 0915		Company: APC		Received by: [Signature]		Date/Time: 6/27/17 1600	
Empty Kit Relinquished by: Sarah Copeland		Date: 06/26/2017, 0915		Company: APC		Received by: [Signature]		Date/Time: 6/27/17 1600	
Relinquished by: Sarah Copeland		Date: 06/26/2017, 0915		Company: APC		Received by: [Signature]		Date/Time: 6/27/17 1600	
Relinquished by: Sarah Copeland		Date: 06/26/2017, 0915		Company: APC		Received by: [Signature]		Date/Time: 6/27/17 1600	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Return To Client <input type="checkbox"/> Archive For _____ Months		Special Instructions/QC Requirements:	



Chain of Custody Record

Client Information		Sampler: Jason Rouss/ Ben Rothschild		Lab PM: Whitmie, Cheyenne R		Carrier Tracking No(s):		COC No: 400-56525-24537.1	
Client Contact: Sarah Copeland		Phone:		E-Mail: cheyenne.whitmire@testamericainc.com		Page 2 of 3		Job #: 400-139866	
Company: Alabama Power General Test Laboratory		Address: 744 County Rd 87 GSC #8		City: Calera		State, Zip: AL, 35040		Phone: 205-664-6121(Tel)	
Email: sgcopele@southernmco.com		Project #: 40007143		WFO #:		Due Date Requested:		TAT Requested (days): Routine	
CCR		Site: Gaston Ash Pond (8)		Sample Date		Sample Time		Sample Type (C=comp, G=grab)	
Matrix (Water, Solid, On-site, BPA-Tissue, Air)		Preservation Code:		Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		Total Number of Containers	
Sample Identification		Sample Date		Sample Time		Sample Type		Matrix	
AX14388	6/20/17	1450	G	Water	X	X	1	MW-8	
AX14389	6/21/17	1415	G	Water	X	X	1	MW-4	
AX14390	6/21/17	1433	G	Water	X	X	1	FB-3 (Field Blank)	
AX14391	6/21/17	1710	G	Water	X	X	1	MW-19	
AX14392	6/21/17	1740	G	Water	X	X	1	EB-1 (Equipment Blank)	
AX14393	6/19/17	1140	G	Water	X	Y	3	MW-10	
AX14394	6/19/17	1432	G	Water	X	X	1	MW-11	
AX14395	6/20/17	0958	G	Water	X	X	1	MW-5	
AX14396	6/20/17	0958	G	Water	X	X	1	MW-5 Dup (Sample Duplicate)	
AX14397	6/20/17	1118	G	Water	X	X	1	MW-22	
AX14398	6/20/17	1221	G	Water	X	X	1	MW-21	
AX14399	6/20/17	1339	G	Water	Y	X	3	MW-6	
Possible Hazard Identification <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: Sarah Copeland Date/Time: 06/26/2017, 0915 Relinquished by: Sarah Copeland Date/Time: _____ Relinquished by: _____ Date/Time: _____ Relinquished by: _____ Date/Time: _____ Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.: _____ Cooler Temperature(s) °C and Other Remarks:									



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-139866-1
SDG Number: Gaston Ash Pond (8)

Login Number: 139866

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	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	N/A	
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: 400-139866-1
 SDG: Gaston Ash Pond (8)

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	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
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	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17 *
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-17
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	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17 *
Tennessee	State Program	4	TN02907	06-30-18
Texas	NELAP	6	T104704286-16-10	09-30-17
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
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	11-30-17
Iowa	State Program	7	373	02-01-18
Kansas	NELAP	7	E-10236	10-31-17
Kentucky (DW)	State Program	4	90125	12-31-17
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-18
Louisiana (DW)	NELAP	6	LA170011	12-31-17
Maryland	State Program	3	310	09-30-18
Missouri	State Program	7	780	06-30-17 *
Nevada	State Program	9	MO000542017-1	07-31-17 *
New Jersey	NELAP	2	MO002	06-30-18
New York	NELAP	2	11616	03-31-18

* 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: 400-139866-1
SDG: Gaston Ash Pond (8)

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
North Dakota	State Program	8	R207	06-30-17 *
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-17 *
Pennsylvania	NELAP	3	68-00540	02-21-18
South Carolina	State Program	4	85002001	06-30-17 *
Texas	NELAP	6	T104704193-16-10	07-31-17 *
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		P330-17-0028	02-02-20
Utah	NELAP	8	MO000542016-8	07-31-17 *
Virginia	NELAP	3	460230	06-14-18
Washington	State Program	10	C592	08-30-17 *
West Virginia DEP	State Program	3	381	08-31-17 *

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

TestAmerica Pensacola



Chain of Custody
Groundwater
 APC General Testing Laboratory
 General Service Complex Building 8

- Field Complete
- Lab Complete

Lab ETA 06/22/2017 08:30

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Ben Rothschild	Location	Gaston Ash Pond
Analysis Requested	Bottle 1 (1L): Radiological		
Comments	Radium Duplicate collected at MW-10 and MW-6 There is no temperature preservation requirement for Radium.		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-10	06/19/2017	11:40	3	Groundwater		AX14393
MW-11	06/19/2017	14:32	1	Groundwater		AX14394
MW-5	06/20/2017	09:58	1	Groundwater		AX14395
MW-5 DUP	06/20/2017	09:58	1	Sample Duplicate		AX14396
MW-22	06/20/2017	11:18	1	Groundwater		AX14397
MW-21	06/20/2017	12:21	1	Groundwater		AX14398
MW-6	06/20/2017	13:39	3	Groundwater		AX14399
MW-7	06/20/2017	15:15	1	Groundwater		AX14400
MW-14	06/21/2017	14:26	1	Groundwater		AX14401
MW-13	06/21/2017	17:14	1	Groundwater		AX14402
FB-1	06/21/2017	17:45	1	Field Blank		AX14403
MW-12	06/21/2017	18:48	1	Groundwater		AX14404

Relinquished By	Received By	Date/Time
	Sarah Copeland <small>Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o.ou, email=sgcopela@southernmco.com, c=US Date: 2017.06.22 08:13:10 -05'00'</small>	06/22/2017 08:13

SmarTroll ID	5151-26193-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>	
Turbidity ID	3901-20010-2-2	Cooler Temp	NA
		Thermometer ID	NA
		pH Strip ID	5881-30147-10-1



Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

- Field Complete
- Lab Complete

Lab ETA 06/22/2017 08:00

Requested Complete Date	<input type="text" value="Routine"/>	Results To	<input type="text" value="Dustin Brooks, Greg Dyer"/>
Site Representative	<input type="text" value="Byron Corina"/>	Requested By	<input type="text" value="Greg Dyer"/>
Collector	<input type="text" value="Jason Rouss"/>	Location	<input type="text" value="Gaston Ash Pond"/>
Analysis Requested	<input type="text" value="Bottle 1 (1L): Radiological"/>		
Comments	<input type="text" value="There is no temperature preservation requirement for Radium."/>		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-1	06/19/2017	11:08	1	Groundwater		AX14382
MW-2	06/19/2017	14:19	1	Groundwater		AX14383
MW-2 DUP	06/19/2017	14:19	1	Sample Duplicate		AX14384
MW-3	06/19/2017	16:13	1	Groundwater		AX14385
MW-15R	06/20/2017	09:40	1	Groundwater		AX14386
MW-9	06/20/2017	13:16	1	Groundwater		AX14387
MW-8	06/20/2017	14:50	1	Groundwater		AX14388
MW-4	06/21/2017	14:15	1	Groundwater		AX14389
FB-3	06/21/2017	14:33	1	Field Blank		AX14390
MW-19	06/21/2017	17:10	1	Groundwater		AX14391
EB-1	06/21/2017	17:40	1	Equipment Blank		AX14392

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: 2017.06.22 08:14:33 -05'00'</small>	06/22/2017 08:14

SmarTroll ID <input type="text" value="4696-23443-3-2"/>	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/> Cooler Temp <input type="text" value="NA"/> Thermometer ID <input type="text" value="NA"/> pH Strip ID <input type="text" value="5881-30147-10-1"/>
Turbidity ID <input type="text" value="4677-23342-4-1"/>	

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 : WMWGASAP_1109
Project/Site : Gaston Ash Pond
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:

Supervision:



Anions

Gaston Ash Pond

WMWGASAP_1109

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 anions were outsourced to Test America, Pensacola for analysis. Listed below is the job narrative provided by Test America.

**Job Narrative
400-142088-1
General Chemistry**

Method(s) SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 365855 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 Cl- E: The following sample was diluted to bring the concentration of target analytes within the calibration range:

AX19387 MW-22 (400-142088-23). Elevated reporting limits (RLs) are provided.

Method(s) SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 365448 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 365507 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:

AX19163 MW-12 (400-142088-3), AX19165 MW-14 (400-142088-5), AX19379 MW-16 (400-142088-15), AX19380 MW-17 (400-142088-16), (400-142056-A-5), (400-142056-A-5 MS), (400-142056-A-5 MSD), AX19381 MW-18 (400-142088-17), AX19382 MW-20 (400-142088-18), AX19382 MW-20 (400-142088-18[MS]), AX19382 MW-20 (400-142088-18[MSD]), AX19383 MW-15R (400-142088-19), AX19384 MW-15RDUP (400-142088-20), AX19386 MW-5 (400-142088-22), AX19387 MW-22 (400-142088-23), AX19388 MW-21 (400-142088-24), AX19389 MW-6 (400-142088-25) and AX19390 MW-7 (400-142088-26). Elevated reporting limits (RLs) are provided.



Metals ICP

Gaston Ash Pond

WMWGASAP_1109

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>
AX19161	20170908BK	WMWGASAP_1109
AX19162	20170908BK	WMWGASAP_1109
AX19163	20170908BK	WMWGASAP_1109
AX19164	20170908BK	WMWGASAP_1109
AX19165	20170908BK	WMWGASAP_1109
AX19166	20170908BK	WMWGASAP_1109
AX19167	20170908BK	WMWGASAP_1109
AX19168	20170908BK	WMWGASAP_1109
AX19169	20170908BK	WMWGASAP_1109
AX19170	20170908BK	WMWGASAP_1109
AX19375	20170908CK &20170921bDK	WMWGASAP_1109
AX19376	20170908CK &20170921bDK	WMWGASAP_1109
AX19377	20170908CK &20170921bDK	WMWGASAP_1109
AX19378	20170908CK &20170921bDK	WMWGASAP_1109
AX19379	20170908CK &20170921bDK	WMWGASAP_1109
AX19380	20170908CK &20170921bDK	WMWGASAP_1109
AX19381	20170908CK &20170921bDK & 20170922AK	WMWGASAP_1109
AX19382	20170908CK &20170921bDK & 20170922AK	WMWGASAP_1109
AX19383	20170908CK &20170921bDK	WMWGASAP_1109
AX19384	20170908CK &20170921bDK	WMWGASAP_1109
AX19385	20170908DK	WMWGASAP_1109
AX19386	20170908DK	WMWGASAP_1109
AX19387	20170908DK & 20170914D2K	WMWGASAP_1109
AX19388	20170908DK	WMWGASAP_1109
AX19389	20170908DK	WMWGASAP_1109
AX19390	20170908DK & 20170914D2K	WMWGASAP_1109
AX19391	20170908DK	WMWGASAP_1109
AX19392	20170908DK	WMWGASAP_1109
AX19393	20170908DK	WMWGASAP_1109



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.
7. The following samples were revised to reflect the current Calcium MDL and RL project limits: AX19381, AX19382, AX19387 & AX19390. No results or qualifiers were effected.

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, with the following exception: Batch 20170908CK had a failing LCS for Calcium. (The Boron LCS passed, so data was reported.) This entire batch was reanalyzed for Calcium on 9/21/2017, batch 20170921bDK, with passing LCS.
- 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.



8. All samples were analyzed at a x2 dilution to compensate for potential matrix effects. However, the following samples were further 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>
AX19381	Calcium	x10
AX19382	Calcium	x10
AX19387	Calcium	x10
AX19390	Calcium	x10

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



TDS

Gaston Ash Pond

WMWGASAP_1109

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>
AX19161	601322	WMWGASAP_1109
AX19162	601322	WMWGASAP_1109
AX19163	601322	WMWGASAP_1109
AX19164	601322	WMWGASAP_1109
AX19165	601322	WMWGASAP_1109
AX19166	601322	WMWGASAP_1109
AX19167	601322	WMWGASAP_1109
AX19168	601322	WMWGASAP_1109
AX19169	601322	WMWGASAP_1109
AX19170	601322	WMWGASAP_1109
AX19375	601438	WMWGASAP_1109
AX19376	601438	WMWGASAP_1109
AX19377	601438	WMWGASAP_1109
AX19378	601438	WMWGASAP_1109
AX19379	601438	WMWGASAP_1109
AX19380	601438	WMWGASAP_1109
AX19381	601439	WMWGASAP_1109
AX19382	601439	WMWGASAP_1109
AX19383	601439	WMWGASAP_1109
AX19384	601439	WMWGASAP_1109
AX19385	601439	WMWGASAP_1109
AX19386	601439	WMWGASAP_1109
AX19387	601439	WMWGASAP_1109
AX19388	601439	WMWGASAP_1109
AX19389	601439	WMWGASAP_1109
AX19390	601439	WMWGASAP_1109
AX19391	601594	MWMGASAP_1109
AX19392	601594	MWMGASAP_1109
AX19393	601594	MWMGASAP_1109



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 0.5 mg 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 2.5 mg and 200 mg residue with the exception of AX19169, AX19378, AX19385 and AX19393 which were below the 2.5mg residue requirement.

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: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AX19161

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	J 0.0242	mg/L
* Calcium, Total	HRG	9/8/2017	EPA 200.7		2	0.10	0.5	36.4	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/18/2017	SM 2540C		1		25	185	mg/L
* Chloride, Total, by Test America	RRC	8/23/2017	SM 4500 Cl_E		1	0.60	2.00	3.1	mg/L
* Fluoride, Total, by Test America	CAC	8/19/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		1	1.40	5.00	J 3.4	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: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AX19161

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19170	Boron, Total	mg/L	0.00250	0.044	1.00	0.915	0.922	0.926	0.85 to 1.15	91.5	70 to 130	0.774	20
AX19170	Calcium, Total	mg/L	0.00843	0.22	5.00	35.1	35.9	4.29	4.25 to 5.75	73.4	70 to 130	2.06	20

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-10

Laboratory ID Number: AX19161

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Prec	
AX19170	Solids, Dissolved	mg/L	7.00	25			170	56.0	40 to 60	0.592	5

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Expiration: June 30, 2018

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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



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AX19162

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	0.124	mg/L
* Calcium, Total	HRG	9/8/2017	EPA 200.7		2	0.10	0.5	34.6	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/18/2017	SM 2540C		1		25	135	mg/L
* Chloride, Total, by Test America	RRC	8/23/2017	SM 4500 Cl_E		1	0.60	2.00	6.7	mg/L
* Fluoride, Total, by Test America	CAC	8/19/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		1	1.40	5.00	34	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
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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AX19162

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19170	Boron, Total	mg/L	0.00250	0.044	1.00	0.915	0.922	0.926	0.85 to 1.15	91.5	70 to 130	0.774	20
AX19170	Calcium, Total	mg/L	0.00843	0.22	5.00	35.1	35.9	4.29	4.25 to 5.75	73.4	70 to 130	2.06	20

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-11

Laboratory ID Number: AX19162

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX19170	Solids, Dissolved	mg/L	7.00	25			170	56.0	40 to 60	0.592	5

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Expiration: June 30, 2018

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CC:

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 FAX (205) 257-1654

Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AX19163

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	0.359	mg/L
* Calcium, Total	HRG	9/8/2017	EPA 200.7		2	0.10	0.5	60.6	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/18/2017	SM 2540C		1		50	372	mg/L
* Chloride, Total, by Test America	RRC	8/23/2017	SM 4500 Cl_E		1	0.60	2.00	21	mg/L
* Fluoride, Total, by Test America	CAC	8/19/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		5	7.0	25	100	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
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 (205) 664-6032 or 6171
 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AX19163

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19170	Calcium, Total	mg/L	0.00843	0.22	5.00	35.1	35.9	4.29	4.25 to 5.75	73.4	70 to 130	2.06	20
AX19170	Boron, Total	mg/L	0.00250	0.044	1.00	0.915	0.922	0.926	0.85 to 1.15	91.5	70 to 130	0.774	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

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-12

Laboratory ID Number: AX19163

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX19170	Solids, Dissolved	mg/L	7.00	25			170	56.0	40 to 60	0.592	5

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

Alabama Power General Test Laboratory
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Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AX19164

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	9/8/2017	EPA 200.7		2	0.10	0.5	43.5	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/18/2017	SM 2540C		1		25	217	mg/L
* Chloride, Total, by Test America	RRC	8/23/2017	SM 4500 Cl_E		1	0.60	2.00	5.6	mg/L
* Fluoride, Total, by Test America	CAC	8/19/2017	SM 4500 F_C		1	0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		1	1.40	5.00	U <1.4	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: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AX19164

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19170	Calcium, Total	mg/L	0.00843	0.22	5.00	35.1	35.9	4.29	4.25 to 5.75	73.4	70 to 130	2.06	20
AX19170	Boron, Total	mg/L	0.00250	0.044	1.00	0.915	0.922	0.926	0.85 to 1.15	91.5	70 to 130	0.774	20

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-13

Laboratory ID Number: AX19164

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX19170	Solids, Dissolved	mg/L	7.00	25			170	56.0	40 to 60	0.592	5

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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: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AX19165

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	9/8/2017	EPA 200.7		2	0.10	0.5	72.1	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/18/2017	SM 2540C		1		50	340	mg/L
* Chloride, Total, by Test America	RRC	8/27/2017	SM 4500 Cl_E		1	0.60	2.00	4.9	mg/L
* Fluoride, Total, by Test America	CAC	8/19/2017	SM 4500 F_C		1	0.032	0.10	0.12	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		2	2.80	10	67	mg/L

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AX19165

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19170	Calcium, Total	mg/L	0.00843	0.22	5.00	35.1	35.9	4.29	4.25 to 5.75	73.4	70 to 130	2.06	20
AX19170	Boron, Total	mg/L	0.00250	0.044	1.00	0.915	0.922	0.926	0.85 to 1.15	91.5	70 to 130	0.774	20

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-14

Laboratory ID Number: AX19165

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX19170	Solids, Dissolved	mg/L	7.00	25			170	56.0	40 to 60	0.592	5

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

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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: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AX19166

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	0.230	mg/L
* Calcium, Total	HRG	9/8/2017	EPA 200.7		2	0.10	0.5	48.9	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/18/2017	SM 2540C		1		25	281	mg/L
* Chloride, Total, by Test America	RRC	8/27/2017	SM 4500 Cl_E		1	0.60	2.00	17	mg/L
* Fluoride, Total, by Test America	CAC	8/19/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		1	1.40	5.00	24	mg/L

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Expiration: June 30, 2018

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AX19166

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19170	Calcium, Total	mg/L	0.00843	0.22	5.00	35.1	35.9	4.29	4.25 to 5.75	73.4	70 to 130	2.06	20
AX19170	Boron, Total	mg/L	0.00250	0.044	1.00	0.915	0.922	0.926	0.85 to 1.15	91.5	70 to 130	0.774	20

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-4

Laboratory ID Number: AX19166

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Limit
AX19170	Solids, Dissolved	mg/L	7.00	25				170	56.0	40 to 60			0.592 5

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Alabama Power General Test Laboratory
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 FAX (205) 257-1654

Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-4 DUP

Laboratory ID Number: AX19167

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	0.228	mg/L
* Calcium, Total	HRG	9/8/2017	EPA 200.7		2	0.10	0.5	48.2	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/18/2017	SM 2540C		1		25	286	mg/L
* Chloride, Total, by Test America	RRC	8/27/2017	SM 4500 Cl_E		1	0.60	2.00	17	mg/L
* Fluoride, Total, by Test America	CAC	8/19/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		1	1.40	5.00	24	mg/L

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-4 DUP

Laboratory ID Number: AX19167

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX19170	Calcium, Total	mg/L	0.00843	0.22	5.00	35.1	35.9	4.29	4.25 to 5.75	73.4	70 to 130	2.06	20
AX19170	Boron, Total	mg/L	0.00250	0.044	1.00	0.915	0.922	0.926	0.85 to 1.15	91.5	70 to 130	0.774	20

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-4 DUP

Laboratory ID Number: AX19167

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX19170	Solids, Dissolved	mg/L	7.00	25			170	56.0	40 to 60	0.592	5

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Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AX19168

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	9/8/2017	EPA 200.7		2	0.10	0.5	28.1	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/18/2017	SM 2540C		1		25	146	mg/L
* Chloride, Total, by Test America	RRC	8/27/2017	SM 4500 Cl_E		1	0.60	2.00	2.1	mg/L
* Fluoride, Total, by Test America	CAC	8/19/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		1	1.40	5.00	J 2.4	mg/L

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AX19168

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19170	Calcium, Total	mg/L	0.00843	0.22	5.00	35.1	35.9	4.29	4.25 to 5.75	73.4	70 to 130	2.06	20
AX19170	Boron, Total	mg/L	0.00250	0.044	1.00	0.915	0.922	0.926	0.85 to 1.15	91.5	70 to 130	0.774	20

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-3

Laboratory ID Number: AX19168

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Limit
AX19170	Solids, Dissolved	mg/L	7.00	25				170	56.0	40 to 60			0.592 5

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Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - FB-2

Laboratory ID Number: AX19169

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	9/8/2017	EPA 200.7		2	0.10	0.5	J 0.138	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/18/2017	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total, by Test America	RRC	8/27/2017	SM 4500 Cl_E		1	0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	CAC	8/19/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		1	1.40	5.00	U <1.4	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

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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - FB-2

Laboratory ID Number: AX19169

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19170	Boron, Total	mg/L	0.00250	0.044	1.00	0.915	0.922	0.926	0.85 to 1.15	91.5	70 to 130	0.774	20
AX19170	Calcium, Total	mg/L	0.00843	0.22	5.00	35.1	35.9	4.29	4.25 to 5.75	73.4	70 to 130	2.06	20

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Expiration: June 30, 2018

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - FB-2

Laboratory ID Number: AX19169

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX19170	Solids, Dissolved	mg/L	7.00	25			170	56.0	40 to 60		0.592 5

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

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

Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AX19170

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	9/8/2017	EPA 200.7		2	0.10	0.5	31.5	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/18/2017	SM 2540C		1		25	168	mg/L
* Chloride, Total, by Test America	RRC	8/27/2017	SM 4500 Cl_E		1	0.60	2.00	5.4	mg/L
* Fluoride, Total, by Test America	CAC	8/19/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		1	1.40	5.00	J 1.7	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: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AX19170

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19170	Boron, Total	mg/L	0.00250	0.044	1.00	0.915	0.922	0.926	0.85 to 1.15	91.5	70 to 130	0.774	20
AX19170	Calcium, Total	mg/L	0.00843	0.22	5.00	35.1	35.9	4.29	4.25 to 5.75	73.4	70 to 130	2.06	20

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Expiration: June 30, 2018

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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 15-Aug-17

Description: Gaston Ash Pond - MW-2

Laboratory ID Number: AX19170

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Limit
AX19170	Solids, Dissolved	mg/L	7.00	25				170	56.0	40 to 60			0.592 5

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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:

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 FAX (205) 257-1654

Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AX19375

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	9/21/2017	EPA 200.7		2	0.10	0.5	43.0	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/21/2017	SM 2540C		1		25	232	mg/L
* Chloride, Total, by Test America	RRC	8/23/2017	SM 4500 Cl_E		1	0.60	2.00	12	mg/L
* Fluoride, Total, by Test America	CAC	8/19/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		1	1.40	5.00	22	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

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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AX19375

Sample	Analysis	Units	MB	MB				LFB		Rec			Prec
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19384	Calcium, Total	mg/L	-0.00307	0.22	5.00	43.6	43.6	5.07	4.25 to 5.75	90.3	70 to 130	0.178	20
AX19384	Boron, Total	mg/L	0.000566	0.044	1.00	1.83	1.84	0.919	0.85 to 1.15	94.7	70 to 130	0.183	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

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-19

Laboratory ID Number: AX19375

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Prec	
AX19380	Solids, Dissolved	mg/L	8.00	25			438	54.0	40 to 60	1.15	5

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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:

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 FAX (205) 257-1654

Certificate Of Analysis Alabama Power



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AX19376

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	9/21/2017	EPA 200.7		2	0.10	0.5	57.0	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/21/2017	SM 2540C		1		25	284	mg/L
* Chloride, Total, by Test America	RRC	8/27/2017	SM 4500 Cl_E		1	0.60	2.00	2.9	mg/L
* Fluoride, Total, by Test America	CAC	8/19/2017	SM 4500 F_C		1	0.032	0.10	J 0.080	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		1	1.40	5.00	16	mg/L

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AX19376

Sample	Analysis	Units	MB	MB				LFB		Rec			Prec
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19384	Calcium, Total	mg/L	-0.00307	0.22	5.00	43.6	43.6	5.07	4.25 to 5.75	90.3	70 to 130	0.178	20
AX19384	Boron, Total	mg/L	0.000566	0.044	1.00	1.83	1.84	0.919	0.85 to 1.15	94.7	70 to 130	0.183	20

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Expiration: June 30, 2018

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-1

Laboratory ID Number: AX19376

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Limit
AX19380	Solids, Dissolved	mg/L	8.00	25				438	54.0	40 to 60			1.15 5

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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Alabama Power General Test Laboratory
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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AX19377

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	J 0.0862	mg/L
* Calcium, Total	HRG	9/21/2017	EPA 200.7		2	0.10	0.5	51.6	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/21/2017	SM 2540C		1		25	279	mg/L
* Chloride, Total, by Test America	RRC	8/27/2017	SM 4500 Cl_E		1	0.60	2.00	4.6	mg/L
* Fluoride, Total, by Test America	CAC	8/19/2017	SM 4500 F_C		1	0.032	0.10	J 0.090	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		1	1.40	5.00	5	mg/L

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AX19377

Sample	Analysis	Units	MB	MB				LFB		Rec			Prec
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19384	Calcium, Total	mg/L	-0.00307	0.22	5.00	43.6	43.6	5.07	4.25 to 5.75	90.3	70 to 130	0.178	20
AX19384	Boron, Total	mg/L	0.000566	0.044	1.00	1.83	1.84	0.919	0.85 to 1.15	94.7	70 to 130	0.183	20

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-8

Laboratory ID Number: AX19377

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX19380	Solids, Dissolved	mg/L	8.00	25			438	54.0	40 to 60			1.15	5

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Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAPFB
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX19378

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	9/21/2017	EPA 200.7		2	0.10	0.5	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/21/2017	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total, by Test America	RRC	8/27/2017	SM 4500 Cl_E		1	0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	CAC	8/19/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		1	1.40	5.00	U <1.4	mg/L

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAPFB
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX19378

Sample	Analysis	Units	MB	MB				LFB		Rec			Prec
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19384	Boron, Total	mg/L	0.000566	0.044	1.00	1.83	1.84	0.919	0.85 to 1.15	94.7	70 to 130	0.183	20
AX19384	Calcium, Total	mg/L	-0.00307	0.22	5.00	43.6	43.6	5.07	4.25 to 5.75	90.3	70 to 130	0.178	20

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAPFB
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX19378

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX19380	Solids, Dissolved	mg/L	8.00	25			438	54.0	40 to 60			1.15	5

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AX19379

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	1.24	mg/L
* Calcium, Total	HRG	9/21/2017	EPA 200.7		2	0.10	0.5	41.3	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/21/2017	SM 2540C		1		25	263	mg/L
* Chloride, Total, by Test America	RRC	8/23/2017	SM 4500 Cl_E		1	0.60	2.00	12	mg/L
* Fluoride, Total, by Test America	CAC	8/19/2017	SM 4500 F_C		1	0.032	0.10	0.12	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		5	7.00	25	140	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

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AX19379

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19384	Calcium, Total	mg/L	-0.00307	0.22	5.00	43.6	43.6	5.07	4.25 to 5.75	90.3	70 to 130	0.178	20
AX19384	Boron, Total	mg/L	0.000566	0.044	1.00	1.83	1.84	0.919	0.85 to 1.15	94.7	70 to 130	0.183	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

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-16

Laboratory ID Number: AX19379

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Prec	
AX19380	Solids, Dissolved	mg/L	8.00	25			438	54.0	40 to 60	1.15	5

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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:

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 FAX (205) 257-1654

Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AX19380

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	2.64	mg/L
* Calcium, Total	HRG	9/21/2017	EPA 200.7		2	0.10	0.5	72.8	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/21/2017	SM 2540C		1		50	428	mg/L
* Chloride, Total, by Test America	RRC	8/23/2017	SM 4500 Cl_E		1	0.60	2.00	17	mg/L
* Fluoride, Total, by Test America	CAC	8/19/2017	SM 4500 F_C		1	0.032	0.10	0.22	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		10	14.0	50	250	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: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AX19380

Sample	Analysis	Units	MB	MB				LFB		Rec			Prec
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19384	Boron, Total	mg/L	0.000566	0.044	1.00	1.83	1.84	0.919	0.85 to 1.15	94.7	70 to 130	0.183	20
AX19384	Calcium, Total	mg/L	-0.00307	0.22	5.00	43.6	43.6	5.07	4.25 to 5.75	90.3	70 to 130	0.178	20

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-17

Laboratory ID Number: AX19380

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX19380	Solids, Dissolved	mg/L	8.00	25			438	54.0	40 to 60			1.15	5

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CC:

Alabama Power General Test Laboratory
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Certificate Of Analysis  **Alabama Power**

Revised Copy



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AX19381

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	1.19	mg/L
* Calcium, Total	HRG	9/22/2017	EPA 200.7		10	1.0	5.0	105	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/21/2017	SM 2540C		1		50	550	mg/L
* Chloride, Total, by Test America	RRC	8/23/2017	SM 4500 Cl_E		1	0.60	2.00	12	mg/L
* Fluoride, Total, by Test America	CAC	8/19/2017	SM 4500 F_C		1	0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		5	7.00	25	150	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
 REVISED COPY: The MDL and RL for Calcium was incorrect for project limits.

Alabama Power General Test Laboratory
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Batch QC Summary



Revised Copy



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AX19381

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19384	Calcium, Total	mg/L	-0.00307	0.22	5.00	43.6	43.6	5.07	4.25 to 5.75	90.3	70 to 130	0.178	20
AX19384	Boron, Total	mg/L	0.000566	0.044	1.00	1.83	1.84	0.919	0.85 to 1.15	94.7	70 to 130	0.183	20

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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Batch QC Summary



Revised Copy



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-18

Laboratory ID Number: AX19381

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
				Limit			Duplicate	LFB	Limit	Prec	
AX19390	Solids, Dissolved	mg/L	8.00	25			476	54.0	40 to 60	1.45	5

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Certificate Of Analysis



Revised Copy



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AX19382

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	3.40	mg/L
* Calcium, Total	HRG	9/22/2017	EPA 200.7		10	1.0	5.0	159	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/21/2017	SM 2540C		1		100	872	mg/L
* Chloride, Total, by Test America	RRC	8/23/2017	SM 4500 Cl_E		1	0.60	2.00	18	mg/L
* Fluoride, Total, by Test America	CAC	8/19/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		20	28.0	100	540	mg/L

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Batch QC Summary



Revised Copy



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AX19382

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19384	Calcium, Total	mg/L	-0.00307	0.22	5.00	43.6	43.6	5.07	4.25 to 5.75	90.3	70 to 130	0.178	20
AX19384	Boron, Total	mg/L	0.000566	0.044	1.00	1.83	1.84	0.919	0.85 to 1.15	94.7	70 to 130	0.183	20

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Expiration: June 30, 2018

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Batch QC Summary



Revised Copy



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-20

Laboratory ID Number: AX19382

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec			
				Limit			Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AX19390	Solids, Dissolved	mg/L	8.00	25			476	54.0	40 to 60			1.45	5

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Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AX19383

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	0.906	mg/L
* Calcium, Total	HRG	9/21/2017	EPA 200.7		2	0.10	0.5	39.5	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/21/2017	SM 2540C		1		50	332	mg/L
* Chloride, Total, by Test America	RRC	8/23/2017	SM 4500 Cl_E		1	0.60	2.00	27	mg/L
* Fluoride, Total, by Test America	CAC	8/19/2017	SM 4500 F_C		1	0.032	0.10	J 0.070	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		5	7.00	25	140	mg/L

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Expiration: June 30, 2018

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AX19383

Sample	Analysis	Units	MB	MB				LFB		Rec			Prec
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19384	Calcium, Total	mg/L	-0.00307	0.22	5.00	43.6	43.6	5.07	4.25 to 5.75	90.3	70 to 130	0.178	20
AX19384	Boron, Total	mg/L	0.000566	0.044	1.00	1.83	1.84	0.919	0.85 to 1.15	94.7	70 to 130	0.183	20

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-15R

Laboratory ID Number: AX19383

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AX19390	Solids, Dissolved	mg/L	8.00	25				476	54.0	40 to 60			1.45	5

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Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-15RDUP

Laboratory ID Number: AX19384

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	0.886	mg/L
* Calcium, Total	HRG	9/21/2017	EPA 200.7		2	0.10	0.5	39.0	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/21/2017	SM 2540C		1		50	356	mg/L
* Chloride, Total, by Test America	RRC	8/23/2017	SM 4500 Cl_E		1	0.60	2.00	27	mg/L
* Fluoride, Total, by Test America	BAB	9/5/2017	SM 4500 F_C		1	0.032	0.10	J 0.060	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		5	7.00	25	150	mg/L

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-15RDUP

Laboratory ID Number: AX19384

Sample	Analysis	Units	MB	MB				LFB		Rec			Prec
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19384	Calcium, Total	mg/L	-0.00307	0.22	5.00	43.6	43.6	5.07	4.25 to 5.75	90.3	70 to 130	0.178	20
AX19384	Boron, Total	mg/L	0.000566	0.044	1.00	1.83	1.84	0.919	0.85 to 1.15	94.7	70 to 130	0.183	20

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-15RDUP

Laboratory ID Number: AX19384

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
				Limit			Duplicate	LFB	Limit	Prec	
AX19390	Solids, Dissolved	mg/L	8.00	25			476	54.0	40 to 60	1.45	5

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAPFB
Sample Date: 14-Aug-17
Customer ID:
Delivery Date: 16-Aug-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX19385

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	9/8/2017	EPA 200.7		2	0.10	0.5	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/21/2017	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total, by Test America	RRC	8/27/2017	SM 4500 Cl_E		1	0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	BAB	9/5/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		1	1.40	5.00	U <1.4	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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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAPFB
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX19385

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19393	Calcium, Total	mg/L	-0.00101	0.22	5.00	4.68	4.59	4.46	4.25 to 5.75	93.6	70 to 130	1.88	20
AX19393	Boron, Total	mg/L	0.00122	0.044	1.00	0.892	0.937	0.872	0.85 to 1.15	89.2	70 to 130	4.98	20

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAPFB
 Sample Date: 14-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond Field Blank

Laboratory ID Number: AX19385

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX19390	Solids, Dissolved	mg/L	8.00	25			476	54.0	40 to 60			1.45	5

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

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Certificate Of Analysis Alabama Power



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AX19386

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	2.16	mg/L
* Calcium, Total	HRG	9/8/2017	EPA 200.7		2	0.10	0.5	65.7	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/21/2017	SM 2540C		1		50	440	mg/L
* Chloride, Total, by Test America	RRC	8/27/2017	SM 4500 Cl_E		1	0.60	2.00	36	mg/L
* Fluoride, Total, by Test America	BAB	9/5/2017	SM 4500 F_C		1	0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		5	7.00	25	170	mg/L

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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, 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: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AX19386

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19393	Calcium, Total	mg/L	-0.00101	0.22	5.00	4.68	4.59	4.46	4.25 to 5.75	93.6	70 to 130	1.88	20
AX19393	Boron, Total	mg/L	0.00122	0.044	1.00	0.892	0.937	0.872	0.85 to 1.15	89.2	70 to 130	4.98	20

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-5

Laboratory ID Number: AX19386

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
								Duplicate	LFB	Limit	Rec	Limit	Prec
AX19390	Solids, Dissolved	mg/L	8.00	25				476	54.0	40 to 60			1.45
													5

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Expiration: June 30, 2018

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CC:

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 FAX (205) 257-1654

Certificate Of Analysis  **Alabama Power**

Revised Copy



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AX19387

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	1.87	mg/L
* Calcium, Total	HRG	9/14/2017	EPA 200.7		10	1.0	5.0	81.8	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/21/2017	SM 2540C		1		50	488	mg/L
* Chloride, Total, by Test America	RRC	8/27/2017	SM 4500 Cl_E		2	1.20	4.0	61	mg/L
* Fluoride, Total, by Test America	BAB	9/5/2017	SM 4500 F_C		1	0.032	0.10	J 0.060	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		5	7.00	25	170	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
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Batch QC Summary



Revised Copy



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AX19387

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19393	Calcium, Total	mg/L	-0.00101	0.22	5.00	4.68	4.59	4.46	4.25 to 5.75	93.6	70 to 130	1.88	20
AX19393	Boron, Total	mg/L	0.00122	0.044	1.00	0.892	0.937	0.872	0.85 to 1.15	89.2	70 to 130	4.98	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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Batch QC Summary



Revised Copy



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-22

Laboratory ID Number: AX19387

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
				Limit			Duplicate	LFB	Limit	Prec	
AX19390	Solids, Dissolved	mg/L	8.00	25			476	54.0	40 to 60	1.45	5

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Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AX19388

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	2.04	mg/L
* Calcium, Total	HRG	9/8/2017	EPA 200.7		2	0.10	0.5	54.5	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/21/2017	SM 2540C		1		50	364	mg/L
* Chloride, Total, by Test America	RRC	8/27/2017	SM 4500 Cl_E		1	0.60	2.00	21	mg/L
* Fluoride, Total, by Test America	BAB	9/5/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		5	7.00	25	150	mg/L

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AX19388

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19393	Calcium, Total	mg/L	-0.00101	0.22	5.00	4.68	4.59	4.46	4.25 to 5.75	93.6	70 to 130	1.88	20
AX19393	Boron, Total	mg/L	0.00122	0.044	1.00	0.892	0.937	0.872	0.85 to 1.15	89.2	70 to 130	4.98	20

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-21

Laboratory ID Number: AX19388

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AX19390	Solids, Dissolved	mg/L	8.00	25				476	54.0	40 to 60			1.45	5

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Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AX19389

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	1.34	mg/L
* Calcium, Total	HRG	9/8/2017	EPA 200.7		2	0.10	0.5	52.5	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/21/2017	SM 2540C		1		50	394	mg/L
* Chloride, Total, by Test America	RRC	8/27/2017	SM 4500 Cl_E		1	0.60	2.00	32	mg/L
* Fluoride, Total, by Test America	BAB	9/5/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		5	7.00	25	160	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AX19389

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19393	Calcium, Total	mg/L	-0.00101	0.22	5.00	4.68	4.59	4.46	4.25 to 5.75	93.6	70 to 130	1.88	20
AX19393	Boron, Total	mg/L	0.00122	0.044	1.00	0.892	0.937	0.872	0.85 to 1.15	89.2	70 to 130	4.98	20

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Expiration: June 30, 2018

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-6

Laboratory ID Number: AX19389

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX19390	Solids, Dissolved	mg/L	8.00	25			476	54.0	40 to 60			1.45	5

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Certificate Of Analysis



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To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AX19390

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	1.68	mg/L
* Calcium, Total	HRG	9/14/2017	EPA 200.7		10	1.0	5.0	89.4	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/21/2017	SM 2540C		1		50	490	mg/L
* Chloride, Total, by Test America	RRC	8/27/2017	SM 4500 Cl_E		1	0.60	2.00	18	mg/L
* Fluoride, Total, by Test America	BAB	9/5/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	RRC	8/24/2017	SM 4500 SO4_E		10	14.0	50	210	mg/L

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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Batch QC Summary



Revised Copy



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AX19390

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19393	Calcium, Total	mg/L	-0.00101	0.22	5.00	4.68	4.59	4.46	4.25 to 5.75	93.6	70 to 130	1.88	20
AX19393	Boron, Total	mg/L	0.00122	0.044	1.00	0.892	0.937	0.872	0.85 to 1.15	89.2	70 to 130	4.98	20

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Batch QC Summary



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To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 15-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-7

Laboratory ID Number: AX19390

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX19390	Solids, Dissolved	mg/L	8.00	25			476	54.0	40 to 60	1.45	5

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Certificate Of Analysis Alabama Power



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 16-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AX19391

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	J 0.0213	mg/L
* Calcium, Total	HRG	9/8/2017	EPA 200.7		2	0.10	0.5	30.5	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/23/2017	SM 2540C		1		25	205	mg/L
* Chloride, Total, by Test America	RRC	8/27/2017	SM 4500 Cl_E		1	0.60	2.00	7.6	mg/L
* Fluoride, Total, by Test America	CAC	8/19/2017	SM 4500 F_C		1	0.032	0.10	0.11	mg/L
* Sulfate, Total, by Test America	RRC	8/27/2017	SM 4500 SO4_E		1	1.40	5.00	14	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

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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 16-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AX19391

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19393	Calcium, Total	mg/L	-0.00101	0.22	5.00	4.68	4.59	4.46	4.25 to 5.75	93.6	70 to 130	1.88	20
AX19393	Boron, Total	mg/L	0.00122	0.044	1.00	0.892	0.937	0.872	0.85 to 1.15	89.2	70 to 130	4.98	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 16-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-9

Laboratory ID Number: AX19391

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec		
				Limit				Duplicate	LFB	Limit	Rec	Limit	Limit	
AX19391	Solids, Dissolved	mg/L	5.00	25				199	53.0	40 to 60			1.49	5

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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: WMWGASAP
 Sample Date: 16-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-9DUP

Laboratory ID Number: AX19392

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	9/8/2017	EPA 200.7		2	0.10	0.5	30.5	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/23/2017	SM 2540C		1		25	196	mg/L
* Chloride, Total, by Test America	RRC	8/27/2017	SM 4500 Cl_E		1	0.60	2.00	7.8	mg/L
* Fluoride, Total, by Test America	BAB	9/5/2017	SM 4500 F_C		1	0.032	0.10	0.12	mg/L
* Sulfate, Total, by Test America	RRC	8/27/2017	SM 4500 SO4_E		1	1.40	5.00	13	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: WMWGASAP
 Sample Date: 16-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-9DUP

Laboratory ID Number: AX19392

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19393	Calcium, Total	mg/L	-0.00101	0.22	5.00	4.68	4.59	4.46	4.25 to 5.75	93.6	70 to 130	1.88	20
AX19393	Boron, Total	mg/L	0.00122	0.044	1.00	0.892	0.937	0.872	0.85 to 1.15	89.2	70 to 130	4.98	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

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAP
 Sample Date: 16-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond - MW-9DUP

Laboratory ID Number: AX19392

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec		
				Limit				Duplicate	LFB	Limit	Rec	Limit	Limit	
AX19391	Solids, Dissolved	mg/L	5.00	25				199	53.0	40 to 60			1.49	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.

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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: WMWGASAPEB
 Sample Date: 16-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AX19393

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/8/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	9/8/2017	EPA 200.7		2	0.10	0.5	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	CES	8/23/2017	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total, by Test America	RRC	8/27/2017	SM 4500 Cl_E		1	0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	BAB	9/5/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	RRC	8/27/2017	SM 4500 SO4_E		1	1.40	5.00	U <1.4	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

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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: WMWGASAPEB
 Sample Date: 16-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AX19393

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX19393	Calcium, Total	mg/L	-0.00101	0.22	5.00	4.68	4.59	4.46	4.25 to 5.75	93.6	70 to 130	1.88	20
AX19393	Boron, Total	mg/L	0.00122	0.044	1.00	0.892	0.937	0.872	0.85 to 1.15	89.2	70 to 130	4.98	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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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWGASAPEB
 Sample Date: 16-Aug-17
 Customer ID:
 Delivery Date: 16-Aug-17

Description: Gaston Ash Pond Equipment Blank

Laboratory ID Number: AX19393

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX19391	Solids, Dissolved	mg/L	5.00	25			199	53.0	40 to 60	1.49	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, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

Definitions



Abbreviation	Description
DF	Dilution Factor
LFB	Lab Fortified Blank
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 08/15/2017 14:30

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Gaston Ash Pond
Analysis Requested	Bottle 1 (500mL): Metals, Bottle 2 (500mL): TDS, Bottle 3 (250mL): Anions		
Comments	All anions outsourced to Test America, Pensacola		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-16	08/14/2017	11:28	3	Groundwater		AX19379
MW-17	08/14/2017	12:16	3	Groundwater		AX19380
MW-18	08/14/2017	13:23	3	Groundwater		AX19381
MW-20	08/14/2017	14:10	3	Groundwater		AX19382
MW-15R	08/14/2017	16:38	3	Groundwater		AX19383
MW-15RDUP	08/14/2017	16:38	3	Sample Duplicate		AX19384
FB-1	08/14/2017	16:15	3	Field Blank		AX19385
MW-5	08/15/2017	10:12	3	Groundwater		AX19386
MW-22	08/15/2017	10:58	3	Groundwater		AX19387
MW-21	08/15/2017	11:49	3	Groundwater		AX19388
MW-6	08/15/2017	13:02	3	Groundwater		AX19389
MW-7	08/15/2017	14:04	3	Groundwater		AX19390
MW-9	08/16/2017	10:14	3	Groundwater		AX19391
MW-9DUP	08/16/2017	10:14	3	Sample Duplicate		AX19392
EB-1	08/16/2017	10:45	3	Equipment Blank		AX19393

Relinquished By	Received By	Date/Time
	Keith Kornegay <small>Digitally signed by Keith Kornegay DN: cn=Keith Kornegay, o=Alabama Power Company, ou=Environmental Affairs, email=kkornegay@southernco.com, c=US Date: 2017.08.16 15:21:45 -0500</small>	08/16/2017 15:22

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
		1.4 degrees C
		Thermometer ID
		6035-30997-2-2
		pH Strip ID
		6213-32462-20-8



Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

- Field Complete
- Lab Complete

Lab ETA 08/15/2017 15:30

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Byron Corina	Requested By	Greg Dyer
Collector	Ben Rothschadl	Location	Gaston Ash Pond
Analysis Requested	Bottle 1 (500mL): Metals, Bottle 2 (500mL): TDS, Bottle 3 (250mL): Anions		
Comments	All anions outsourced to Test America, Pensacola		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-10	08/14/2017	10:45	3	Groundwater		AX19161
MW-11	08/14/2017	12:23	3	Groundwater		AX19162
MW-12	08/14/2017	13:45	3	Groundwater		AX19163
MW-13	08/14/2017	15:00	3	Groundwater		AX19164
MW-14	08/15/2017	09:40	3	Groundwater		AX19165
MW-4	08/15/2017	11:12	3	Groundwater		AX19166
MW-4 DUP	08/15/2017	11:12	3	Sample Duplicate		AX19167
MW-3	08/15/2017	12:45	3	Groundwater		AX19168
FB-2	08/15/2017	15:05	3	Field Blank		AX19169
MW-2	08/15/2017	14:00	3	Groundwater		AX19170

Relinquished By	Received By	Date/Time
	Keith Kornegay <small>Digitally signed by Keith Kornegay DN: cn=Keith Kornegay, o=Alabama Power Company, ou=Environmental Affairs, email=kkornegay@southernco.com, c=US Date: 2017.08.15 16:08:43 -0500</small>	08/15/2017 16:09

SmarTroll ID	5151-26193-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	3901-20010-2-2	Cooler Temp
		0.6 degrees C
		Thermometer ID
		6035-30997-2-2
		pH Strip ID
		6153-32034-10-1

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: 400-142088-1

TestAmerica Sample Delivery Group: Plant Gaston Ash Pond

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:

9/6/2017 6:04:10 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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Case Narrative

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

TestAmerica Job ID: 400-142088-1
SDG: Plant Gaston Ash Pond

Job ID: 400-142088-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-142088-1

General Chemistry

Method(s) SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 365855 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 Cl- E: The following sample was diluted to bring the concentration of target analytes within the calibration range: AX19387 MW-22 (400-142088-23). Elevated reporting limits (RLs) are provided.

Method(s) SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 365448 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 365507 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: AX19163 MW-12 (400-142088-3), AX19165 MW-14 (400-142088-5), AX19379 MW-16 (400-142088-15), AX19380 MW-17 (400-142088-16), (400-142056-A-5), (400-142056-A-5 MS), (400-142056-A-5 MSD)AX19381 MW-18 (400-142088-17), AX19382 MW-20 (400-142088-18), AX19382 MW-20 (400-142088-18[MS]), AX19382 MW-20 (400-142088-18[MSD]), AX19383 MW-15R (400-142088-19), AX19384 MW-15RDUP (400-142088-20), AX19386 MW-5 (400-142088-22), AX19387 MW-22 (400-142088-23), AX19388 MW-21 (400-142088-24), AX19389 MW-6 (400-142088-25) and AX19390 MW-7 (400-142088-26). Elevated reporting limits (RLs) are provided.

Detection Summary

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

TestAmerica Job ID: 400-142088-1
SDG: Plant Gaston Ash Pond

Client Sample ID: AX19161 MW-10

Lab Sample ID: 400-142088-1

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	0.040	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	3.4	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX19162 MW-11

Lab Sample ID: 400-142088-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	6.7		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	34		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX19163 MW-12

Lab Sample ID: 400-142088-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	21		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	100		25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: AX19164 MW-13

Lab Sample ID: 400-142088-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.6		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

Client Sample ID: AX19165 MW-14

Lab Sample ID: 400-142088-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4.9		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.12		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	67		10	2.8	mg/L	2		SM 4500 SO4 E	Total/NA

Client Sample ID: AX19166 MW-4

Lab Sample ID: 400-142088-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	17		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	24		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX19167 MW-4DUP

Lab Sample ID: 400-142088-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	17		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	24		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX19168 MW-3

Lab Sample ID: 400-142088-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.1		2.0	0.60	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: AX19169 FB-2

Lab Sample ID: 400-142088-9

No Detections.

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: 400-142088-1
SDG: Plant Gaston Ash Pond

Client Sample ID: AX19170 MW-2

Lab Sample ID: 400-142088-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.4	F1	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	1.7	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX19375 MW-19

Lab Sample ID: 400-142088-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	12		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	22		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX19376 MW-1

Lab Sample ID: 400-142088-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.9		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.080	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	16		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX19377 MW-8

Lab Sample ID: 400-142088-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4.6		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	5.0		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX19378 FB-3

Lab Sample ID: 400-142088-14

No Detections.

Client Sample ID: AX19379 MW-16

Lab Sample ID: 400-142088-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	12		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.12		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	140		25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: AX19380 MW-17

Lab Sample ID: 400-142088-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	17		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.22		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	250		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX19381 MW-18

Lab Sample ID: 400-142088-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	12		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	150		25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: AX19382 MW-20

Lab Sample ID: 400-142088-18

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: 400-142088-1
SDG: Plant Gaston Ash Pond

Client Sample ID: AX19382 MW-20 (Continued)

Lab Sample ID: 400-142088-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	18		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	540	F1	100	28	mg/L	20		SM 4500 SO4 E	Total/NA

Client Sample ID: AX19383 MW-15R

Lab Sample ID: 400-142088-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	27		2.0	0.60	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	140		25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: AX19384 MW-15RDUP

Lab Sample ID: 400-142088-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	27		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	150		25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: AX19385 FB-1

Lab Sample ID: 400-142088-21

No Detections.

Client Sample ID: AX19386 MW-5

Lab Sample ID: 400-142088-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	36		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	170		25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: AX19387 MW-22

Lab Sample ID: 400-142088-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	61		4.0	1.2	mg/L	2		SM 4500 Cl- E	Total/NA
Fluoride	0.060	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	170		25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: AX19388 MW-21

Lab Sample ID: 400-142088-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	21		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	150		25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: AX19389 MW-6

Lab Sample ID: 400-142088-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	32		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	160		25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: AX19390 MW-7

Lab Sample ID: 400-142088-26

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: 400-142088-1
SDG: Plant Gaston Ash Pond

Client Sample ID: AX19390 MW-7 (Continued)

Lab Sample ID: 400-142088-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	18		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	210		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX19391 MW-9

Lab Sample ID: 400-142088-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	7.6		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.11		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: AX19392 MW-9DUP

Lab Sample ID: 400-142088-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	7.8		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.12		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	13		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX19393 EB-1

Lab Sample ID: 400-142088-29

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: 400-142088-1
SDG: Plant Gaston Ash Pond

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: 400-142088-1
SDG: Plant Gaston Ash Pond

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-142088-1	AX19161 MW-10	Water	08/14/17 10:45	08/18/17 10:10
400-142088-2	AX19162 MW-11	Water	08/14/17 12:23	08/18/17 10:10
400-142088-3	AX19163 MW-12	Water	08/14/17 13:45	08/18/17 10:10
400-142088-4	AX19164 MW-13	Water	08/14/17 15:00	08/18/17 10:10
400-142088-5	AX19165 MW-14	Water	08/15/17 09:40	08/18/17 10:10
400-142088-6	AX19166 MW-4	Water	08/15/17 11:12	08/18/17 10:10
400-142088-7	AX19167 MW-4DUP	Water	08/15/17 11:12	08/18/17 10:10
400-142088-8	AX19168 MW-3	Water	08/15/17 12:45	08/18/17 10:10
400-142088-9	AX19169 FB-2	Water	08/15/17 15:05	08/18/17 10:10
400-142088-10	AX19170 MW-2	Water	08/15/17 14:00	08/18/17 10:10
400-142088-11	AX19375 MW-19	Water	08/14/17 16:25	08/18/17 10:10
400-142088-12	AX19376 MW-1	Water	08/15/17 11:06	08/18/17 10:10
400-142088-13	AX19377 MW-8	Water	08/15/17 12:47	08/18/17 10:10
400-142088-14	AX19378 FB-3	Water	08/15/17 13:05	08/18/17 10:10
400-142088-15	AX19379 MW-16	Water	08/14/17 11:28	08/18/17 10:10
400-142088-16	AX19380 MW-17	Water	08/14/17 12:16	08/18/17 10:10
400-142088-17	AX19381 MW-18	Water	08/14/17 13:23	08/18/17 10:10
400-142088-18	AX19382 MW-20	Water	08/14/17 14:10	08/18/17 10:10
400-142088-19	AX19383 MW-15R	Water	08/14/17 16:38	08/18/17 10:10
400-142088-20	AX19384 MW-15RDUP	Water	08/14/17 16:38	08/18/17 10:10
400-142088-21	AX19385 FB-1	Water	08/14/17 16:15	08/18/17 10:10
400-142088-22	AX19386 MW-5	Water	08/15/17 10:12	08/18/17 10:10
400-142088-23	AX19387 MW-22	Water	08/15/17 10:58	08/18/17 10:10
400-142088-24	AX19388 MW-21	Water	08/15/17 11:49	08/18/17 10:10
400-142088-25	AX19389 MW-6	Water	08/15/17 13:02	08/18/17 10:10
400-142088-26	AX19390 MW-7	Water	08/15/17 14:04	08/18/17 10:10
400-142088-27	AX19391 MW-9	Water	08/16/17 10:14	08/18/17 10:10
400-142088-28	AX19392 MW-9DUP	Water	08/16/17 10:14	08/18/17 10:10
400-142088-29	AX19393 EB-1	Water	08/16/17 10:45	08/18/17 10:10

Client Sample Results

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

TestAmerica Job ID: 400-142088-1
 SDG: Plant Gaston Ash Pond

Client Sample ID: AX19161 MW-10

Lab Sample ID: 400-142088-1

Date Collected: 08/14/17 10:45

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.1		2.0	0.60	mg/L			08/23/17 10:08	1
Fluoride	0.040	J	0.10	0.032	mg/L			08/19/17 10:46	1
Sulfate	3.4	J	5.0	1.4	mg/L			08/24/17 08:02	1

Client Sample ID: AX19162 MW-11

Lab Sample ID: 400-142088-2

Date Collected: 08/14/17 12:23

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.7		2.0	0.60	mg/L			08/23/17 10:50	1
Fluoride	<0.032		0.10	0.032	mg/L			08/19/17 10:49	1
Sulfate	34		5.0	1.4	mg/L			08/24/17 08:02	1

Client Sample ID: AX19163 MW-12

Lab Sample ID: 400-142088-3

Date Collected: 08/14/17 13:45

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21		2.0	0.60	mg/L			08/23/17 10:50	1
Fluoride	0.040	J	0.10	0.032	mg/L			08/19/17 10:51	1
Sulfate	100		25	7.0	mg/L			08/24/17 08:34	5

Client Sample ID: AX19164 MW-13

Lab Sample ID: 400-142088-4

Date Collected: 08/14/17 15:00

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.6		2.0	0.60	mg/L			08/23/17 10:50	1
Fluoride	0.050	J	0.10	0.032	mg/L			08/19/17 10:54	1
Sulfate	<1.4		5.0	1.4	mg/L			08/24/17 08:04	1

Client Sample ID: AX19165 MW-14

Lab Sample ID: 400-142088-5

Date Collected: 08/15/17 09:40

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.9		2.0	0.60	mg/L			08/27/17 08:38	1
Fluoride	0.12		0.10	0.032	mg/L			08/19/17 11:30	1
Sulfate	67		10	2.8	mg/L			08/24/17 11:11	2

Client Sample Results

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

TestAmerica Job ID: 400-142088-1
 SDG: Plant Gaston Ash Pond

Client Sample ID: AX19166 MW-4

Date Collected: 08/15/17 11:12

Date Received: 08/18/17 10:10

Lab Sample ID: 400-142088-6

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		2.0	0.60	mg/L			08/27/17 08:38	1
Fluoride	<0.032		0.10	0.032	mg/L			08/19/17 11:32	1
Sulfate	24		5.0	1.4	mg/L			08/24/17 10:04	1

Client Sample ID: AX19167 MW-4DUP

Date Collected: 08/15/17 11:12

Date Received: 08/18/17 10:10

Lab Sample ID: 400-142088-7

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		2.0	0.60	mg/L			08/27/17 08:38	1
Fluoride	<0.032		0.10	0.032	mg/L			08/19/17 11:35	1
Sulfate	24		5.0	1.4	mg/L			08/24/17 10:04	1

Client Sample ID: AX19168 MW-3

Date Collected: 08/15/17 12:45

Date Received: 08/18/17 10:10

Lab Sample ID: 400-142088-8

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.1		2.0	0.60	mg/L			08/27/17 08:38	1
Fluoride	<0.032		0.10	0.032	mg/L			08/19/17 11:38	1
Sulfate	2.4	J	5.0	1.4	mg/L			08/24/17 10:06	1

Client Sample ID: AX19169 FB-2

Date Collected: 08/15/17 15:05

Date Received: 08/18/17 10:10

Lab Sample ID: 400-142088-9

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			08/27/17 08:38	1
Fluoride	<0.032		0.10	0.032	mg/L			08/19/17 11:41	1
Sulfate	<1.4		5.0	1.4	mg/L			08/24/17 10:06	1

Client Sample ID: AX19170 MW-2

Date Collected: 08/15/17 14:00

Date Received: 08/18/17 10:10

Lab Sample ID: 400-142088-10

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.4	F1	2.0	0.60	mg/L			08/27/17 08:38	1
Fluoride	<0.032		0.10	0.032	mg/L			08/19/17 10:35	1
Sulfate	1.7	J	5.0	1.4	mg/L			08/24/17 10:39	1

Client Sample ID: AX19375 MW-19

Date Collected: 08/14/17 16:25

Date Received: 08/18/17 10:10

Lab Sample ID: 400-142088-11

Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		2.0	0.60	mg/L			08/23/17 10:50	1

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-142088-1
SDG: Plant Gaston Ash Pond

Client Sample ID: AX19375 MW-19

Lab Sample ID: 400-142088-11

Date Collected: 08/14/17 16:25

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.040	J	0.10	0.032	mg/L			08/19/17 11:43	1
Sulfate	22		5.0	1.4	mg/L			08/24/17 08:04	1

Client Sample ID: AX19376 MW-1

Lab Sample ID: 400-142088-12

Date Collected: 08/15/17 11:06

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.9		2.0	0.60	mg/L			08/27/17 08:38	1
Fluoride	0.080	J	0.10	0.032	mg/L			08/19/17 11:45	1
Sulfate	16		5.0	1.4	mg/L			08/24/17 10:39	1

Client Sample ID: AX19377 MW-8

Lab Sample ID: 400-142088-13

Date Collected: 08/15/17 12:47

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.6		2.0	0.60	mg/L			08/27/17 08:39	1
Fluoride	0.090	J	0.10	0.032	mg/L			08/19/17 11:58	1
Sulfate	5.0		5.0	1.4	mg/L			08/24/17 10:39	1

Client Sample ID: AX19378 FB-3

Lab Sample ID: 400-142088-14

Date Collected: 08/15/17 13:05

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			08/27/17 08:39	1
Fluoride	<0.032		0.10	0.032	mg/L			08/19/17 12:01	1
Sulfate	<1.4		5.0	1.4	mg/L			08/24/17 10:39	1

Client Sample ID: AX19379 MW-16

Lab Sample ID: 400-142088-15

Date Collected: 08/14/17 11:28

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		2.0	0.60	mg/L			08/23/17 10:50	1
Fluoride	0.12		0.10	0.032	mg/L			08/19/17 12:02	1
Sulfate	140		25	7.0	mg/L			08/24/17 08:29	5

Client Sample ID: AX19380 MW-17

Lab Sample ID: 400-142088-16

Date Collected: 08/14/17 12:16

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		2.0	0.60	mg/L			08/23/17 10:50	1
Fluoride	0.22		0.10	0.032	mg/L			08/19/17 12:05	1

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-142088-1
SDG: Plant Gaston Ash Pond

Client Sample ID: AX19380 MW-17

Lab Sample ID: 400-142088-16

Date Collected: 08/14/17 12:16

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	250		50	14	mg/L			08/24/17 08:50	10

Client Sample ID: AX19381 MW-18

Lab Sample ID: 400-142088-17

Date Collected: 08/14/17 13:23

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		2.0	0.60	mg/L			08/23/17 10:50	1
Fluoride	0.050	J	0.10	0.032	mg/L			08/19/17 12:07	1
Sulfate	150		25	7.0	mg/L			08/24/17 11:06	5

Client Sample ID: AX19382 MW-20

Lab Sample ID: 400-142088-18

Date Collected: 08/14/17 14:10

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		2.0	0.60	mg/L			08/23/17 10:50	1
Fluoride	0.040	J	0.10	0.032	mg/L			08/19/17 11:25	1
Sulfate	540	F1	100	28	mg/L			08/24/17 11:06	20

Client Sample ID: AX19383 MW-15R

Lab Sample ID: 400-142088-19

Date Collected: 08/14/17 16:38

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27		2.0	0.60	mg/L			08/23/17 10:51	1
Fluoride	0.070	J	0.10	0.032	mg/L			08/19/17 12:09	1
Sulfate	140		25	7.0	mg/L			08/24/17 11:11	5

Client Sample ID: AX19384 MW-15RDUP

Lab Sample ID: 400-142088-20

Date Collected: 08/14/17 16:38

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27		2.0	0.60	mg/L			08/23/17 10:51	1
Fluoride	0.060	J	0.10	0.032	mg/L			09/05/17 16:30	1
Sulfate	150		25	7.0	mg/L			08/24/17 11:11	5

Client Sample ID: AX19385 FB-1

Lab Sample ID: 400-142088-21

Date Collected: 08/14/17 16:15

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			08/27/17 08:38	1
Fluoride	<0.032		0.10	0.032	mg/L			09/05/17 16:32	1
Sulfate	<1.4		5.0	1.4	mg/L			08/24/17 10:04	1

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-142088-1
 SDG: Plant Gaston Ash Pond

Client Sample ID: AX19386 MW-5

Lab Sample ID: 400-142088-22

Date Collected: 08/15/17 10:12

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	36		2.0	0.60	mg/L			08/27/17 08:53	1
Fluoride	0.050	J	0.10	0.032	mg/L			09/05/17 16:35	1
Sulfate	170		25	7.0	mg/L			08/24/17 11:11	5

Client Sample ID: AX19387 MW-22

Lab Sample ID: 400-142088-23

Date Collected: 08/15/17 10:58

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	61		4.0	1.2	mg/L			08/27/17 09:09	2
Fluoride	0.060	J	0.10	0.032	mg/L			09/05/17 16:36	1
Sulfate	170		25	7.0	mg/L			08/24/17 11:15	5

Client Sample ID: AX19388 MW-21

Lab Sample ID: 400-142088-24

Date Collected: 08/15/17 11:49

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21		2.0	0.60	mg/L			08/27/17 08:53	1
Fluoride	<0.032		0.10	0.032	mg/L			09/05/17 16:38	1
Sulfate	150		25	7.0	mg/L			08/24/17 11:15	5

Client Sample ID: AX19389 MW-6

Lab Sample ID: 400-142088-25

Date Collected: 08/15/17 13:02

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	32		2.0	0.60	mg/L			08/27/17 08:53	1
Fluoride	0.040	J	0.10	0.032	mg/L			09/05/17 16:41	1
Sulfate	160		25	7.0	mg/L			08/24/17 11:15	5

Client Sample ID: AX19390 MW-7

Lab Sample ID: 400-142088-26

Date Collected: 08/15/17 14:04

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		2.0	0.60	mg/L			08/27/17 08:53	1
Fluoride	0.040	J	0.10	0.032	mg/L			09/05/17 16:48	1
Sulfate	210		50	14	mg/L			08/24/17 11:42	10

Client Sample Results

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

TestAmerica Job ID: 400-142088-1
SDG: Plant Gaston Ash Pond

Client Sample ID: AX19391 MW-9

Lab Sample ID: 400-142088-27

Date Collected: 08/16/17 10:14

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.6		2.0	0.60	mg/L			08/27/17 08:53	1
Fluoride	0.11		0.10	0.032	mg/L			08/19/17 11:52	1
Sulfate	14		5.0	1.4	mg/L			08/27/17 13:11	1

Client Sample ID: AX19392 MW-9DUP

Lab Sample ID: 400-142088-28

Date Collected: 08/16/17 10:14

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.8		2.0	0.60	mg/L			08/27/17 08:53	1
Fluoride	0.12		0.10	0.032	mg/L			09/05/17 16:53	1
Sulfate	13		5.0	1.4	mg/L			08/24/17 10:41	1

Client Sample ID: AX19393 EB-1

Lab Sample ID: 400-142088-29

Date Collected: 08/16/17 10:45

Matrix: Water

Date Received: 08/18/17 10:10

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			08/27/17 08:53	1
Fluoride	<0.032		0.10	0.032	mg/L			09/05/17 16:55	1
Sulfate	<1.4		5.0	1.4	mg/L			08/27/17 13:11	1

Definitions/Glossary

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

TestAmerica Job ID: 400-142088-1
SDG: Plant Gaston Ash Pond

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.
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.
▫	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: 400-142088-1
SDG: Plant Gaston Ash Pond

Client Sample ID: AX19161 MW-10

Lab Sample ID: 400-142088-1

Date Collected: 08/14/17 10:45

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365314	08/23/17 10:08	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	364824	08/19/17 10:46	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	365448	08/24/17 08:02	RRC	TAL PEN

Client Sample ID: AX19162 MW-11

Lab Sample ID: 400-142088-2

Date Collected: 08/14/17 12:23

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365314	08/23/17 10:50	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	364824	08/19/17 10:49	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	365448	08/24/17 08:02	RRC	TAL PEN

Client Sample ID: AX19163 MW-12

Lab Sample ID: 400-142088-3

Date Collected: 08/14/17 13:45

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365314	08/23/17 10:50	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	364824	08/19/17 10:51	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	365448	08/24/17 08:34	RRC	TAL PEN

Client Sample ID: AX19164 MW-13

Lab Sample ID: 400-142088-4

Date Collected: 08/14/17 15:00

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365314	08/23/17 10:50	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	364824	08/19/17 10:54	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	365448	08/24/17 08:04	RRC	TAL PEN

Client Sample ID: AX19165 MW-14

Lab Sample ID: 400-142088-5

Date Collected: 08/15/17 09:40

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365855	08/27/17 08:38	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	364839	08/19/17 11:30	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		2	365507	08/24/17 11:11	RRC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-142088-1
SDG: Plant Gaston Ash Pond

Client Sample ID: AX19166 MW-4

Lab Sample ID: 400-142088-6

Date Collected: 08/15/17 11:12

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365855	08/27/17 08:38	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	364839	08/19/17 11:32	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	365507	08/24/17 10:04	RRC	TAL PEN

Client Sample ID: AX19167 MW-4DUP

Lab Sample ID: 400-142088-7

Date Collected: 08/15/17 11:12

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365855	08/27/17 08:38	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	364839	08/19/17 11:35	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	365507	08/24/17 10:04	RRC	TAL PEN

Client Sample ID: AX19168 MW-3

Lab Sample ID: 400-142088-8

Date Collected: 08/15/17 12:45

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365855	08/27/17 08:38	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	364839	08/19/17 11:38	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	365507	08/24/17 10:06	RRC	TAL PEN

Client Sample ID: AX19169 FB-2

Lab Sample ID: 400-142088-9

Date Collected: 08/15/17 15:05

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365855	08/27/17 08:38	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	364839	08/19/17 11:41	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	365507	08/24/17 10:06	RRC	TAL PEN

Client Sample ID: AX19170 MW-2

Lab Sample ID: 400-142088-10

Date Collected: 08/15/17 14:00

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365855	08/27/17 08:38	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	364824	08/19/17 10:35	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	365507	08/24/17 10:39	RRC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-142088-1
SDG: Plant Gaston Ash Pond

Client Sample ID: AX19375 MW-19

Lab Sample ID: 400-142088-11

Date Collected: 08/14/17 16:25

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365314	08/23/17 10:50	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	364839	08/19/17 11:43	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	365448	08/24/17 08:04	RRC	TAL PEN

Client Sample ID: AX19376 MW-1

Lab Sample ID: 400-142088-12

Date Collected: 08/15/17 11:06

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365855	08/27/17 08:38	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	364839	08/19/17 11:45	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	365507	08/24/17 10:39	RRC	TAL PEN

Client Sample ID: AX19377 MW-8

Lab Sample ID: 400-142088-13

Date Collected: 08/15/17 12:47

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365855	08/27/17 08:39	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	364839	08/19/17 11:58	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	365507	08/24/17 10:39	RRC	TAL PEN

Client Sample ID: AX19378 FB-3

Lab Sample ID: 400-142088-14

Date Collected: 08/15/17 13:05

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365855	08/27/17 08:39	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	364839	08/19/17 12:01	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	365507	08/24/17 10:39	RRC	TAL PEN

Client Sample ID: AX19379 MW-16

Lab Sample ID: 400-142088-15

Date Collected: 08/14/17 11:28

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365314	08/23/17 10:50	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	364839	08/19/17 12:02	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	365448	08/24/17 08:29	RRC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-142088-1
SDG: Plant Gaston Ash Pond

Client Sample ID: AX19380 MW-17

Lab Sample ID: 400-142088-16

Date Collected: 08/14/17 12:16

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365314	08/23/17 10:50	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	364839	08/19/17 12:05	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	365448	08/24/17 08:50	RRC	TAL PEN

Client Sample ID: AX19381 MW-18

Lab Sample ID: 400-142088-17

Date Collected: 08/14/17 13:23

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365314	08/23/17 10:50	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	364839	08/19/17 12:07	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	365507	08/24/17 11:06	RRC	TAL PEN

Client Sample ID: AX19382 MW-20

Lab Sample ID: 400-142088-18

Date Collected: 08/14/17 14:10

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365314	08/23/17 10:50	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	364839	08/19/17 11:25	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		20	365507	08/24/17 11:06	RRC	TAL PEN

Client Sample ID: AX19383 MW-15R

Lab Sample ID: 400-142088-19

Date Collected: 08/14/17 16:38

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365314	08/23/17 10:51	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	364839	08/19/17 12:09	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	365507	08/24/17 11:11	RRC	TAL PEN

Client Sample ID: AX19384 MW-15RDUP

Lab Sample ID: 400-142088-20

Date Collected: 08/14/17 16:38

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365314	08/23/17 10:51	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	366873	09/05/17 16:30	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	365507	08/24/17 11:11	RRC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-142088-1
SDG: Plant Gaston Ash Pond

Client Sample ID: AX19385 FB-1

Lab Sample ID: 400-142088-21

Date Collected: 08/14/17 16:15

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365855	08/27/17 08:38	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	366873	09/05/17 16:32	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	365507	08/24/17 10:04	RRC	TAL PEN

Client Sample ID: AX19386 MW-5

Lab Sample ID: 400-142088-22

Date Collected: 08/15/17 10:12

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365855	08/27/17 08:53	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	366873	09/05/17 16:35	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	365507	08/24/17 11:11	RRC	TAL PEN

Client Sample ID: AX19387 MW-22

Lab Sample ID: 400-142088-23

Date Collected: 08/15/17 10:58

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		2	365855	08/27/17 09:09	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	366873	09/05/17 16:36	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	365507	08/24/17 11:15	RRC	TAL PEN

Client Sample ID: AX19388 MW-21

Lab Sample ID: 400-142088-24

Date Collected: 08/15/17 11:49

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365855	08/27/17 08:53	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	366873	09/05/17 16:38	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	365507	08/24/17 11:15	RRC	TAL PEN

Client Sample ID: AX19389 MW-6

Lab Sample ID: 400-142088-25

Date Collected: 08/15/17 13:02

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365855	08/27/17 08:53	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	366873	09/05/17 16:41	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	365507	08/24/17 11:15	RRC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-142088-1
SDG: Plant Gaston Ash Pond

Client Sample ID: AX19390 MW-7

Lab Sample ID: 400-142088-26

Date Collected: 08/15/17 14:04

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365855	08/27/17 08:53	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	366873	09/05/17 16:48	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	365507	08/24/17 11:42	RRC	TAL PEN

Client Sample ID: AX19391 MW-9

Lab Sample ID: 400-142088-27

Date Collected: 08/16/17 10:14

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365855	08/27/17 08:53	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	364839	08/19/17 11:52	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	365859	08/27/17 13:11	RRC	TAL PEN

Client Sample ID: AX19392 MW-9DUP

Lab Sample ID: 400-142088-28

Date Collected: 08/16/17 10:14

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365855	08/27/17 08:53	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	366873	09/05/17 16:53	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	365507	08/24/17 10:41	RRC	TAL PEN

Client Sample ID: AX19393 EB-1

Lab Sample ID: 400-142088-29

Date Collected: 08/16/17 10:45

Matrix: Water

Date Received: 08/18/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	365855	08/27/17 08:53	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	366873	09/05/17 16:55	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	365859	08/27/17 13:11	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: 400-142088-1
 SDG: Plant Gaston Ash Pond

General Chemistry

Analysis Batch: 364824

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-142088-1	AX19161 MW-10	Total/NA	Water	SM 4500 F C	
400-142088-2	AX19162 MW-11	Total/NA	Water	SM 4500 F C	
400-142088-3	AX19163 MW-12	Total/NA	Water	SM 4500 F C	
400-142088-4	AX19164 MW-13	Total/NA	Water	SM 4500 F C	
400-142088-10	AX19170 MW-2	Total/NA	Water	SM 4500 F C	
MB 400-364824/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-364824/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-142088-10 MS	AX19170 MW-2	Total/NA	Water	SM 4500 F C	
400-142088-10 MSD	AX19170 MW-2	Total/NA	Water	SM 4500 F C	

Analysis Batch: 364839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-142088-5	AX19165 MW-14	Total/NA	Water	SM 4500 F C	
400-142088-6	AX19166 MW-4	Total/NA	Water	SM 4500 F C	
400-142088-7	AX19167 MW-4DUP	Total/NA	Water	SM 4500 F C	
400-142088-8	AX19168 MW-3	Total/NA	Water	SM 4500 F C	
400-142088-9	AX19169 FB-2	Total/NA	Water	SM 4500 F C	
400-142088-11	AX19375 MW-19	Total/NA	Water	SM 4500 F C	
400-142088-12	AX19376 MW-1	Total/NA	Water	SM 4500 F C	
400-142088-13	AX19377 MW-8	Total/NA	Water	SM 4500 F C	
400-142088-14	AX19378 FB-3	Total/NA	Water	SM 4500 F C	
400-142088-15	AX19379 MW-16	Total/NA	Water	SM 4500 F C	
400-142088-16	AX19380 MW-17	Total/NA	Water	SM 4500 F C	
400-142088-17	AX19381 MW-18	Total/NA	Water	SM 4500 F C	
400-142088-18	AX19382 MW-20	Total/NA	Water	SM 4500 F C	
400-142088-19	AX19383 MW-15R	Total/NA	Water	SM 4500 F C	
400-142088-27	AX19391 MW-9	Total/NA	Water	SM 4500 F C	
MB 400-364839/4	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-364839/5	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-142088-18 MS	AX19382 MW-20	Total/NA	Water	SM 4500 F C	
400-142088-18 MSD	AX19382 MW-20	Total/NA	Water	SM 4500 F C	
400-142088-27 MS	AX19391 MW-9	Total/NA	Water	SM 4500 F C	
400-142088-27 MSD	AX19391 MW-9	Total/NA	Water	SM 4500 F C	

Analysis Batch: 365314

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-142088-1	AX19161 MW-10	Total/NA	Water	SM 4500 Cl- E	
400-142088-2	AX19162 MW-11	Total/NA	Water	SM 4500 Cl- E	
400-142088-3	AX19163 MW-12	Total/NA	Water	SM 4500 Cl- E	
400-142088-4	AX19164 MW-13	Total/NA	Water	SM 4500 Cl- E	
400-142088-11	AX19375 MW-19	Total/NA	Water	SM 4500 Cl- E	
400-142088-15	AX19379 MW-16	Total/NA	Water	SM 4500 Cl- E	
400-142088-16	AX19380 MW-17	Total/NA	Water	SM 4500 Cl- E	
400-142088-17	AX19381 MW-18	Total/NA	Water	SM 4500 Cl- E	
400-142088-18	AX19382 MW-20	Total/NA	Water	SM 4500 Cl- E	
400-142088-19	AX19383 MW-15R	Total/NA	Water	SM 4500 Cl- E	
400-142088-20	AX19384 MW-15RDUP	Total/NA	Water	SM 4500 Cl- E	
MB 400-365314/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-365314/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-365314/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-142088-18 MS	AX19382 MW-20	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: 400-142088-1
 SDG: Plant Gaston Ash Pond

General Chemistry (Continued)

Analysis Batch: 365314 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-142088-18 MSD	AX19382 MW-20	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 365448

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-142088-1	AX19161 MW-10	Total/NA	Water	SM 4500 SO4 E	
400-142088-2	AX19162 MW-11	Total/NA	Water	SM 4500 SO4 E	
400-142088-3	AX19163 MW-12	Total/NA	Water	SM 4500 SO4 E	
400-142088-4	AX19164 MW-13	Total/NA	Water	SM 4500 SO4 E	
400-142088-11	AX19375 MW-19	Total/NA	Water	SM 4500 SO4 E	
400-142088-15	AX19379 MW-16	Total/NA	Water	SM 4500 SO4 E	
400-142088-16	AX19380 MW-17	Total/NA	Water	SM 4500 SO4 E	
MB 400-365448/16	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-365448/17	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-365448/13	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-141929-A-2 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-141929-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 365507

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-142088-5	AX19165 MW-14	Total/NA	Water	SM 4500 SO4 E	
400-142088-6	AX19166 MW-4	Total/NA	Water	SM 4500 SO4 E	
400-142088-7	AX19167 MW-4DUP	Total/NA	Water	SM 4500 SO4 E	
400-142088-8	AX19168 MW-3	Total/NA	Water	SM 4500 SO4 E	
400-142088-9	AX19169 FB-2	Total/NA	Water	SM 4500 SO4 E	
400-142088-10	AX19170 MW-2	Total/NA	Water	SM 4500 SO4 E	
400-142088-12	AX19376 MW-1	Total/NA	Water	SM 4500 SO4 E	
400-142088-13	AX19377 MW-8	Total/NA	Water	SM 4500 SO4 E	
400-142088-14	AX19378 FB-3	Total/NA	Water	SM 4500 SO4 E	
400-142088-17	AX19381 MW-18	Total/NA	Water	SM 4500 SO4 E	
400-142088-18	AX19382 MW-20	Total/NA	Water	SM 4500 SO4 E	
400-142088-19	AX19383 MW-15R	Total/NA	Water	SM 4500 SO4 E	
400-142088-20	AX19384 MW-15RDUP	Total/NA	Water	SM 4500 SO4 E	
400-142088-21	AX19385 FB-1	Total/NA	Water	SM 4500 SO4 E	
400-142088-22	AX19386 MW-5	Total/NA	Water	SM 4500 SO4 E	
400-142088-23	AX19387 MW-22	Total/NA	Water	SM 4500 SO4 E	
400-142088-24	AX19388 MW-21	Total/NA	Water	SM 4500 SO4 E	
400-142088-25	AX19389 MW-6	Total/NA	Water	SM 4500 SO4 E	
400-142088-26	AX19390 MW-7	Total/NA	Water	SM 4500 SO4 E	
400-142088-28	AX19392 MW-9DUP	Total/NA	Water	SM 4500 SO4 E	
MB 400-365507/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-365507/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-365507/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-142088-10 MS	AX19170 MW-2	Total/NA	Water	SM 4500 SO4 E	
400-142088-10 MSD	AX19170 MW-2	Total/NA	Water	SM 4500 SO4 E	
400-142088-18 MS	AX19382 MW-20	Total/NA	Water	SM 4500 SO4 E	
400-142088-18 MSD	AX19382 MW-20	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 365727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-365727/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-365727/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-142088-1
 SDG: Plant Gaston Ash Pond

General Chemistry (Continued)

Analysis Batch: 365727 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-142056-A-5 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-142056-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-141890-A-15 DU	Duplicate	Total/NA	Water	SM 4500 F C	

Analysis Batch: 365855

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-142088-5	AX19165 MW-14	Total/NA	Water	SM 4500 CI- E	
400-142088-6	AX19166 MW-4	Total/NA	Water	SM 4500 CI- E	
400-142088-7	AX19167 MW-4DUP	Total/NA	Water	SM 4500 CI- E	
400-142088-8	AX19168 MW-3	Total/NA	Water	SM 4500 CI- E	
400-142088-9	AX19169 FB-2	Total/NA	Water	SM 4500 CI- E	
400-142088-10	AX19170 MW-2	Total/NA	Water	SM 4500 CI- E	
400-142088-12	AX19376 MW-1	Total/NA	Water	SM 4500 CI- E	
400-142088-13	AX19377 MW-8	Total/NA	Water	SM 4500 CI- E	
400-142088-14	AX19378 FB-3	Total/NA	Water	SM 4500 CI- E	
400-142088-21	AX19385 FB-1	Total/NA	Water	SM 4500 CI- E	
400-142088-22	AX19386 MW-5	Total/NA	Water	SM 4500 CI- E	
400-142088-23	AX19387 MW-22	Total/NA	Water	SM 4500 CI- E	
400-142088-24	AX19388 MW-21	Total/NA	Water	SM 4500 CI- E	
400-142088-25	AX19389 MW-6	Total/NA	Water	SM 4500 CI- E	
400-142088-26	AX19390 MW-7	Total/NA	Water	SM 4500 CI- E	
400-142088-27	AX19391 MW-9	Total/NA	Water	SM 4500 CI- E	
400-142088-28	AX19392 MW-9DUP	Total/NA	Water	SM 4500 CI- E	
400-142088-29	AX19393 EB-1	Total/NA	Water	SM 4500 CI- E	
MB 400-365855/6	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 400-365855/7	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
MRL 400-365855/3	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
400-142088-10 MS	AX19170 MW-2	Total/NA	Water	SM 4500 CI- E	
400-142088-10 MSD	AX19170 MW-2	Total/NA	Water	SM 4500 CI- E	
400-142088-27 MS	AX19391 MW-9	Total/NA	Water	SM 4500 CI- E	
400-142088-27 MSD	AX19391 MW-9	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 365859

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-142088-27	AX19391 MW-9	Total/NA	Water	SM 4500 SO4 E	
400-142088-29	AX19393 EB-1	Total/NA	Water	SM 4500 SO4 E	
MB 400-365859/15	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-365859/16	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-365859/12	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-142088-27 MS	AX19391 MW-9	Total/NA	Water	SM 4500 SO4 E	
400-142088-27 MSD	AX19391 MW-9	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 366873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-142088-20	AX19384 MW-15RDUP	Total/NA	Water	SM 4500 F C	
400-142088-21	AX19385 FB-1	Total/NA	Water	SM 4500 F C	
400-142088-22	AX19386 MW-5	Total/NA	Water	SM 4500 F C	
400-142088-23	AX19387 MW-22	Total/NA	Water	SM 4500 F C	
400-142088-24	AX19388 MW-21	Total/NA	Water	SM 4500 F C	
400-142088-25	AX19389 MW-6	Total/NA	Water	SM 4500 F C	
400-142088-26	AX19390 MW-7	Total/NA	Water	SM 4500 F C	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-142088-1
SDG: Plant Gaston Ash Pond

General Chemistry (Continued)

Analysis Batch: 366873 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-142088-28	AX19392 MW-9DUP	Total/NA	Water	SM 4500 F C	
400-142088-29	AX19393 EB-1	Total/NA	Water	SM 4500 F C	
MB 400-366873/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-366873/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-142088-A-10 MS	400-142088-A-10 MS	Total/NA	Water	SM 4500 F C	
400-142088-A-10 MSD	400-142088-A-10 MSD	Total/NA	Water	SM 4500 F C	
400-142088-26 DU	AX19390 MW-7	Total/NA	Water	SM 4500 F C	

QC Sample Results

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

TestAmerica Job ID: 400-142088-1
 SDG: Plant Gaston Ash Pond

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-365314/6
Matrix: Water
Analysis Batch: 365314

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			08/23/17 09:49	1

Lab Sample ID: LCS 400-365314/7
Matrix: Water
Analysis Batch: 365314

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	30.2		mg/L		101	90 - 110

Lab Sample ID: MRL 400-365314/3
Matrix: Water
Analysis Batch: 365314

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	2.16		mg/L		108	50 - 150

Lab Sample ID: 400-142088-18 MS
Matrix: Water
Analysis Batch: 365314

Client Sample ID: AX19382 MW-20
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	18		10.0	27.1		mg/L		94	73 - 120

Lab Sample ID: 400-142088-18 MSD
Matrix: Water
Analysis Batch: 365314

Client Sample ID: AX19382 MW-20
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	18		10.0	27.1		mg/L		94	73 - 120	0	8

Lab Sample ID: MB 400-365855/6
Matrix: Water
Analysis Batch: 365855

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			08/27/17 08:18	1

Lab Sample ID: LCS 400-365855/7
Matrix: Water
Analysis Batch: 365855

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	29.7		mg/L		99	90 - 110

Lab Sample ID: MRL 400-365855/3
Matrix: Water
Analysis Batch: 365855

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	2.06		mg/L		103	50 - 150

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-142088-1
 SDG: Plant Gaston Ash Pond

Lab Sample ID: 400-142088-10 MS
Matrix: Water
Analysis Batch: 365855

Client Sample ID: AX19170 MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.4	F1	10.0	10.5	F1	mg/L		52	73 - 120

Lab Sample ID: 400-142088-10 MSD
Matrix: Water
Analysis Batch: 365855

Client Sample ID: AX19170 MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	5.4	F1	10.0	10.5	F1	mg/L		51	73 - 120	1	8

Lab Sample ID: 400-142088-27 MS
Matrix: Water
Analysis Batch: 365855

Client Sample ID: AX19391 MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	7.6		10.0	16.2		mg/L		86	73 - 120

Lab Sample ID: 400-142088-27 MSD
Matrix: Water
Analysis Batch: 365855

Client Sample ID: AX19391 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
Chloride	7.6		10.0	16.2		mg/L		86	73 - 120	0	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-364824/3
Matrix: Water
Analysis Batch: 364824

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			08/19/17 09:57	1

Lab Sample ID: LCS 400-364824/4
Matrix: Water
Analysis Batch: 364824

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	4.34		mg/L		109	90 - 110

Lab Sample ID: MB 400-364839/4
Matrix: Water
Analysis Batch: 364839

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			08/19/17 11:16	1

QC Sample Results

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

TestAmerica Job ID: 400-142088-1
 SDG: Plant Gaston Ash Pond

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: LCS 400-364839/5
Matrix: Water
Analysis Batch: 364839

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	4.18		mg/L		105	90 - 110

Lab Sample ID: 400-142088-18 MS
Matrix: Water
Analysis Batch: 364839

Client Sample ID: AX19382 MW-20
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.040	J	1.00	1.15		mg/L		111	75 - 125

Lab Sample ID: 400-142088-18 MSD
Matrix: Water
Analysis Batch: 364839

Client Sample ID: AX19382 MW-20
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.040	J	1.00	1.13		mg/L		109	75 - 125	2	4

Lab Sample ID: 400-142088-27 MS
Matrix: Water
Analysis Batch: 364839

Client Sample ID: AX19391 MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.11		1.00	1.22		mg/L		111	75 - 125

Lab Sample ID: 400-142088-27 MSD
Matrix: Water
Analysis Batch: 364839

Client Sample ID: AX19391 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
Fluoride	0.11		1.00	1.22		mg/L		111	75 - 125	0	4

Lab Sample ID: MB 400-365727/3
Matrix: Water
Analysis Batch: 365727

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			08/25/17 13:45	1

Lab Sample ID: LCS 400-365727/4
Matrix: Water
Analysis Batch: 365727

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	4.34		mg/L		109	90 - 110

Lab Sample ID: 400-142056-A-5 MS
Matrix: Water
Analysis Batch: 365727

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	0.63		1.00	1.71		mg/L		108	75 - 125

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-142088-1
 SDG: Plant Gaston Ash Pond

Lab Sample ID: 400-142056-A-5 MSD
Matrix: Water
Analysis Batch: 365727

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	0.63		1.00	1.74		mg/L		111	75 - 125	2	4

Lab Sample ID: 400-141890-A-15 DU
Matrix: Water
Analysis Batch: 365727

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride	0.51		0.510		mg/L		0	4

Lab Sample ID: MB 400-366873/3
Matrix: Water
Analysis Batch: 366873

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			09/05/17 16:11	1

Lab Sample ID: LCS 400-366873/4
Matrix: Water
Analysis Batch: 366873

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	4.34		mg/L		109	90 - 110

Lab Sample ID: 400-142088-A-10 MS
Matrix: Water
Analysis Batch: 366873

Client Sample ID: 400-142088-A-10 MS
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.0300		1.00	1.19		mg/L		119	75 - 125

Lab Sample ID: 400-142088-A-10 MSD
Matrix: Water
Analysis Batch: 366873

Client Sample ID: 400-142088-A-10 MSD
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.0300		1.00	1.19		mg/L		119	75 - 125	0	4

Lab Sample ID: 400-142088-26 DU
Matrix: Water
Analysis Batch: 366873

Client Sample ID: AX19390 MW-7
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

QC Sample Results

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

TestAmerica Job ID: 400-142088-1
 SDG: Plant Gaston Ash Pond

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-365448/16
Matrix: Water
Analysis Batch: 365448

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			08/24/17 07:25	1

Lab Sample ID: LCS 400-365448/17
Matrix: Water
Analysis Batch: 365448

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	15.2		mg/L		102	90 - 110

Lab Sample ID: MRL 400-365448/13
Matrix: Water
Analysis Batch: 365448

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	4.59	J	mg/L		92	50 - 150

Lab Sample ID: 400-141929-A-2 MS
Matrix: Water
Analysis Batch: 365448

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	20		10.0	29.9		mg/L		94	77 - 128

Lab Sample ID: 400-141929-A-2 MSD
Matrix: Water
Analysis Batch: 365448

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	20		10.0	30.2		mg/L		98	77 - 128	1	5

Lab Sample ID: MB 400-365507/6
Matrix: Water
Analysis Batch: 365507

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			08/24/17 09:42	1

Lab Sample ID: LCS 400-365507/7
Matrix: Water
Analysis Batch: 365507

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	15.5		mg/L		104	90 - 110

Lab Sample ID: MRL 400-365507/3
Matrix: Water
Analysis Batch: 365507

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

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-142088-1
 SDG: Plant Gaston Ash Pond

Lab Sample ID: 400-142088-10 MS
Matrix: Water
Analysis Batch: 365507

Client Sample ID: AX19170 MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	1.7	J	10.0	13.2		mg/L		115	77 - 128

Lab Sample ID: 400-142088-10 MSD
Matrix: Water
Analysis Batch: 365507

Client Sample ID: AX19170 MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	1.7	J	10.0	13.2		mg/L		115	77 - 128	0	5

Lab Sample ID: 400-142088-18 MS
Matrix: Water
Analysis Batch: 365507

Client Sample ID: AX19382 MW-20
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	540	F1	200	524	F1	mg/L		-10	77 - 128

Lab Sample ID: 400-142088-18 MSD
Matrix: Water
Analysis Batch: 365507

Client Sample ID: AX19382 MW-20
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	540	F1	200	536	F1	mg/L		-4	77 - 128	2	5

Lab Sample ID: MB 400-365859/15
Matrix: Water
Analysis Batch: 365859

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			08/27/17 12:54	1

Lab Sample ID: LCS 400-365859/16
Matrix: Water
Analysis Batch: 365859

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	15.6		mg/L		104	90 - 110

Lab Sample ID: 400-142088-27 MS
Matrix: Water
Analysis Batch: 365859

Client Sample ID: AX19391 MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	14		10.0	25.2		mg/L		109	77 - 128

Lab Sample ID: 400-142088-27 MSD
Matrix: Water
Analysis Batch: 365859

Client Sample ID: AX19391 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	14		10.0	24.8		mg/L		105	77 - 128	2	5

TestAmerica Pensacola

Chain of Custody Record

Client Information		Lab PM: Whitmire, Cheyenne R		Carrier Tracking No(s):		COC No: 400-56525-24537.1	
Company: Alabama Power General Test Laboratory		E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 1 of 1			
Address: 744 County Rd 87 GSC #8		Project Name: CCR		Job #:			
City: Calera		Project #:		Job #:			
State, Zip: AL, 35040		SSOW#:		Job #:			
Phone: 205-664-6004		Site: Gaston Ash Pond		Job #:			
Email: khkorneg@southernco.com		Due Date Requested:		Job #:			
Project Name: CCR		TAT Requested (days): Routine		Job #:			
Site: Gaston Ash Pond		PO #:		Job #:			
		WO #:		Job #:			
		Project #:		Job #:			
		SSOW#:		Job #:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=water/oil, BT=Tissue, A=Air)	Preservation Code:	Analysis Requested			Special Instructions/Note:
						Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of Containers	
AX19161	8/14/17	10:45	G	Water		N	X	X	MW-10
AX19162	8/14/17	12:23	G	Water		X	X	X	MW-11
AX19163	8/14/17	13:45	G	Water		X	X	X	MW-12
AX19164	8/14/17	15:00	G	Water		X	X	X	MW-13
AX19165	8/15/17	09:40	G	Water		X	X	X	MW-14
AX19166	8/15/17	11:12	G	Water		X	X	X	MW-4
AX19167	8/15/17	11:12	G	Water		X	X	X	MW-4DUP (Sample Duplicate)
AX19168	8/15/17	12:45	G	Water		X	X	X	MW-3
AX19169	8/15/17	15:05	G	Water		X	X	X	FB-2
AX19170	8/15/17	14:00	G	Water		Y	X	X	MW-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	
Empty Kit Relinquished by: Relinquished by: Keith Kornegay		Method of Shipment:	
Relinquished by:		Date/Time: 8/18/17 10:10 Company: TA	
Relinquished by:		Date/Time:	
Relinquished by:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks: 0.0°C IR7	



Chain of Custody Record


Client Information		Sampler: Ben Rothschild/Anthony Goggins/Nick Pitts Lab PM: Whitmire, Chyenne R Phone: _____ E-Mail: chyenneye.whitmire@testamericainc.com	
Company: Alabama Power General Test Laboratory Address: 744 County Rd 87 GSC #8 City: Calera State, Zip: AL, 35040 Phone: 205-664-6004 Email: fkkorneg@southernco.com Project Name: CCR Site: Gaston Ash Pond		Carrier Tracking No(s): 400-56525-24537.1 Page: Page 1 of 1 Job #: _____	
Due Date Requested: _____ TAT Requested (days): Routine		Analysis Requested	
PO #: _____ WO #: _____ Project #: _____ SSOW#: _____		Total Number of containers: _____	
Sample Identification AX19375 AX19376 AX19377 AX19378 AX19379 AX19380 AX19381 AX19382 AX19383 AX19384		Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air) Water Water Water Water Water Water Water Water Water Water Water Water	
Sample Date 8/14/17 8/15/17 8/15/17 8/15/17 8/14/17 8/14/17 8/14/17 8/14/17 8/14/17 8/14/17		Sample Type (C=comp, G=grab) G G G G G G G G G G G G	
Sample Time 16:25 11:06 12:47 13:05 11:28 12:16 13:23 14:10 16:38 16:38		Preservation Code: SM 4500 F.C SM 4500 C.I.E SM 4500 S.Q.E	
Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> N Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> N Special Instructions/Note: MW-19 MW-1 MW-8 FB-3 MW-16 MW-17 MW-18 MW-20 MW-15R MW-15RDUP		Special Instructions/Note: MW-19 MW-1 MW-8 FB-3 MW-16 MW-17 MW-18 MW-20 MW-15R MW-15RDUP	
Possible Hazard Identification <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: Keith Kornegay Relinquished by: _____ Relinquished by: _____ Relinquished by: _____			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Cooler Temperature(s) °C and Other Remarks: 0.0°C IR			



Chain of Custody Record

Client Information Client Contact: Keith Kornegay Company: Alabama Power General Test Laboratory Address: 744 County Rd 87 GSC #8 City: Calera State/Zip: AL, 35040 Phone: 205-664-6004 Email: fkkorneg@southernco.com Project Name: CCR Site: Gaston Ash Pond		Sampler: Ben Rothschild/Anthony Goggins/Nick Pitts Lab PM: Whitmire, Cheyenne R Carrier Tracking No(s): Phone: E-Mail: cheyenne.whitmire@testamericainc.com		COC No: 400-56525-24537.1 Page: Page 1 of 1 Job #:	
Due Date Requested: TAT Requested (days): Routine PO #: WO #: Project #: SSOW#:		Analysis Requested			
Sample Identification AX19385 AX19386 AX19387 AX19388 AX19389 AX19390 AX19391 AX19392 AX19393		Sample Date 8/14/17 8/15/17 8/15/17 8/15/17 8/15/17 8/15/17 8/16/17 8/16/17		Sample Time 16:15 10:12 10:58 11:49 13:02 14:04 10:14 10:14 10:45	
Matrix (W=water, S=solid, O=soil, BT=Tissue, A=Air)		Sample Type (C=comp, G=grab)		Preservation Code:	
Perform MS/MSD (Yes or No)		Field Filtered Sample (Yes or No)		SM 4500 F.C.	
SM 4500 Cl.E		SM 4500 SO4.E		Total Number of containers	
Special Instructions/Note: FB-1 MW-5 MW-22 MW-21 MW-6 MW-7 MW-9 MW-9DUP (Sample Duplicate) EB-1		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)	
Possible Hazard Identification <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: Keith Kornegay		Date/Time:		Date/Time:	
Relinquished by:		Date/Time:		Date/Time:	
Relinquished by:		Date/Time:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 0.0°C IPR	

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:

Method of Shipment:
 Received by:  Date/Time: 8/18/17 1010 Company: TA
 Received by: Date/Time: Company:
 Received by: Date/Time: Company:
 Cooler Temperature(s) °C and Other Remarks: 0.0°C IPR



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-142088-1
SDG Number: Plant Gaston Ash Pond

Login Number: 142088

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 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	



Accreditation/Certification Summary

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

TestAmerica Job ID: 400-142088-1
 SDG: Plant Gaston Ash Pond

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	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17 *
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	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-18
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-17
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	12-31-17
Oklahoma	State Program	6	9810	08-31-18
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17 *
Tennessee	State Program	4	TN02907	06-30-18
Texas	NELAP	6	T104704286-16-10	09-30-17
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.

Plant Gaston Ash Pond
Field pH Data

Well	Date	Obs	Units
GN-AP-MW-1	3/29/2016	7.39	SU
GN-AP-MW-1	5/19/2016	7.35	SU
GN-AP-MW-1	7/12/2016	7.46	SU
GN-AP-MW-1	9/13/2016	7.43	SU
GN-AP-MW-1	11/15/2016	7.42	SU
GN-AP-MW-1	2/28/2017	7.36	SU
GN-AP-MW-1	5/23/2017	7.33	SU
GN-AP-MW-1	6/19/2017	7.34	SU
GN-AP-MW-1	8/15/2017	7.31	SU
GN-AP-MW-10	3/30/2016	7.45	SU
GN-AP-MW-10	5/17/2016	7.68	SU
GN-AP-MW-10	7/13/2016	7.71	SU
GN-AP-MW-10	9/13/2016	7.53	SU
GN-AP-MW-10	11/15/2016	7.53	SU
GN-AP-MW-10	2/28/2017	7.58	SU
GN-AP-MW-10	5/22/2017	7.51	SU
GN-AP-MW-10	6/19/2017	7.53	SU
GN-AP-MW-10	8/14/2017	7.52	SU
GN-AP-MW-11	3/30/2016	7.63	SU
GN-AP-MW-11	5/18/2016	7.64	SU
GN-AP-MW-11	7/13/2016	7.84	SU
GN-AP-MW-11	9/13/2016	7.69	SU
GN-AP-MW-11	11/14/2016	7.7	SU
GN-AP-MW-11	2/28/2017	7.79	SU
GN-AP-MW-11	5/22/2017	7.72	SU
GN-AP-MW-11	6/19/2017	7.73	SU
GN-AP-MW-11	8/14/2017	7.67	SU
GN-AP-MW-12	3/30/2016	7.39	SU
GN-AP-MW-12	5/18/2016	7.34	SU
GN-AP-MW-12	7/13/2016	7.52	SU
GN-AP-MW-12	9/12/2016	7.39	SU
GN-AP-MW-12	11/14/2016	7.42	SU
GN-AP-MW-12	2/28/2017	7.46	SU
GN-AP-MW-12	5/24/2017	7.39	SU
GN-AP-MW-12	6/21/2017	7.36	SU
GN-AP-MW-12	8/14/2017	7.36	SU
GN-AP-MW-13	3/30/2016	7.27	SU
GN-AP-MW-13	5/18/2016	7.37	SU
GN-AP-MW-13	7/14/2016	7.51	SU
GN-AP-MW-13	9/12/2016	7.39	SU
GN-AP-MW-13	11/14/2016	7.37	SU
GN-AP-MW-13	2/28/2017	7.32	SU
GN-AP-MW-13	5/24/2017	7.44	SU
GN-AP-MW-13	6/21/2017	7.39	SU
GN-AP-MW-13	8/14/2017	7.39	SU
GN-AP-MW-14	3/28/2016	7.34	SU

Plant Gaston Ash Pond
Field pH Data

Well	Date	Obs	Units
GN-AP-MW-14	5/17/2016	7.22	SU
GN-AP-MW-14	7/11/2016	7.32	SU
GN-AP-MW-14	9/13/2016	7.35	SU
GN-AP-MW-14	11/15/2016	7.32	SU
GN-AP-MW-14	2/27/2017	7.38	SU
GN-AP-MW-14	5/24/2017	7.41	SU
GN-AP-MW-14	6/21/2017	7.26	SU
GN-AP-MW-14	8/15/2017	7.33	SU
GN-AP-MW-15R	3/28/2016	7.43	SU
GN-AP-MW-15R	5/19/2016	7.43	SU
GN-AP-MW-15R	7/11/2016	7.58	SU
GN-AP-MW-15R	8/22/2016	7.56	SU
GN-AP-MW-15R	9/14/2016	7.52	SU
GN-AP-MW-15R	11/15/2016	7.57	SU
GN-AP-MW-15R	1/3/2017	7.62	SU
GN-AP-MW-15R	2/27/2017	7.52	SU
GN-AP-MW-15R	5/22/2017	7.52	SU
GN-AP-MW-15R	6/20/2017	7.46	SU
GN-AP-MW-15R	8/14/2017	7.57	SU
GN-AP-MW-16	3/29/2016	8.15	SU
GN-AP-MW-16	5/17/2016	8.18	SU
GN-AP-MW-16	7/14/2016	8.23	SU
GN-AP-MW-16	9/13/2016	8.25	SU
GN-AP-MW-16	11/14/2016	8.31	SU
GN-AP-MW-16	2/28/2017	8.31	SU
GN-AP-MW-16	5/24/2017	8.22	SU
GN-AP-MW-16	6/19/2017	8.18	SU
GN-AP-MW-16	8/14/2017	8.32	SU
GN-AP-MW-17	3/29/2016	9.66	SU
GN-AP-MW-17	5/17/2016	9.56	SU
GN-AP-MW-17	7/14/2016	9.63	SU
GN-AP-MW-17	9/13/2016	9.57	SU
GN-AP-MW-17	11/16/2016	9.59	SU
GN-AP-MW-17	2/28/2017	9.56	SU
GN-AP-MW-17	5/24/2017	9.71	SU
GN-AP-MW-17	6/19/2017	9.67	SU
GN-AP-MW-17	8/14/2017	9.62	SU
GN-AP-MW-18	3/29/2016	6.95	SU
GN-AP-MW-18	5/17/2016	6.87	SU
GN-AP-MW-18	7/18/2016	6.85	SU
GN-AP-MW-18	9/14/2016	6.9	SU
GN-AP-MW-18	11/14/2016	6.89	SU
GN-AP-MW-18	2/28/2017	6.83	SU
GN-AP-MW-18	5/24/2017	6.87	SU
GN-AP-MW-18	6/19/2017	6.89	SU
GN-AP-MW-18	8/14/2017	6.89	SU

Plant Gaston Ash Pond
Field pH Data

Well	Date	Obs	Units
GN-AP-MW-19	3/28/2016	7.24	SU
GN-AP-MW-19	5/18/2016	7.5	SU
GN-AP-MW-19	7/13/2016	7.63	SU
GN-AP-MW-19	9/13/2016	7.53	SU
GN-AP-MW-19	11/16/2016	7.55	SU
GN-AP-MW-19	2/27/2017	7.53	SU
GN-AP-MW-19	5/22/2017	7.5	SU
GN-AP-MW-19	6/21/2017	7.51	SU
GN-AP-MW-19	8/14/2017	7.43	SU
GN-AP-MW-2	3/28/2016	7.79	SU
GN-AP-MW-2	5/18/2016	7.73	SU
GN-AP-MW-2	7/11/2016	7.99	SU
GN-AP-MW-2	9/14/2016	7.75	SU
GN-AP-MW-2	11/16/2016	7.64	SU
GN-AP-MW-2	3/1/2017	7.65	SU
GN-AP-MW-2	5/23/2017	7.67	SU
GN-AP-MW-2	6/19/2017	7.65	SU
GN-AP-MW-2	8/15/2017	7.69	SU
GN-AP-MW-20	3/29/2016	7.96	SU
GN-AP-MW-20	5/18/2016	7.88	SU
GN-AP-MW-20	7/13/2016	7.92	SU
GN-AP-MW-20	9/14/2016	7.85	SU
GN-AP-MW-20	11/14/2016	7.84	SU
GN-AP-MW-20	2/28/2017	7.81	SU
GN-AP-MW-20	5/24/2017	7.65	SU
GN-AP-MW-20	6/19/2017	7.79	SU
GN-AP-MW-20	8/14/2017	7.82	SU
GN-AP-MW-21	7/13/2016	7.83	SU
GN-AP-MW-21	8/22/2016	7.86	SU
GN-AP-MW-21	9/13/2016	7.75	SU
GN-AP-MW-21	11/15/2016	7.66	SU
GN-AP-MW-21	1/3/2017	7.57	SU
GN-AP-MW-21	3/1/2017	7.53	SU
GN-AP-MW-21	5/23/2017	7.78	SU
GN-AP-MW-21	6/20/2017	7.82	SU
GN-AP-MW-21	8/15/2017	7.73	SU
GN-AP-MW-22	7/14/2016	7.74	SU
GN-AP-MW-22	8/22/2016	7.55	SU
GN-AP-MW-22	9/13/2016	7.63	SU
GN-AP-MW-22	11/15/2016	7.74	SU
GN-AP-MW-22	1/3/2017	7.69	SU
GN-AP-MW-22	3/1/2017	7.47	SU
GN-AP-MW-22	5/23/2017	7.5	SU
GN-AP-MW-22	6/20/2017	7.37	SU
GN-AP-MW-22	8/15/2017	7.26	SU
GN-AP-MW-3	3/28/2016	7.82	SU

Plant Gaston Ash Pond
Field pH Data

Well	Date	Obs	Units
GN-AP-MW-3	5/17/2016	7.79	SU
GN-AP-MW-3	7/11/2016	7.96	SU
GN-AP-MW-3	9/14/2016	7.79	SU
GN-AP-MW-3	11/16/2016	7.72	SU
GN-AP-MW-3	3/1/2017	7.68	SU
GN-AP-MW-3	5/23/2017	7.69	SU
GN-AP-MW-3	6/19/2017	7.67	SU
GN-AP-MW-3	8/15/2017	7.73	SU
GN-AP-MW-4	3/30/2016	7.31	SU
GN-AP-MW-4	5/17/2016	7.35	SU
GN-AP-MW-4	7/11/2016	7.43	SU
GN-AP-MW-4	9/14/2016	7.26	SU
GN-AP-MW-4	11/16/2016	7.19	SU
GN-AP-MW-4	2/28/2017	7.23	SU
GN-AP-MW-4	5/24/2017	7.26	SU
GN-AP-MW-4	6/21/2017	7.26	SU
GN-AP-MW-4	8/15/2017	7.29	SU
GN-AP-MW-5	3/30/2016	7.61	SU
GN-AP-MW-5	5/23/2016	7.68	SU
GN-AP-MW-5	7/14/2016	7.79	SU
GN-AP-MW-5	9/13/2016	7.69	SU
GN-AP-MW-5	11/15/2016	7.72	SU
GN-AP-MW-5	3/1/2017	7.55	SU
GN-AP-MW-5	5/23/2017	7.64	SU
GN-AP-MW-5	6/20/2017	7.5	SU
GN-AP-MW-5	8/15/2017	7.46	SU
GN-AP-MW-6	3/30/2016	7.95	SU
GN-AP-MW-6	5/19/2016	7.88	SU
GN-AP-MW-6	7/13/2016	8.07	SU
GN-AP-MW-6	9/13/2016	8.04	SU
GN-AP-MW-6	11/15/2016	7.93	SU
GN-AP-MW-6	3/1/2017	7.89	SU
GN-AP-MW-6	5/23/2017	7.96	SU
GN-AP-MW-6	6/20/2017	7.87	SU
GN-AP-MW-6	8/15/2017	7.86	SU
GN-AP-MW-7	3/30/2016	7.45	SU
GN-AP-MW-7	5/19/2016	7.5	SU
GN-AP-MW-7	7/13/2016	7.58	SU
GN-AP-MW-7	9/13/2016	7.53	SU
GN-AP-MW-7	11/15/2016	7.48	SU
GN-AP-MW-7	3/1/2017	7.46	SU
GN-AP-MW-7	5/23/2017	7.51	SU
GN-AP-MW-7	6/20/2017	7.52	SU
GN-AP-MW-7	8/15/2017	7.43	SU
GN-AP-MW-8	3/29/2016	7.2	SU
GN-AP-MW-8	5/23/2016	7.39	SU

Plant Gaston Ash Pond
Field pH Data

Well	Date	Obs	Units
GN-AP-MW-8	7/12/2016	7.43	SU
GN-AP-MW-8	9/13/2016	7.38	SU
GN-AP-MW-8	11/15/2016	7.35	SU
GN-AP-MW-8	2/28/2017	7.3	SU
GN-AP-MW-8	5/24/2017	7.33	SU
GN-AP-MW-8	6/20/2017	7.33	SU
GN-AP-MW-8	8/15/2017	7.31	SU
GN-AP-MW-9	4/4/2016	7.32	SU
GN-AP-MW-9	5/23/2016	7.66	SU
GN-AP-MW-9	7/12/2016	7.77	SU
GN-AP-MW-9	9/13/2016	7.7	SU
GN-AP-MW-9	11/15/2016	7.69	SU
GN-AP-MW-9	2/28/2017	7.66	SU
GN-AP-MW-9	5/24/2017	7.64	SU
GN-AP-MW-9	6/20/2017	7.62	SU
GN-AP-MW-9	8/16/2017	7.51	SU

Appendix B

Statistical Data Evaluation

Interwell Prediction Limits - Significant Results

Plant Gaston Client: Southern Company Data: Gaston Ash Pond Printed 12/13/2017, 2:39 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDsND Adj.	Transform	Alpha	Method
Boron (mg/L)	GN-AP-MW-4	0.05	n/a	8/15/2017	0.23	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-5	0.05	n/a	8/15/2017	2.16	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-6	0.05	n/a	8/15/2017	1.34	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-7	0.05	n/a	8/15/2017	1.68	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-11	0.05	n/a	8/14/2017	0.124	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-12	0.05	n/a	8/14/2017	0.359	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-15R	0.05	n/a	8/14/2017	0.906	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-16	0.05	n/a	8/14/2017	1.24	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-17	0.05	n/a	8/14/2017	2.64	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-18	0.05	n/a	8/14/2017	1.19	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-20	0.05	n/a	8/14/2017	3.4	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-21	0.05	n/a	8/15/2017	2.04	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-22	0.05	n/a	8/15/2017	1.87	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Calcium (mg/L)	GN-AP-MW-5	57	n/a	8/15/2017	65.7	Yes	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-7	57	n/a	8/15/2017	89.4	Yes	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-12	57	n/a	8/14/2017	60.6	Yes	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-14	57	n/a	8/15/2017	72.1	Yes	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-17	57	n/a	8/14/2017	72.8	Yes	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-18	57	n/a	8/14/2017	105	Yes	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-20	57	n/a	8/14/2017	159	Yes	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-22	57	n/a	8/15/2017	81.8	Yes	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Chloride (mg/L)	GN-AP-MW-4	4.68	n/a	8/15/2017	17	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-5	4.68	n/a	8/15/2017	36	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-6	4.68	n/a	8/15/2017	32	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-7	4.68	n/a	8/15/2017	18	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-9	4.68	n/a	8/16/2017	7.6	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-11	4.68	n/a	8/14/2017	6.7	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-12	4.68	n/a	8/14/2017	21	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-13	4.68	n/a	8/14/2017	5.6	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-14	4.68	n/a	8/15/2017	4.9	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-15R	4.68	n/a	8/14/2017	27	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-16	4.68	n/a	8/14/2017	12	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-17	4.68	n/a	8/14/2017	17	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-18	4.68	n/a	8/14/2017	12	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-19	4.68	n/a	8/14/2017	12	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-20	4.68	n/a	8/14/2017	18	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-21	4.68	n/a	8/15/2017	21	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-22	4.68	n/a	8/15/2017	61	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Fluoride (mg/L)	GN-AP-MW-14	0.11	n/a	8/15/2017	0.12	Yes	27	0.05416	0.02387	40.74	Kaplan-Meier	No	0.000396 Param 1 of 2
Fluoride (mg/L)	GN-AP-MW-16	0.11	n/a	8/14/2017	0.12	Yes	27	0.05416	0.02387	40.74	Kaplan-Meier	No	0.000396 Param 1 of 2
Fluoride (mg/L)	GN-AP-MW-17	0.11	n/a	8/14/2017	0.22	Yes	27	0.05416	0.02387	40.74	Kaplan-Meier	No	0.000396 Param 1 of 2
pH (pH)	GN-AP-MW-16	8.082	7.162	8/14/2017	8.32	Yes	27	7.622	0.1966	0	None	No	0.000198 Param 1 of 2
pH (pH)	GN-AP-MW-17	8.082	7.162	8/14/2017	9.62	Yes	27	7.622	0.1966	0	None	No	0.000198 Param 1 of 2
pH (pH)	GN-AP-MW-18	8.082	7.162	8/14/2017	6.89	Yes	27	7.622	0.1966	0	None	No	0.000198 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-5	25.42	n/a	8/15/2017	170	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-6	25.42	n/a	8/15/2017	160	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-7	25.42	n/a	8/15/2017	210	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-11	25.42	n/a	8/14/2017	34	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-12	25.42	n/a	8/14/2017	100	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-14	25.42	n/a	8/15/2017	67	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-15R	25.42	n/a	8/14/2017	140	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-16	25.42	n/a	8/14/2017	140	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-17	25.42	n/a	8/14/2017	250	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-18	25.42	n/a	8/14/2017	150	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-20	25.42	n/a	8/14/2017	540	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2

Interwell Prediction Limits - Significant Results

Plant Gaston Client: Southern Company Data: Gaston Ash Pond Printed 12/13/2017, 2:39 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>
Sulfate (mg/L)	GN-AP-MW-21	25.42	n/a	8/15/2017	150	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-22	25.42	n/a	8/15/2017	170	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
TDS (mg/L)	GN-AP-MW-5	291	n/a	8/15/2017	440	Yes	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-6	291	n/a	8/15/2017	394	Yes	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-7	291	n/a	8/15/2017	490	Yes	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-12	291	n/a	8/14/2017	372	Yes	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-14	291	n/a	8/15/2017	340	Yes	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-15R	291	n/a	8/14/2017	332	Yes	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-17	291	n/a	8/14/2017	428	Yes	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-18	291	n/a	8/14/2017	550	Yes	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-20	291	n/a	8/14/2017	872	Yes	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-21	291	n/a	8/15/2017	364	Yes	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-22	291	n/a	8/15/2017	488	Yes	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2

Interwell Prediction Limits - All Results

Plant Gaston Client: Southern Company Data: Gaston Ash Pond Printed 12/13/2017, 2:39 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDsND Adj.	Transform	Alpha	Method
Boron (mg/L)	GN-AP-MW-4	0.05	n/a	8/15/2017	0.23	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-5	0.05	n/a	8/15/2017	2.16	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-6	0.05	n/a	8/15/2017	1.34	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-7	0.05	n/a	8/15/2017	1.68	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-8	0.05	n/a	8/15/2017	0.0862	No	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-9	0.05	n/a	8/16/2017	0.05ND	No	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-10	0.05	n/a	8/14/2017	0.0242	No	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-11	0.05	n/a	8/14/2017	0.124	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-12	0.05	n/a	8/14/2017	0.359	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-13	0.05	n/a	8/14/2017	0.05ND	No	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-14	0.05	n/a	8/15/2017	0.05ND	No	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-15R	0.05	n/a	8/14/2017	0.906	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-16	0.05	n/a	8/14/2017	1.24	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-17	0.05	n/a	8/14/2017	2.64	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-18	0.05	n/a	8/14/2017	1.19	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-19	0.05	n/a	8/14/2017	0.05ND	No	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-20	0.05	n/a	8/14/2017	3.4	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-21	0.05	n/a	8/15/2017	2.04	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Boron (mg/L)	GN-AP-MW-22	0.05	n/a	8/15/2017	1.87	Yes	27	n/a	n/a	96.3	n/a	n/a	0.002129 NP (NDs) 1 of 2
Calcium (mg/L)	GN-AP-MW-4	57	n/a	8/15/2017	48.9	No	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-5	57	n/a	8/15/2017	65.7	Yes	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-6	57	n/a	8/15/2017	52.5	No	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-7	57	n/a	8/15/2017	89.4	Yes	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-8	57	n/a	8/15/2017	51.6	No	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-9	57	n/a	8/16/2017	30.5	No	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-10	57	n/a	8/14/2017	36.4	No	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-11	57	n/a	8/14/2017	34.6	No	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-12	57	n/a	8/14/2017	60.6	Yes	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-13	57	n/a	8/14/2017	43.5	No	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-14	57	n/a	8/15/2017	72.1	Yes	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-15R	57	n/a	8/14/2017	39.5	No	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-16	57	n/a	8/14/2017	41.3	No	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-17	57	n/a	8/14/2017	72.8	Yes	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-18	57	n/a	8/14/2017	105	Yes	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-19	57	n/a	8/14/2017	43	No	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-20	57	n/a	8/14/2017	159	Yes	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-21	57	n/a	8/15/2017	54.5	No	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Calcium (mg/L)	GN-AP-MW-22	57	n/a	8/15/2017	81.8	Yes	27	n/a	n/a	3.704	n/a	n/a	0.002129 NP (normality) 1 of 2
Chloride (mg/L)	GN-AP-MW-4	4.68	n/a	8/15/2017	17	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-5	4.68	n/a	8/15/2017	36	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-6	4.68	n/a	8/15/2017	32	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-7	4.68	n/a	8/15/2017	18	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-8	4.68	n/a	8/15/2017	4.6	No	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-9	4.68	n/a	8/16/2017	7.6	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-10	4.68	n/a	8/14/2017	3.1	No	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-11	4.68	n/a	8/14/2017	6.7	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-12	4.68	n/a	8/14/2017	21	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-13	4.68	n/a	8/14/2017	5.6	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-14	4.68	n/a	8/15/2017	4.9	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-15R	4.68	n/a	8/14/2017	27	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-16	4.68	n/a	8/14/2017	12	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-17	4.68	n/a	8/14/2017	17	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-18	4.68	n/a	8/14/2017	12	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-19	4.68	n/a	8/14/2017	12	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-20	4.68	n/a	8/14/2017	18	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2

Interwell Prediction Limits - All Results

Plant Gaston Client: Southern Company Data: Gaston Ash Pond Printed 12/13/2017, 2:39 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDsND Adj.	Transform	Alpha	Method
Chloride (mg/L)	GN-AP-MW-21	4.68	n/a	8/15/2017	21	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Chloride (mg/L)	GN-AP-MW-22	4.68	n/a	8/15/2017	61	Yes	27	1.57	0.2531	0	None	sqrt(x)	0.000396 Param 1 of 2
Fluoride (mg/L)	GN-AP-MW-4	0.11	n/a	8/15/2017	0.05ND	No	27	0.05416	0.02387	40.74	Kaplan-Meier	No	0.000396 Param 1 of 2
Fluoride (mg/L)	GN-AP-MW-5	0.11	n/a	8/15/2017	0.05	No	27	0.05416	0.02387	40.74	Kaplan-Meier	No	0.000396 Param 1 of 2
Fluoride (mg/L)	GN-AP-MW-6	0.11	n/a	8/15/2017	0.04	No	27	0.05416	0.02387	40.74	Kaplan-Meier	No	0.000396 Param 1 of 2
Fluoride (mg/L)	GN-AP-MW-7	0.11	n/a	8/15/2017	0.04	No	27	0.05416	0.02387	40.74	Kaplan-Meier	No	0.000396 Param 1 of 2
Fluoride (mg/L)	GN-AP-MW-8	0.11	n/a	8/15/2017	0.09	No	27	0.05416	0.02387	40.74	Kaplan-Meier	No	0.000396 Param 1 of 2
Fluoride (mg/L)	GN-AP-MW-9	0.11	n/a	8/16/2017	0.05ND	No	27	0.05416	0.02387	40.74	Kaplan-Meier	No	0.000396 Param 1 of 2
Fluoride (mg/L)	GN-AP-MW-10	0.11	n/a	8/14/2017	0.04	No	27	0.05416	0.02387	40.74	Kaplan-Meier	No	0.000396 Param 1 of 2
Fluoride (mg/L)	GN-AP-MW-11	0.11	n/a	8/14/2017	0.05ND	No	27	0.05416	0.02387	40.74	Kaplan-Meier	No	0.000396 Param 1 of 2
Fluoride (mg/L)	GN-AP-MW-12	0.11	n/a	8/14/2017	0.04	No	27	0.05416	0.02387	40.74	Kaplan-Meier	No	0.000396 Param 1 of 2
Fluoride (mg/L)	GN-AP-MW-13	0.11	n/a	8/14/2017	0.05	No	27	0.05416	0.02387	40.74	Kaplan-Meier	No	0.000396 Param 1 of 2
Fluoride (mg/L)	GN-AP-MW-14	0.11	n/a	8/15/2017	0.12	Yes	27	0.05416	0.02387	40.74	Kaplan-Meier	No	0.000396 Param 1 of 2
Fluoride (mg/L)	GN-AP-MW-15R	0.11	n/a	8/14/2017	0.07	No	27	0.05416	0.02387	40.74	Kaplan-Meier	No	0.000396 Param 1 of 2
Fluoride (mg/L)	GN-AP-MW-16	0.11	n/a	8/14/2017	0.12	Yes	27	0.05416	0.02387	40.74	Kaplan-Meier	No	0.000396 Param 1 of 2
Fluoride (mg/L)	GN-AP-MW-17	0.11	n/a	8/14/2017	0.22	Yes	27	0.05416	0.02387	40.74	Kaplan-Meier	No	0.000396 Param 1 of 2
Fluoride (mg/L)	GN-AP-MW-18	0.11	n/a	8/14/2017	0.05	No	27	0.05416	0.02387	40.74	Kaplan-Meier	No	0.000396 Param 1 of 2
Fluoride (mg/L)	GN-AP-MW-19	0.11	n/a	8/14/2017	0.04	No	27	0.05416	0.02387	40.74	Kaplan-Meier	No	0.000396 Param 1 of 2
Fluoride (mg/L)	GN-AP-MW-20	0.11	n/a	8/14/2017	0.04	No	27	0.05416	0.02387	40.74	Kaplan-Meier	No	0.000396 Param 1 of 2
Fluoride (mg/L)	GN-AP-MW-21	0.11	n/a	8/15/2017	0.05ND	No	27	0.05416	0.02387	40.74	Kaplan-Meier	No	0.000396 Param 1 of 2
Fluoride (mg/L)	GN-AP-MW-22	0.11	n/a	8/15/2017	0.06	No	27	0.05416	0.02387	40.74	Kaplan-Meier	No	0.000396 Param 1 of 2
pH (pH)	GN-AP-MW-4	8.082	7.162	8/15/2017	7.29	No	27	7.622	0.1966	0	None	No	0.000198 Param 1 of 2
pH (pH)	GN-AP-MW-5	8.082	7.162	8/15/2017	7.46	No	27	7.622	0.1966	0	None	No	0.000198 Param 1 of 2
pH (pH)	GN-AP-MW-6	8.082	7.162	8/15/2017	7.86	No	27	7.622	0.1966	0	None	No	0.000198 Param 1 of 2
pH (pH)	GN-AP-MW-7	8.082	7.162	8/15/2017	7.43	No	27	7.622	0.1966	0	None	No	0.000198 Param 1 of 2
pH (pH)	GN-AP-MW-8	8.082	7.162	8/15/2017	7.31	No	27	7.622	0.1966	0	None	No	0.000198 Param 1 of 2
pH (pH)	GN-AP-MW-9	8.082	7.162	8/16/2017	7.51	No	27	7.622	0.1966	0	None	No	0.000198 Param 1 of 2
pH (pH)	GN-AP-MW-10	8.082	7.162	8/14/2017	7.52	No	27	7.622	0.1966	0	None	No	0.000198 Param 1 of 2
pH (pH)	GN-AP-MW-11	8.082	7.162	8/14/2017	7.67	No	27	7.622	0.1966	0	None	No	0.000198 Param 1 of 2
pH (pH)	GN-AP-MW-12	8.082	7.162	8/14/2017	7.36	No	27	7.622	0.1966	0	None	No	0.000198 Param 1 of 2
pH (pH)	GN-AP-MW-13	8.082	7.162	8/14/2017	7.39	No	27	7.622	0.1966	0	None	No	0.000198 Param 1 of 2
pH (pH)	GN-AP-MW-14	8.082	7.162	8/15/2017	7.33	No	27	7.622	0.1966	0	None	No	0.000198 Param 1 of 2
pH (pH)	GN-AP-MW-15R	8.082	7.162	8/14/2017	7.57	No	27	7.622	0.1966	0	None	No	0.000198 Param 1 of 2
pH (pH)	GN-AP-MW-16	8.082	7.162	8/14/2017	8.32	Yes	27	7.622	0.1966	0	None	No	0.000198 Param 1 of 2
pH (pH)	GN-AP-MW-17	8.082	7.162	8/14/2017	9.62	Yes	27	7.622	0.1966	0	None	No	0.000198 Param 1 of 2
pH (pH)	GN-AP-MW-18	8.082	7.162	8/14/2017	6.89	Yes	27	7.622	0.1966	0	None	No	0.000198 Param 1 of 2
pH (pH)	GN-AP-MW-19	8.082	7.162	8/14/2017	7.43	No	27	7.622	0.1966	0	None	No	0.000198 Param 1 of 2
pH (pH)	GN-AP-MW-20	8.082	7.162	8/14/2017	7.82	No	27	7.622	0.1966	0	None	No	0.000198 Param 1 of 2
pH (pH)	GN-AP-MW-21	8.082	7.162	8/15/2017	7.73	No	27	7.622	0.1966	0	None	No	0.000198 Param 1 of 2
pH (pH)	GN-AP-MW-22	8.082	7.162	8/15/2017	7.26	No	27	7.622	0.1966	0	None	No	0.000198 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-4	25.42	n/a	8/15/2017	24	No	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-5	25.42	n/a	8/15/2017	170	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-6	25.42	n/a	8/15/2017	160	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-7	25.42	n/a	8/15/2017	210	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-8	25.42	n/a	8/15/2017	5	No	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-9	25.42	n/a	8/16/2017	14	No	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-10	25.42	n/a	8/14/2017	3.4	No	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-11	25.42	n/a	8/14/2017	34	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-12	25.42	n/a	8/14/2017	100	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-13	25.42	n/a	8/14/2017	2.5ND	No	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-14	25.42	n/a	8/15/2017	67	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-15R	25.42	n/a	8/14/2017	140	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-16	25.42	n/a	8/14/2017	140	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-17	25.42	n/a	8/14/2017	250	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-18	25.42	n/a	8/14/2017	150	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2

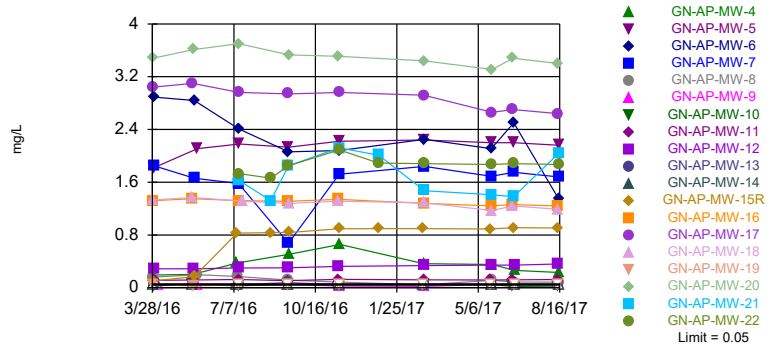
Interwell Prediction Limits - All Results

Plant Gaston Client: Southern Company Data: Gaston Ash Pond Printed 12/13/2017, 2:39 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bq N	Bq Mean	Std. Dev.	%NDsND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	GN-AP-MW-19	25.42	n/a	8/14/2017	22	No	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-20	25.42	n/a	8/14/2017	540	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-21	25.42	n/a	8/15/2017	150	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
Sulfate (mg/L)	GN-AP-MW-22	25.42	n/a	8/15/2017	170	Yes	27	2.53	1.073	0	None	sqrt(x)	0.000396 Param 1 of 2
TDS (mg/L)	GN-AP-MW-4	291	n/a	8/15/2017	281	No	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-5	291	n/a	8/15/2017	440	Yes	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-6	291	n/a	8/15/2017	394	Yes	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-7	291	n/a	8/15/2017	490	Yes	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-8	291	n/a	8/15/2017	279	No	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-9	291	n/a	8/16/2017	205	No	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-10	291	n/a	8/14/2017	185	No	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-11	291	n/a	8/14/2017	135	No	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-12	291	n/a	8/14/2017	372	Yes	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-13	291	n/a	8/14/2017	217	No	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-14	291	n/a	8/15/2017	340	Yes	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-15R	291	n/a	8/14/2017	332	Yes	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-16	291	n/a	8/14/2017	263	No	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-17	291	n/a	8/14/2017	428	Yes	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-18	291	n/a	8/14/2017	550	Yes	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-19	291	n/a	8/14/2017	232	No	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-20	291	n/a	8/14/2017	872	Yes	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-21	291	n/a	8/15/2017	364	Yes	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2
TDS (mg/L)	GN-AP-MW-22	291	n/a	8/15/2017	488	Yes	27	n/a	n/a	0	n/a	n/a	0.002129 NP (normality) 1 of 2

Exceeds Limit: GN-AP-MW-4, GN-AP-MW-5, GN-AP-MW-6, GN-AP-MW-7, GN-AP-MW

Prediction Limit
Interwell Non-parametric

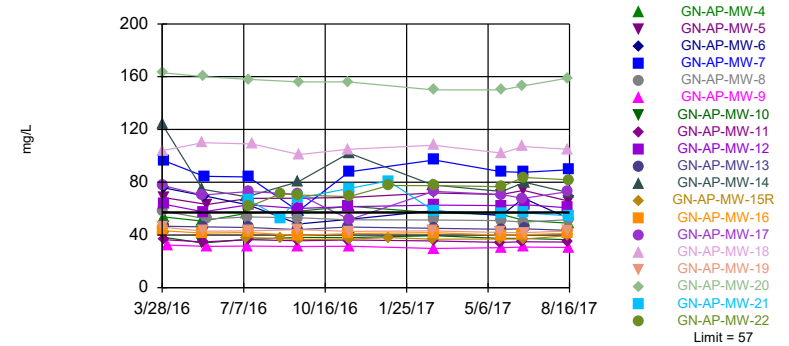


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 27 background values. 96.3% NDs. Annual per-constituent alpha = 0.07778. Individual comparison alpha = 0.002129 (1 of 2). Comparing 19 points to limit.

Constituent: Boron Analysis Run 12/13/2017 2:38 PM View: PLs - Interwell
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Exceeds Limit: GN-AP-MW-5, GN-AP-MW-7, GN-AP-MW-12, GN-AP-MW-14, GN-AP-

Prediction Limit
Interwell Non-parametric

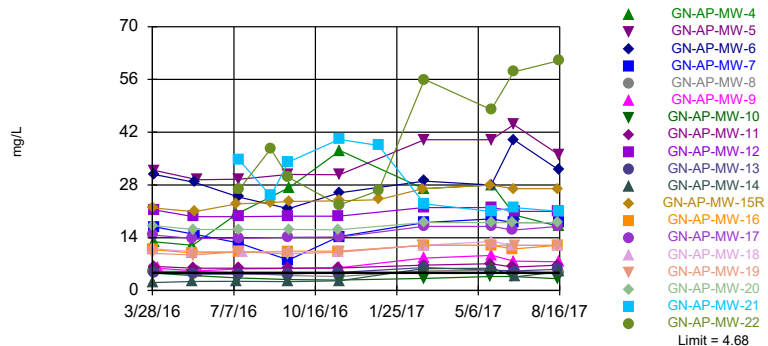


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 27 background values. 3.704% NDs. Annual per-constituent alpha = 0.07778. Individual comparison alpha = 0.002129 (1 of 2). Comparing 19 points to limit.

Constituent: Calcium Analysis Run 12/13/2017 2:38 PM View: PLs - Interwell
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Exceeds Limit: GN-AP-MW-4, GN-AP-MW-5, GN-AP-MW-6, GN-AP-MW-7, GN-AP-MW

Prediction Limit
Interwell Parametric

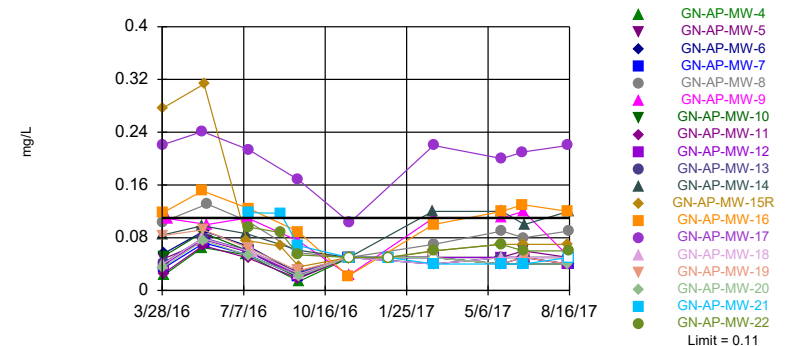


Background Data Summary (based on square root transformation): Mean=1.57, Std. Dev.=0.2531, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9255, critical = 0.894. Kappa = 2.342 (c=7, w=19, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.000396. Comparing 19 points to limit.

Constituent: Chloride Analysis Run 12/13/2017 2:38 PM View: PLs - Interwell
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Exceeds Limit: GN-AP-MW-14, GN-AP-MW-16, GN-AP-MW-17

Prediction Limit
Interwell Parametric

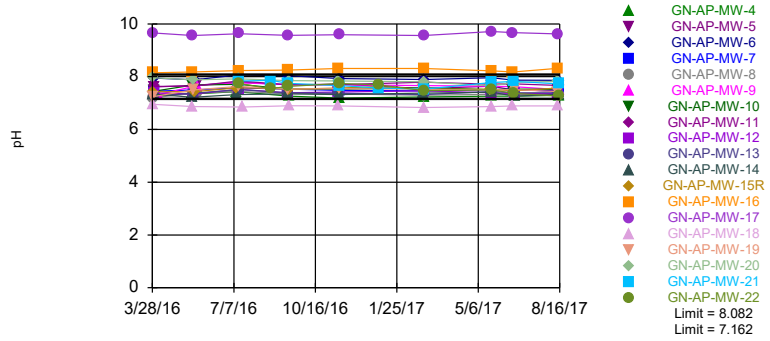


Background Data Summary (after Kaplan-Meier Adjustment): Mean=0.05416, Std. Dev.=0.02387, n=27, 40.74% NDs. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9194, critical = 0.894. Kappa = 2.342 (c=7, w=19, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.000396. Comparing 19 points to limit.

Constituent: Fluoride Analysis Run 12/13/2017 2:38 PM View: PLs - Interwell
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Exceeds Limits: GN-AP-MW-16, GN-AP-MW-17, GN-AP-MW-18

Prediction Limit Interwell Parametric



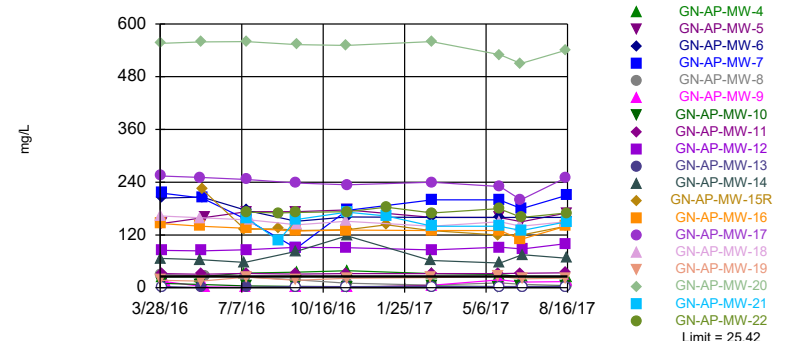
Background Data Summary: Mean=7.622, Std. Dev.=0.1966, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9144, critical = 0.894. Kappa = 2.342 (c=7, w=19, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.000198. Comparing 19 points to limit.

Constituent: pH Analysis Run 12/13/2017 2:38 PM View: PLs - Interwell
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Hollow symbols indicate censored values.

Exceeds Limit: GN-AP-MW-5, GN-AP-MW-6, GN-AP-MW-7, GN-AP-MW-11, GN-AP-M

Prediction Limit Interwell Parametric

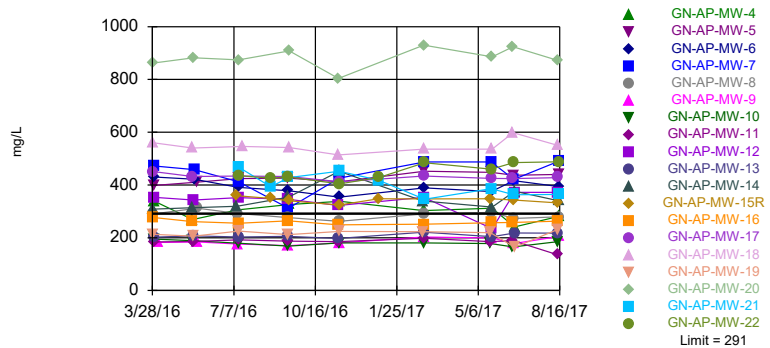


Background Data Summary (based on square root transformation): Mean=2.53, Std. Dev.=1.073, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.894, critical = 0.894. Kappa = 2.342 (c=7, w=19, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.000396. Comparing 19 points to limit.

Constituent: Sulfate Analysis Run 12/13/2017 2:38 PM View: PLs - Interwell
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Exceeds Limit: GN-AP-MW-5, GN-AP-MW-6, GN-AP-MW-7, GN-AP-MW-12, GN-AP-M

Prediction Limit Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 27 background values. Annual per-constituent alpha = 0.07778. Individual comparison alpha = 0.002129 (1 of 2). Comparing 19 points to limit.

Constituent: TDS Analysis Run 12/13/2017 2:38 PM View: PLs - Interwell
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Trend Test Summary - Significant Results

Plant Gaston Client: Southern Company Data: Gaston Ash Pond Printed 11/3/2017, 12:47 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GN-AP-MW-12	0.0515	33	25	Yes	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	GN-AP-MW-15R	0.1197	46	34	Yes	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	GN-AP-MW-17	-0.2926	-29	-25	Yes	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-AP-MW-15R	4.345	46	34	Yes	11	0	n/a	n/a	0.01	NP

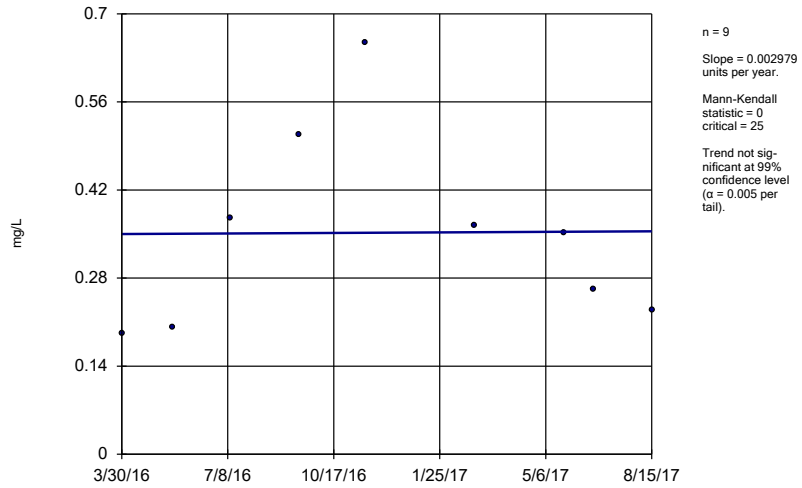
Trend Test Summary - All Results

Plant Gaston Client: Southern Company Data: Gaston Ash Pond Printed 11/3/2017, 12:47 PM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	GN-AP-MW-4	0.002979	0	25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	GN-AP-MW-5	0.08679	15	25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	GN-AP-MW-6	-0.7087	-16	-25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	GN-AP-MW-7	0.002626	0	25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	GN-AP-MW-11	0.004164	9	25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	GN-AP-MW-12	0.0515	33	25	Yes	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	GN-AP-MW-15R	0.1197	46	34	Yes	11	0	n/a	n/a	0.01	NP
Boron (mg/L)	GN-AP-MW-16	-0.06756	-24	-25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	GN-AP-MW-17	-0.2926	-29	-25	Yes	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	GN-AP-MW-18	-0.1099	-25	-25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	GN-AP-MW-20	-0.1472	-19	-25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	GN-AP-MW-21	-0.02904	0	25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	GN-AP-MW-22	0.05195	8	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-AP-MW-5	3.639	14	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-AP-MW-7	2.382	6	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-AP-MW-12	-0.1097	0	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-AP-MW-14	-7.077	-10	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-AP-MW-17	-2.587	-8	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-AP-MW-18	-1.953	-5	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-AP-MW-20	-8.138	-18	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GN-AP-MW-22	15.97	23	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-AP-MW-4	4.153	6	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-AP-MW-5	7.071	19	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-AP-MW-6	3.888	10	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-AP-MW-7	2.674	13	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-AP-MW-9	2.012	20	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-AP-MW-11	0.3277	14	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-AP-MW-12	0.5599	12	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-AP-MW-13	0.9094	20	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-AP-MW-14	1.697	24	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-AP-MW-15R	4.345	46	34	Yes	11	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-AP-MW-16	0.9877	20	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-AP-MW-17	2.006	20	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-AP-MW-18	1.172	15	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-AP-MW-19	1.834	22	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-AP-MW-20	0.6734	13	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-AP-MW-21	-10.36	-19	-25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GN-AP-MW-22	29.83	20	25	No	9	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GN-AP-MW-17	-0.006101	-7	-25	No	9	0	n/a	n/a	0.01	NP
pH (pH)	GN-AP-MW-16	0.09775	16	25	No	9	0	n/a	n/a	0.01	NP
pH (pH)	GN-AP-MW-17	0.03554	5	25	No	9	0	n/a	n/a	0.01	NP
pH (pH)	GN-AP-MW-18	-0.005464	-4	-25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-AP-MW-5	0	2	25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-AP-MW-6	-17.84	-18	-25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-AP-MW-7	2.417	1	25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-AP-MW-11	1.39	13	25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-AP-MW-12	6.59	20	25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-AP-MW-14	-0.7766	0	25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-AP-MW-15R	-15.06	-25	-34	No	11	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-AP-MW-16	-12.29	-16	-25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-AP-MW-17	-21.58	-20	-25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-AP-MW-18	-10.35	-22	-25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-AP-MW-20	-17.31	-17	-25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-AP-MW-21	-21.45	-7	-25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GN-AP-MW-22	-1.463	-5	-25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-AP-MW-5	29.23	22	25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-AP-MW-6	-20.58	-10	-25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-AP-MW-7	13.06	9	25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-AP-MW-12	11.06	6	25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-AP-MW-14	31.75	16	25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-AP-MW-15R	-32.59	-32	-34	No	11	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-AP-MW-17	-10.46	-16	-25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-AP-MW-18	-1.962	-1	-25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-AP-MW-20	20.91	8	25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-AP-MW-21	-88.9	-20	-25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	GN-AP-MW-22	63.11	20	25	No	9	0	n/a	n/a	0.01	NP

Sen's Slope Estimator

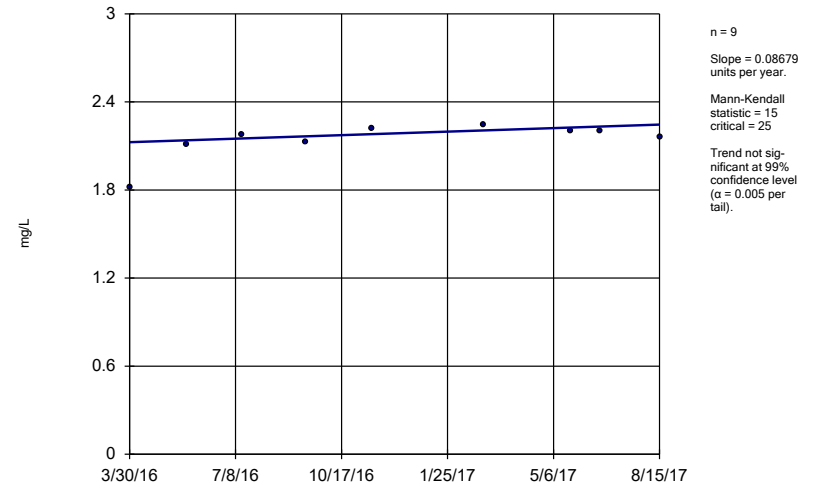
GN-AP-MW-4



Constituent: Boron Analysis Run 11/3/2017 12:35 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

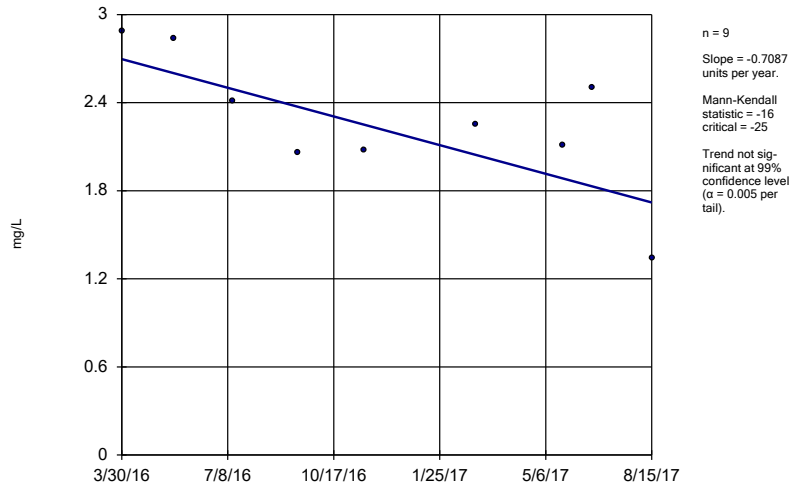
GN-AP-MW-5



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Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

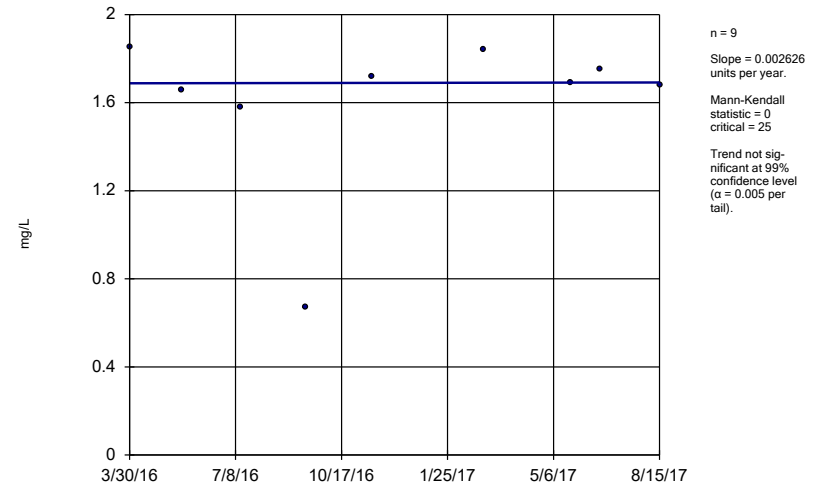
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Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

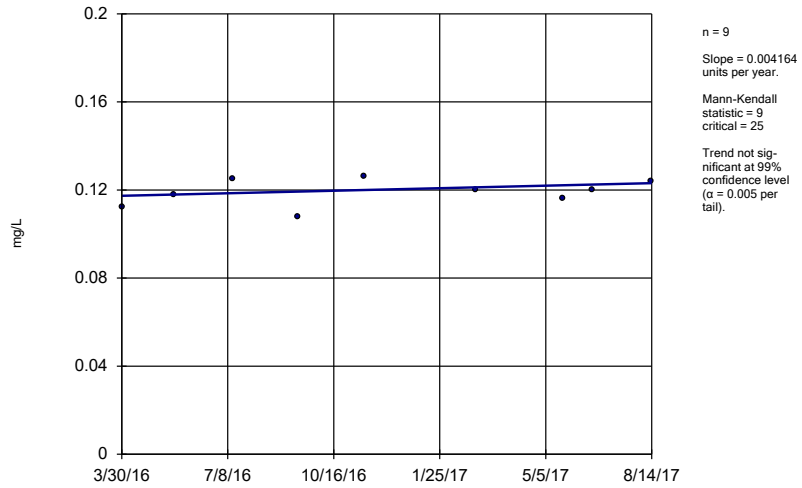
GN-AP-MW-7



Constituent: Boron Analysis Run 11/3/2017 12:35 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

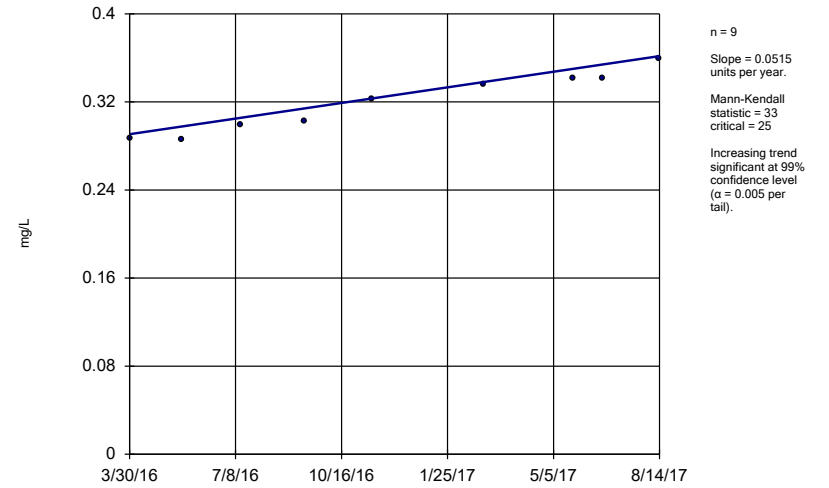
GN-AP-MW-11



Constituent: Boron Analysis Run 11/3/2017 12:35 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

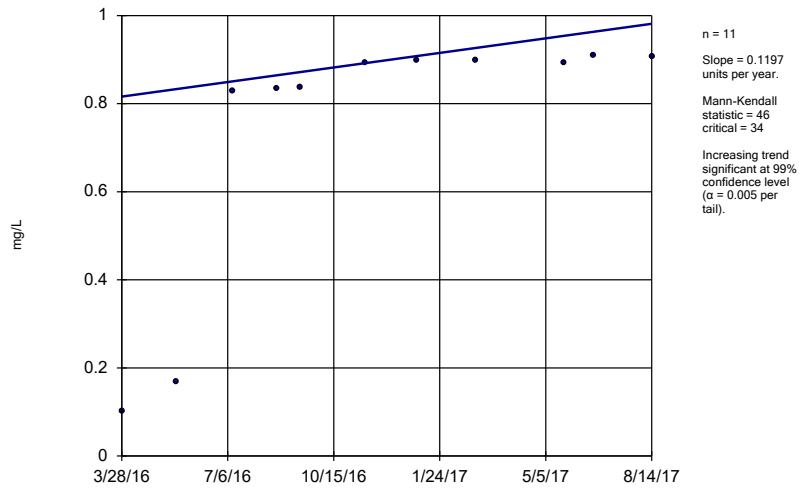
GN-AP-MW-12



Constituent: Boron Analysis Run 11/3/2017 12:35 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

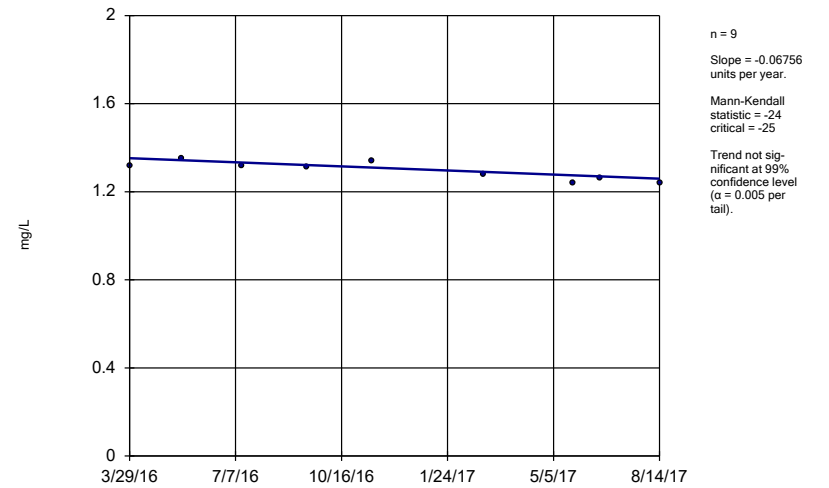
GN-AP-MW-15R



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Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

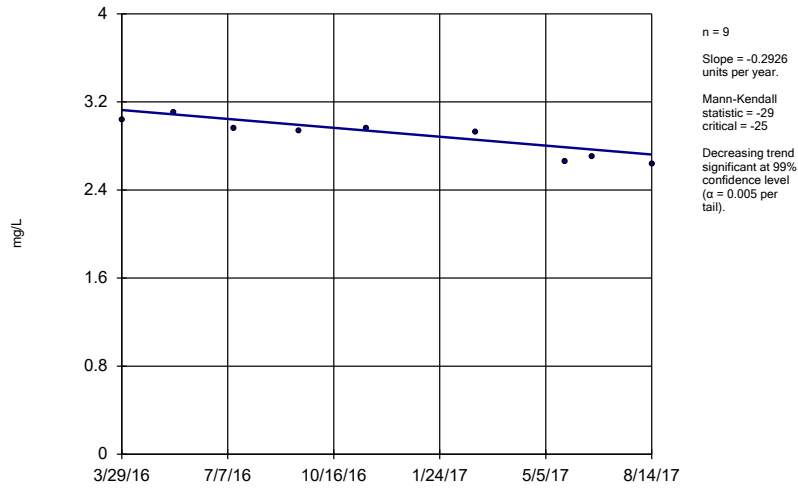
GN-AP-MW-16



Constituent: Boron Analysis Run 11/3/2017 12:35 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

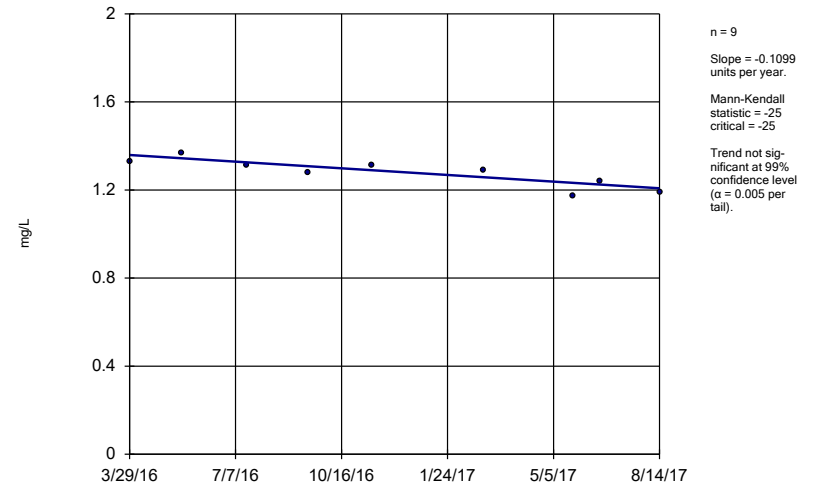
GN-AP-MW-17



Constituent: Boron Analysis Run 11/3/2017 12:35 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

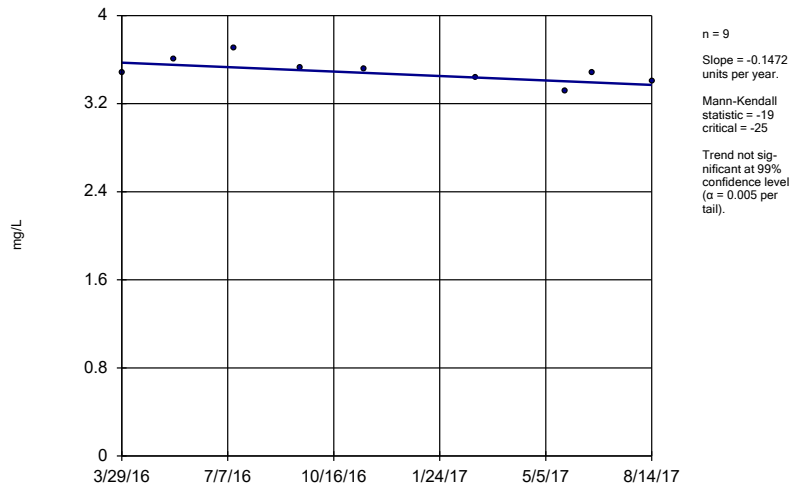
GN-AP-MW-18



Constituent: Boron Analysis Run 11/3/2017 12:35 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

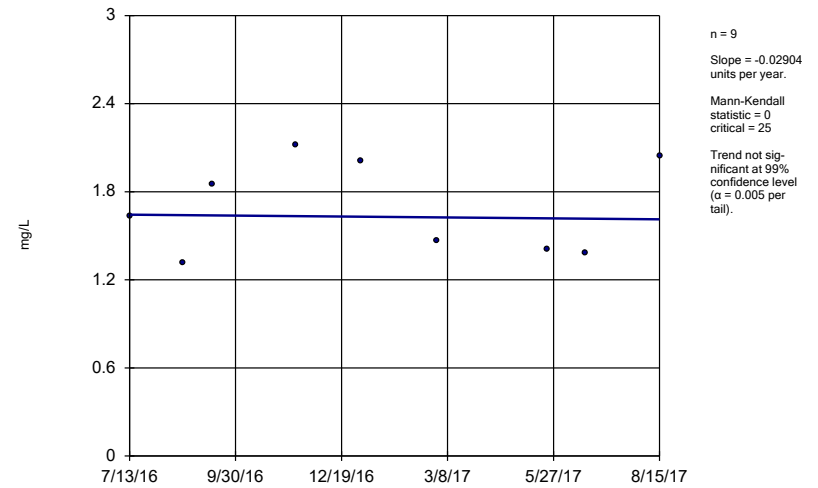
GN-AP-MW-20



Constituent: Boron Analysis Run 11/3/2017 12:35 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

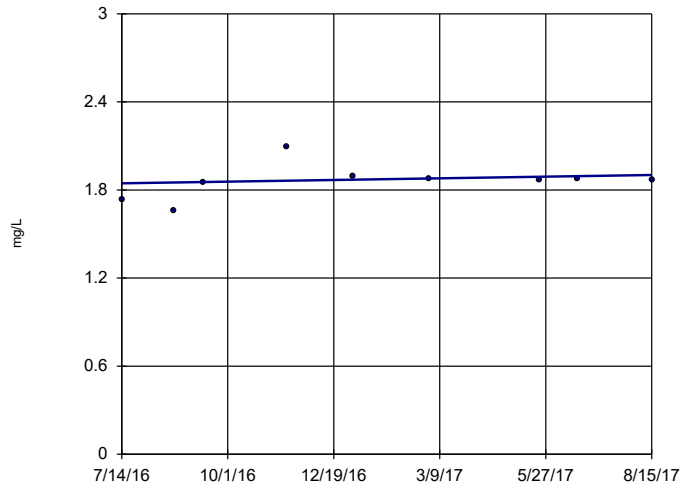
GN-AP-MW-21



Constituent: Boron Analysis Run 11/3/2017 12:35 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

GN-AP-MW-22

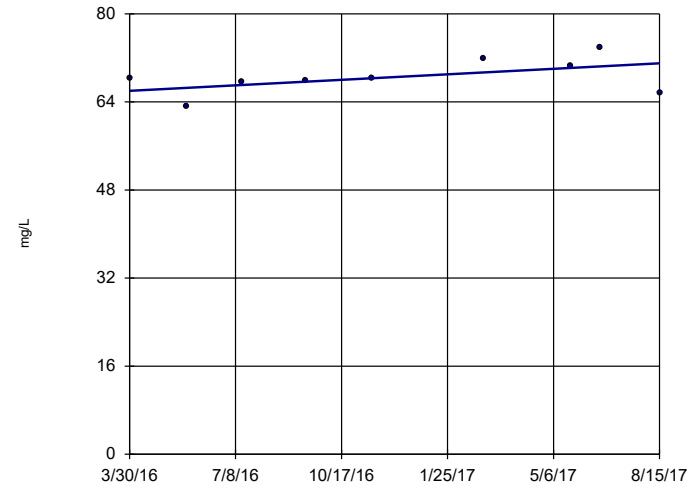


n = 9
 Slope = 0.05195
 units per year.
 Mann-Kendall
 statistic = 8
 critical = 25
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

Constituent: Boron Analysis Run 11/3/2017 12:35 PM View: Trend Tests - PL Exceedances
 Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

GN-AP-MW-5

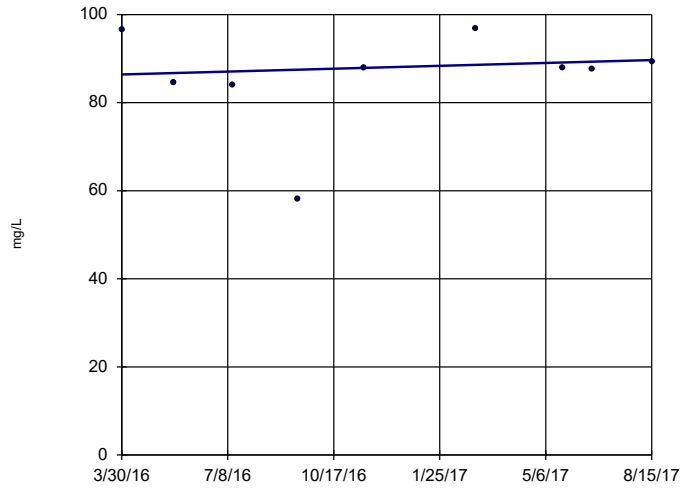


n = 9
 Slope = 3.639
 units per year.
 Mann-Kendall
 statistic = 14
 critical = 25
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

Constituent: Calcium Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
 Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

GN-AP-MW-7

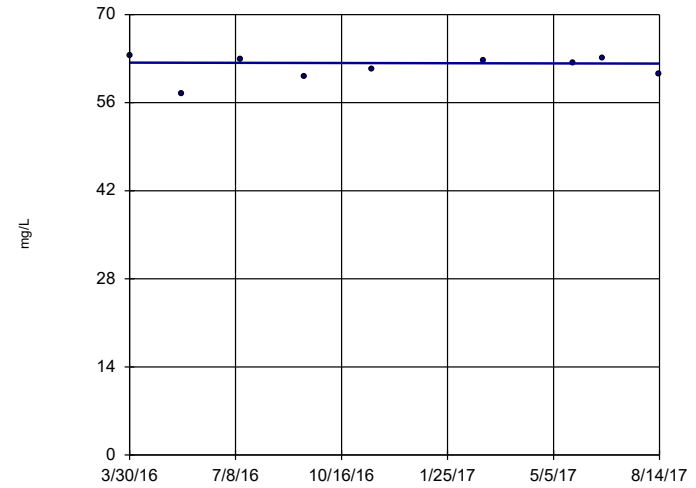


n = 9
 Slope = 2.382
 units per year.
 Mann-Kendall
 statistic = 6
 critical = 25
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

Constituent: Calcium Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
 Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

GN-AP-MW-12

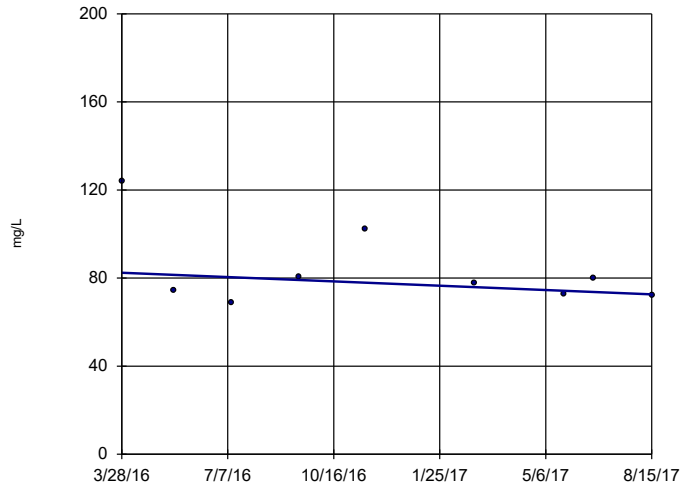


n = 9
 Slope = -0.1097
 units per year.
 Mann-Kendall
 statistic = 0
 critical = 25
 Trend not sig-
 nificant at 99%
 confidence level
 (α = 0.005 per
 tail).

Constituent: Calcium Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
 Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

GN-AP-MW-14

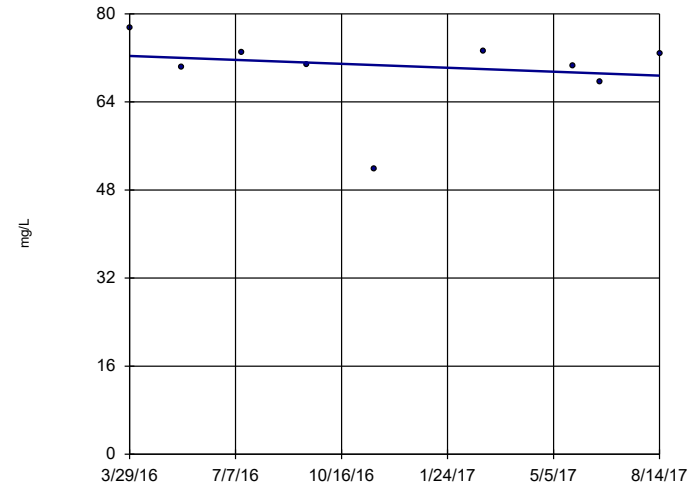


n = 9
 Slope = -7.077 units per year.
 Mann-Kendall statistic = -10
 critical = -25
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
 Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

GN-AP-MW-17

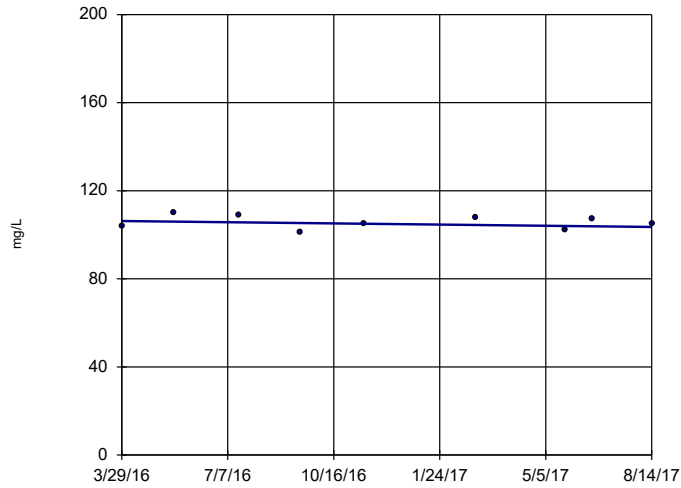


n = 9
 Slope = -2.587 units per year.
 Mann-Kendall statistic = -8
 critical = -25
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
 Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

GN-AP-MW-18

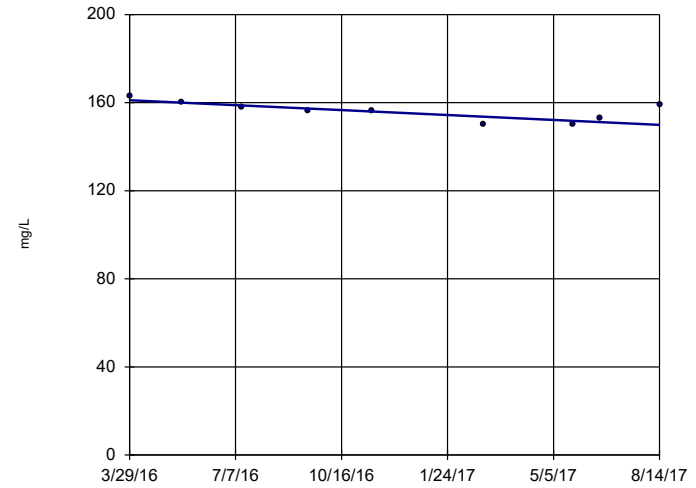


n = 9
 Slope = -1.953 units per year.
 Mann-Kendall statistic = -5
 critical = -25
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
 Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

GN-AP-MW-20

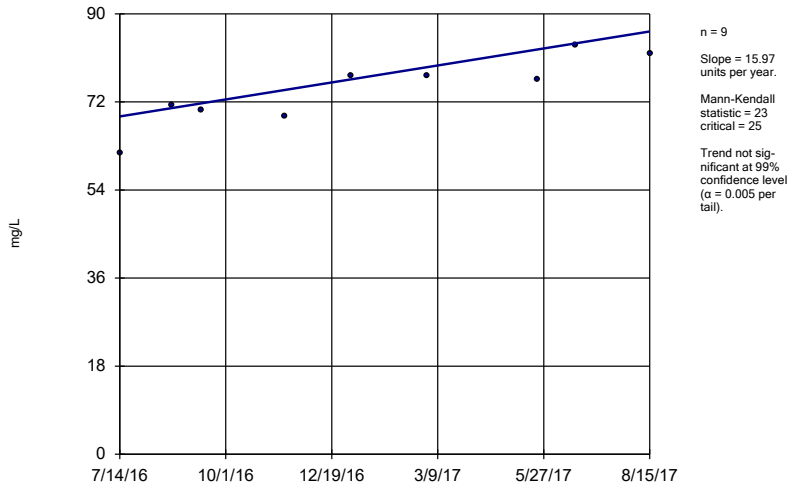


n = 9
 Slope = -8.138 units per year.
 Mann-Kendall statistic = -18
 critical = -25
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
 Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

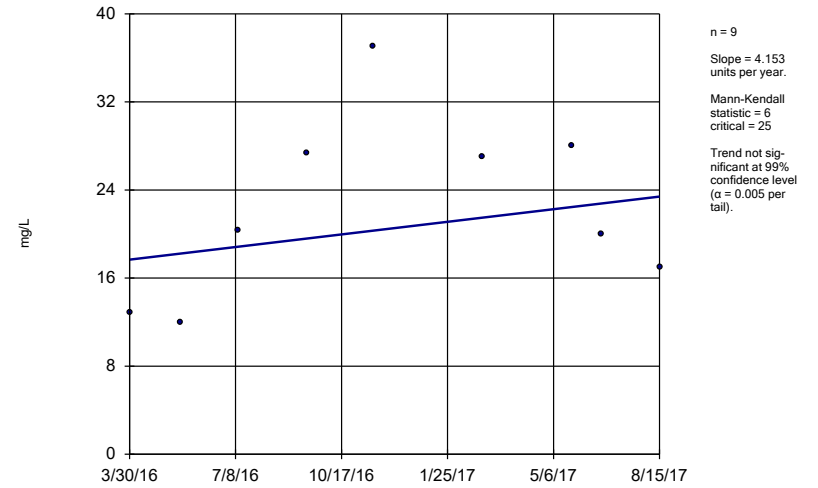
GN-AP-MW-22



Constituent: Calcium Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

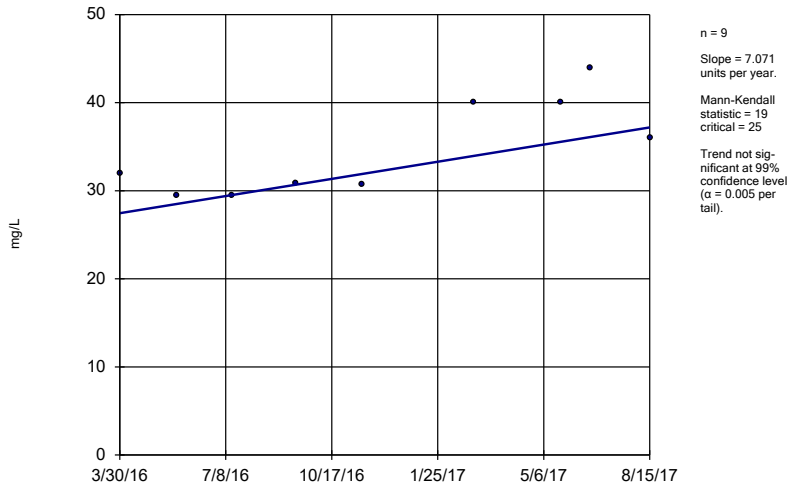
GN-AP-MW-4



Constituent: Chloride Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

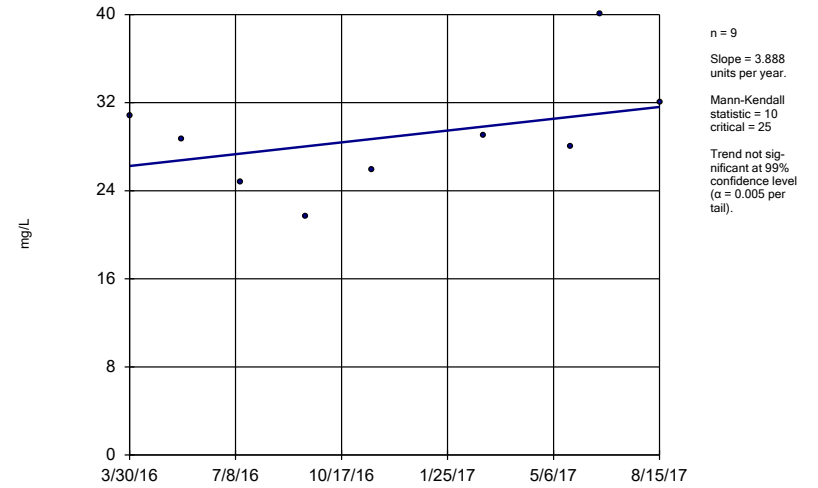
GN-AP-MW-5



Constituent: Chloride Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

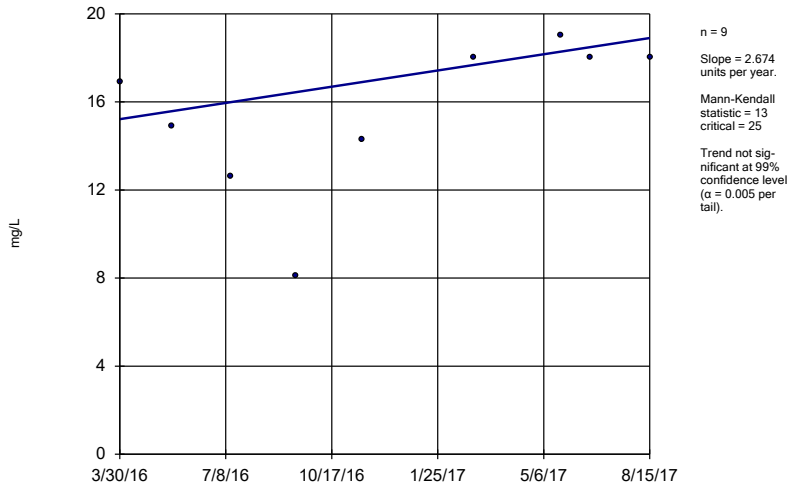
GN-AP-MW-6



Constituent: Chloride Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

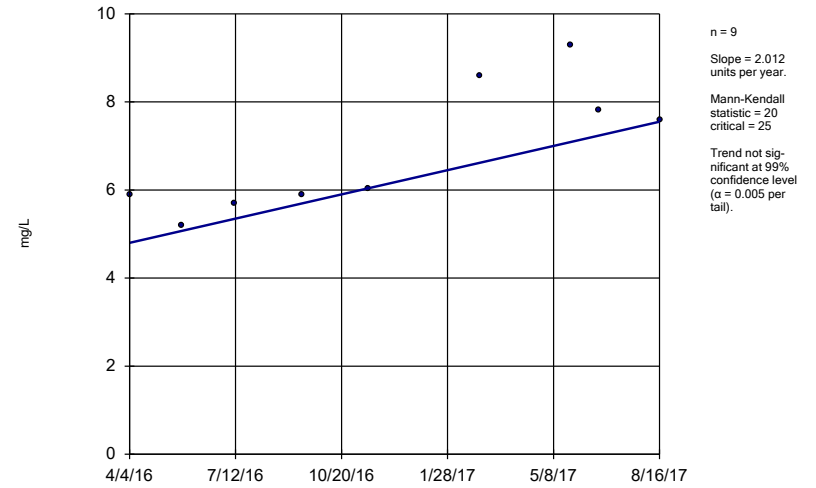
GN-AP-MW-7



Constituent: Chloride Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

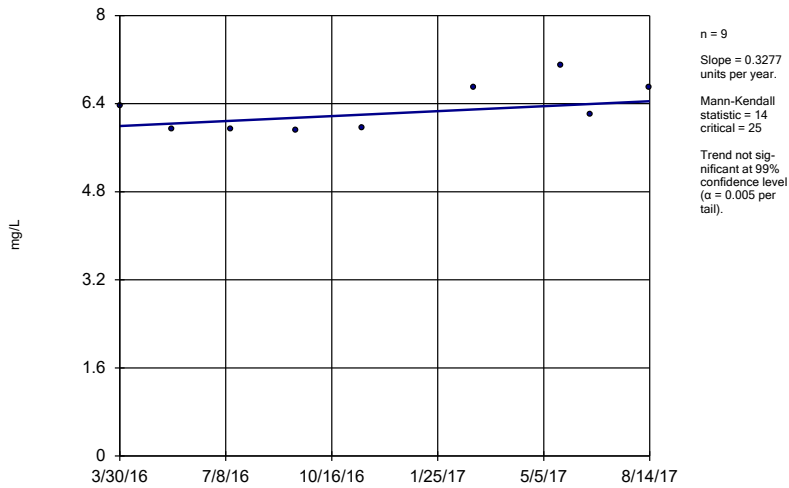
GN-AP-MW-9



Constituent: Chloride Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

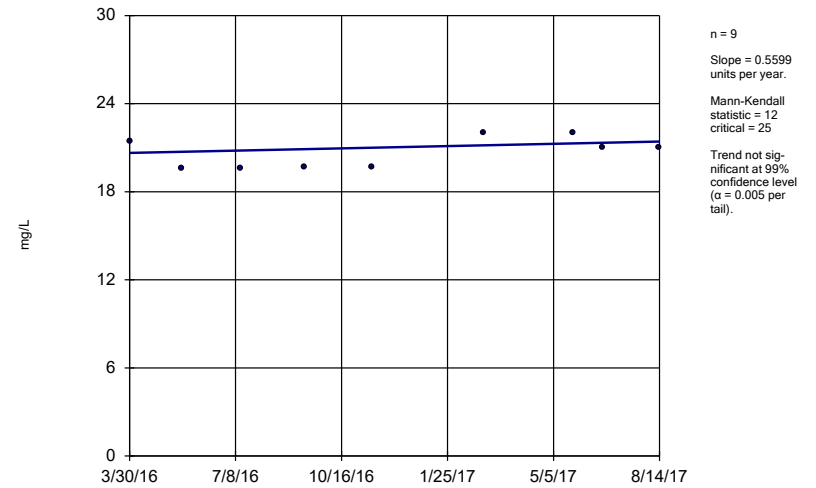
GN-AP-MW-11



Constituent: Chloride Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

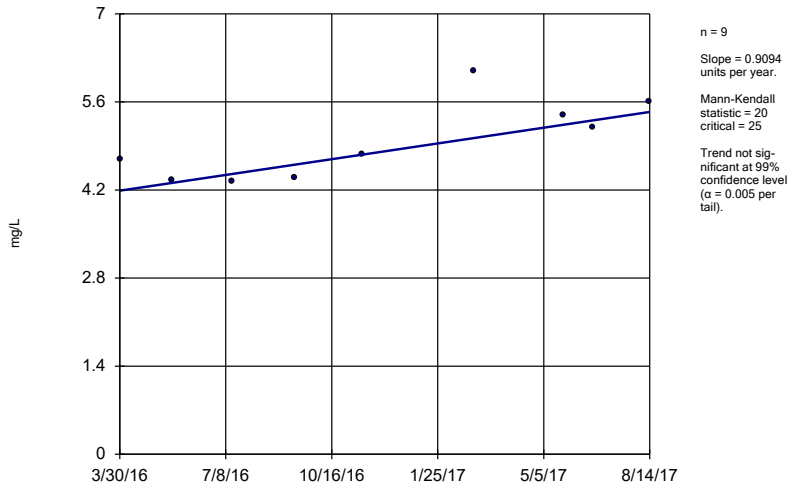
Sen's Slope Estimator

GN-AP-MW-12



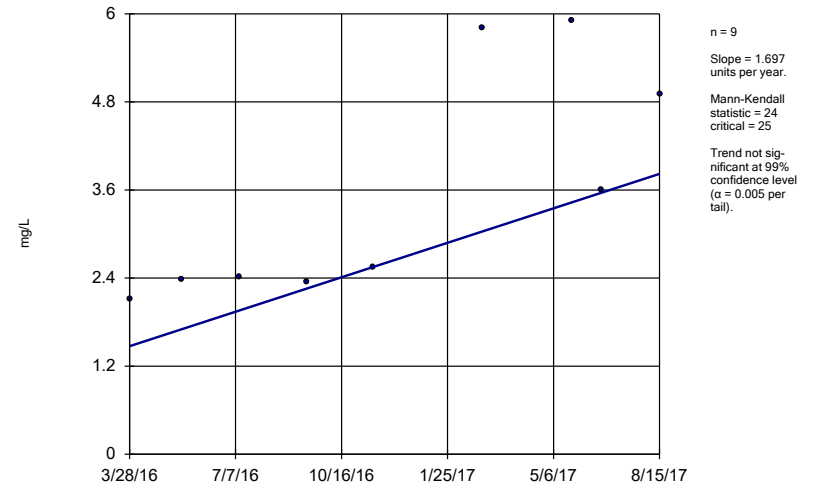
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Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator GN-AP-MW-13



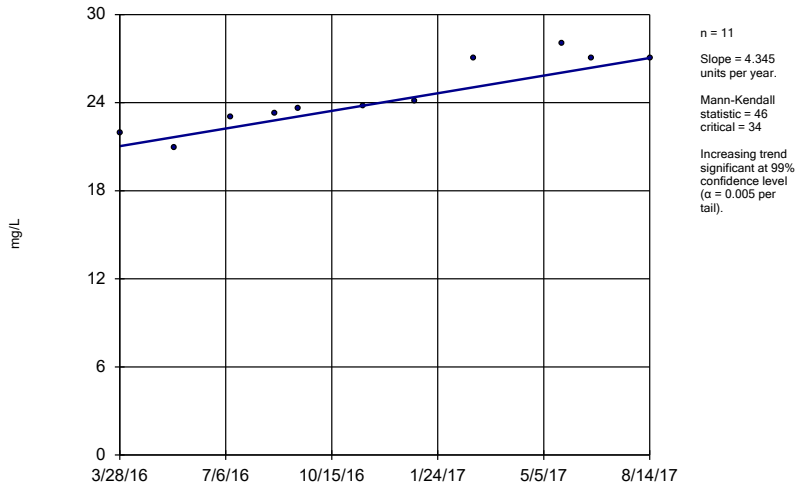
Constituent: Chloride Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator GN-AP-MW-14



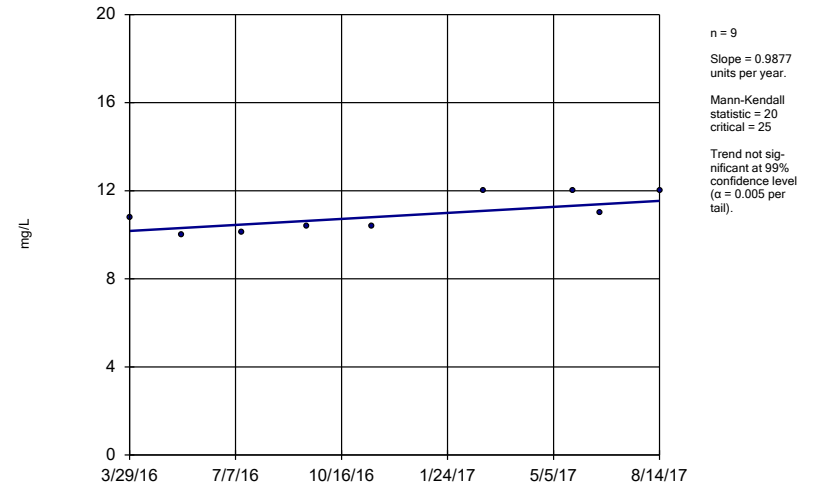
Constituent: Chloride Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator GN-AP-MW-15R



Constituent: Chloride Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

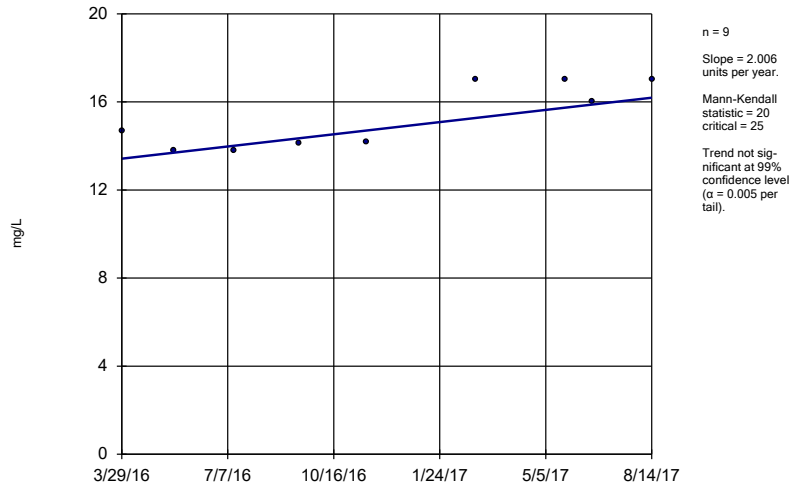
Sen's Slope Estimator GN-AP-MW-16



Constituent: Chloride Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

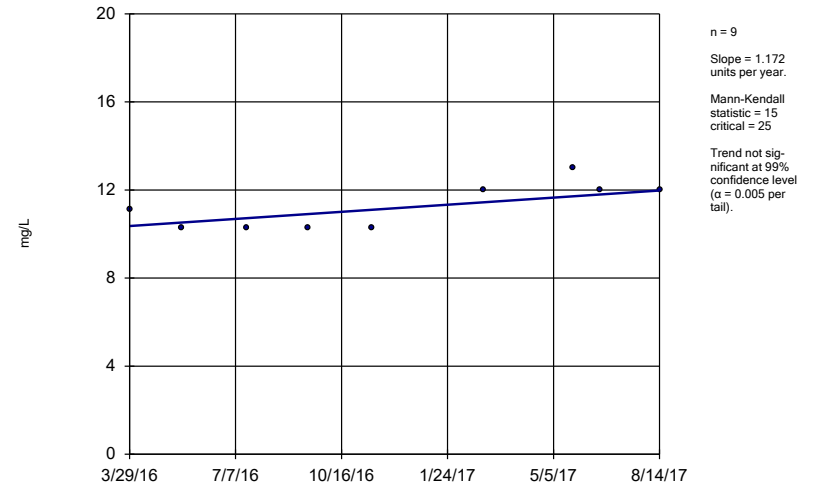
GN-AP-MW-17



Constituent: Chloride Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

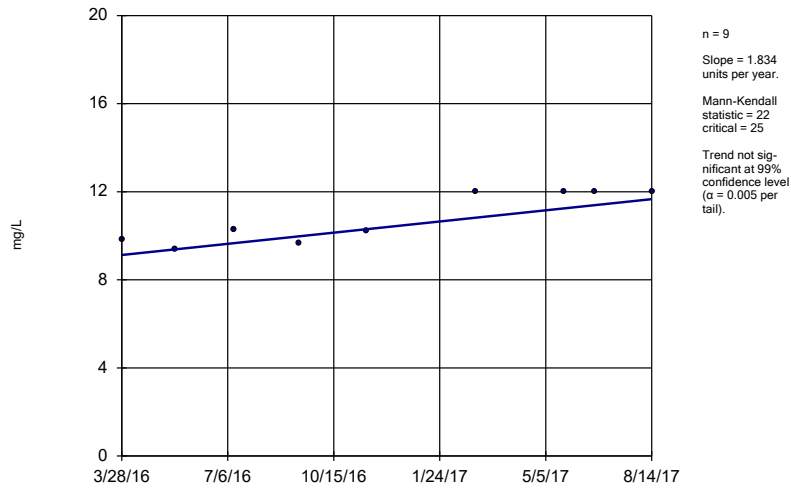
GN-AP-MW-18



Constituent: Chloride Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

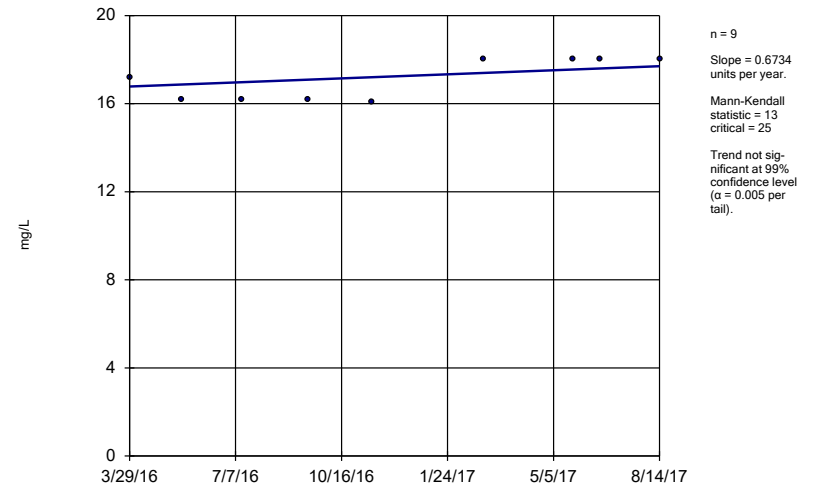
GN-AP-MW-19



Constituent: Chloride Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

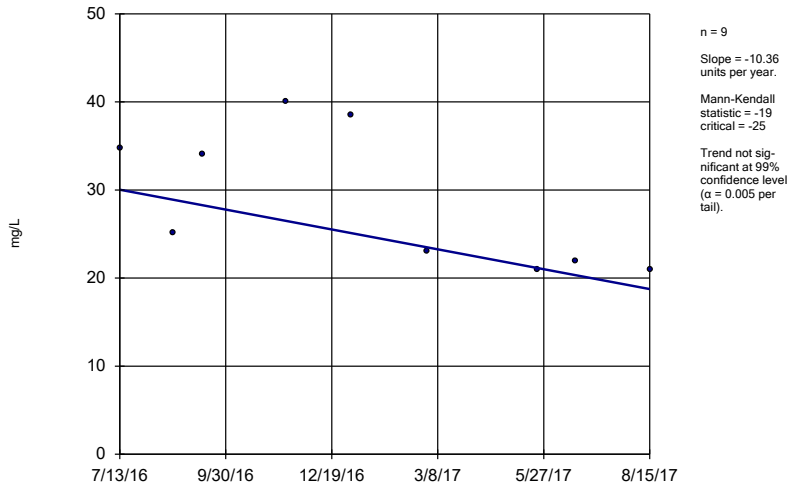
GN-AP-MW-20



Constituent: Chloride Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

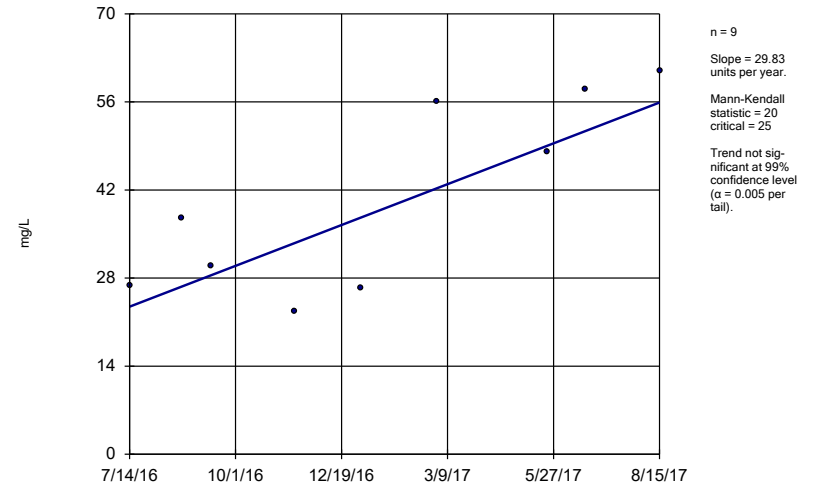
GN-AP-MW-21



Constituent: Chloride Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
 Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

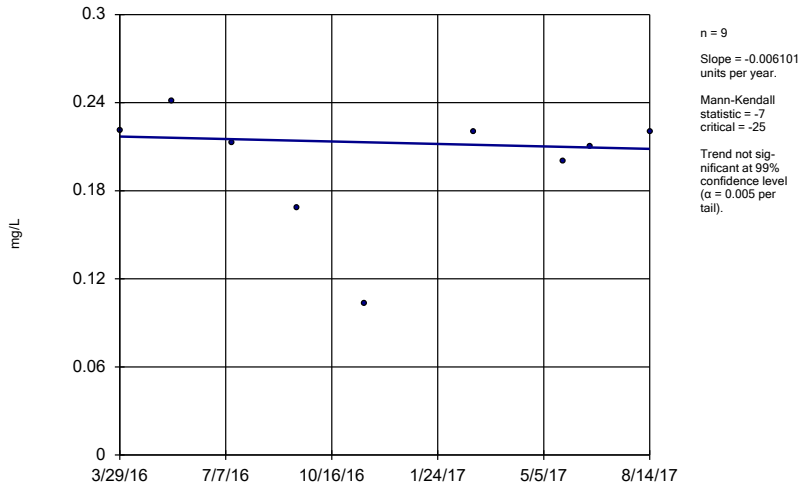
GN-AP-MW-22



Constituent: Chloride Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
 Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

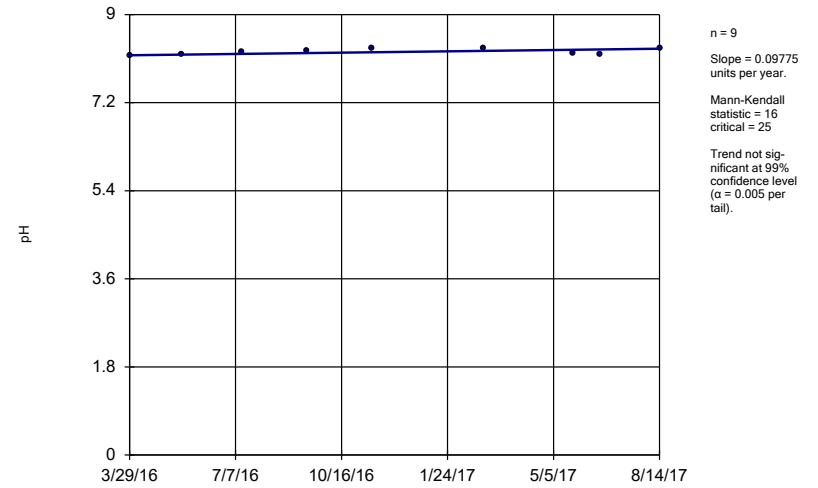
GN-AP-MW-17



Constituent: Fluoride Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
 Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

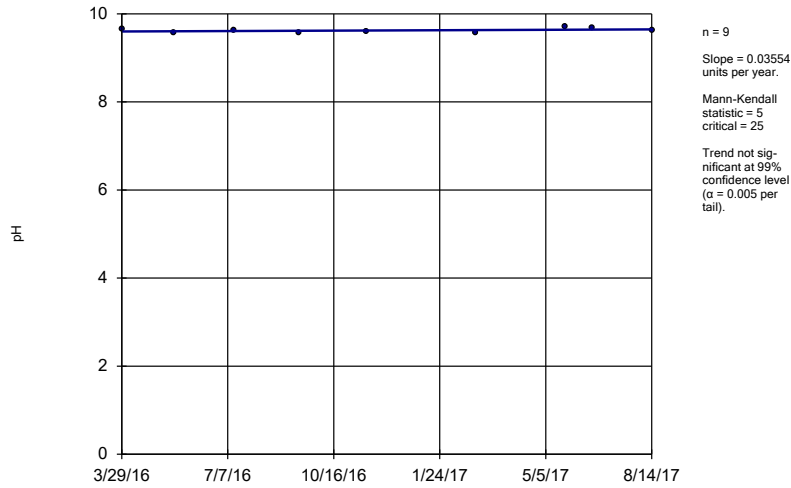
GN-AP-MW-16



Constituent: pH Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
 Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

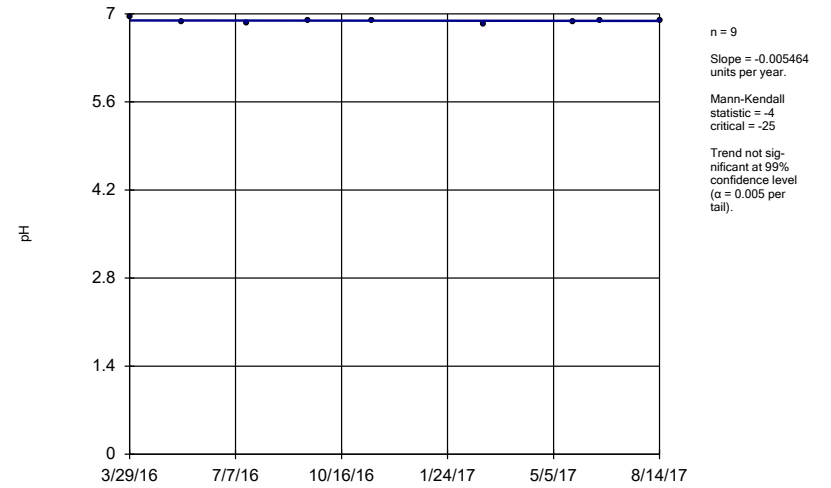
GN-AP-MW-17



Constituent: pH Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
 Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

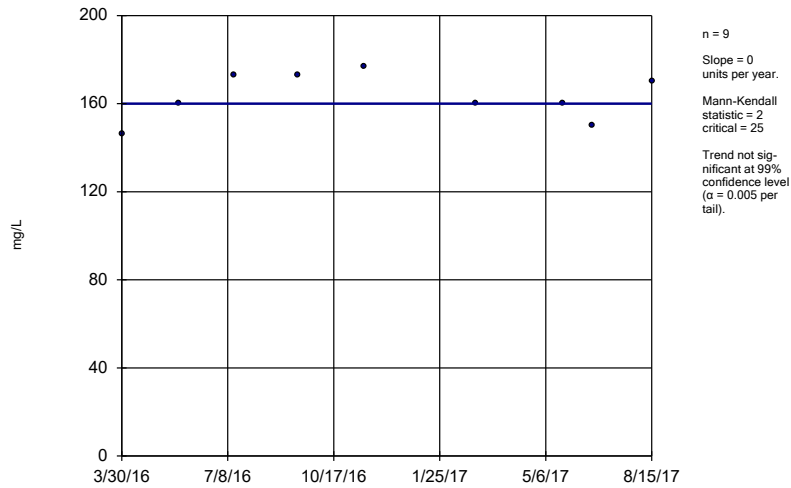
GN-AP-MW-18



Constituent: pH Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
 Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

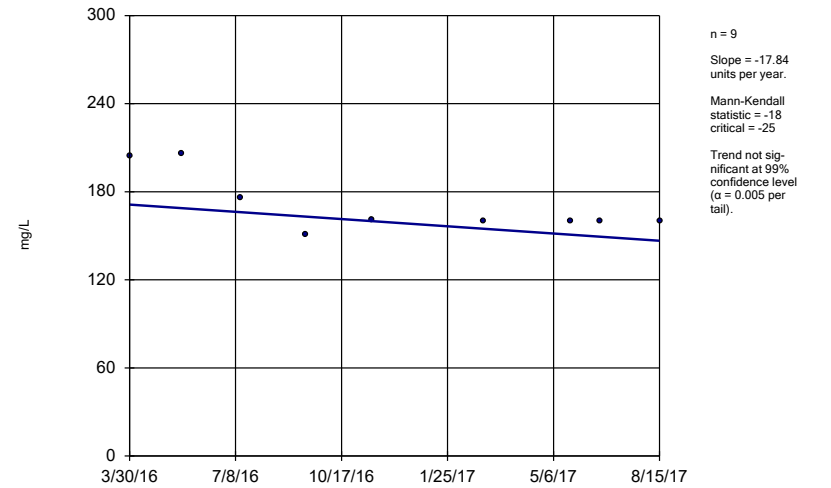
GN-AP-MW-5



Constituent: Sulfate Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
 Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

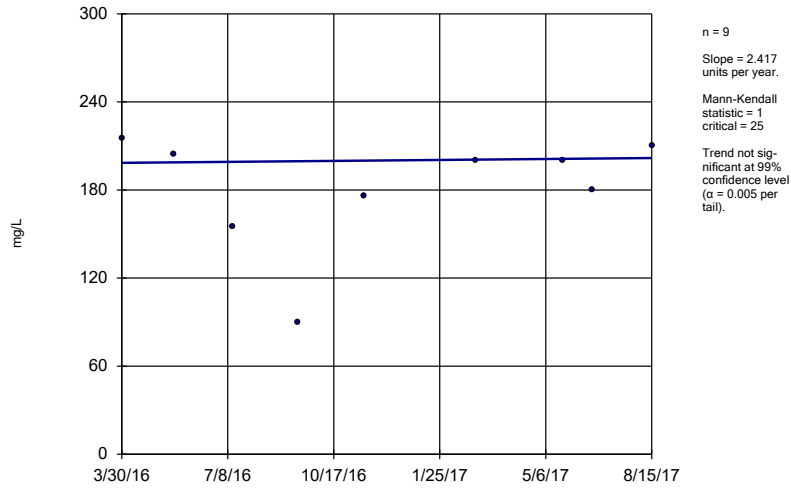
GN-AP-MW-6



Constituent: Sulfate Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
 Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

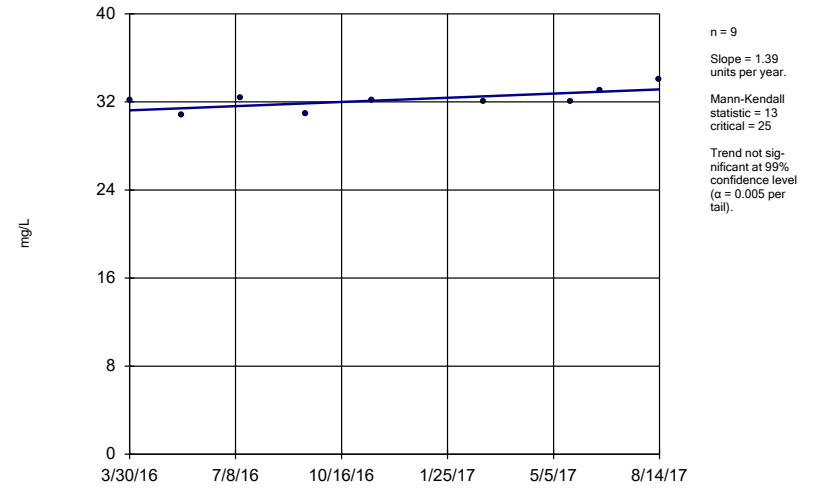
GN-AP-MW-7



Constituent: Sulfate Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

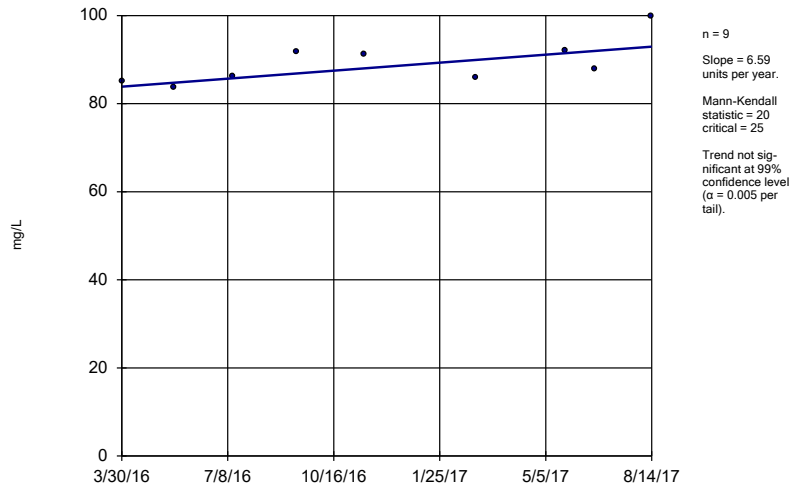
GN-AP-MW-11



Constituent: Sulfate Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

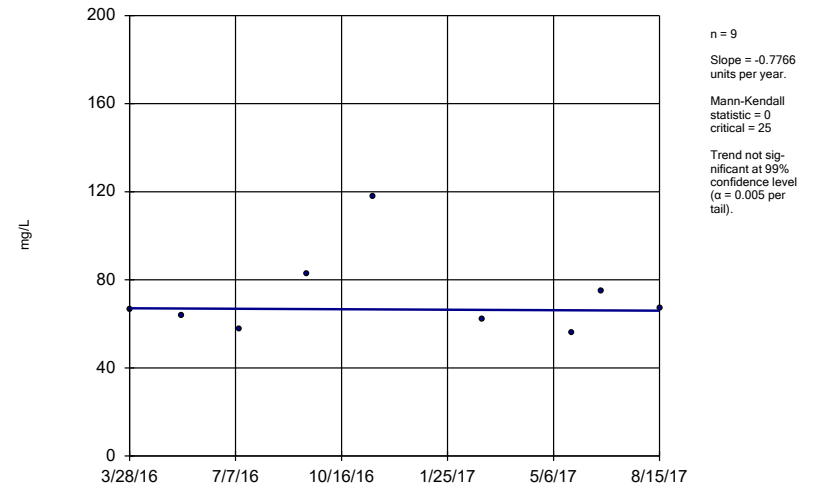
GN-AP-MW-12



Constituent: Sulfate Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

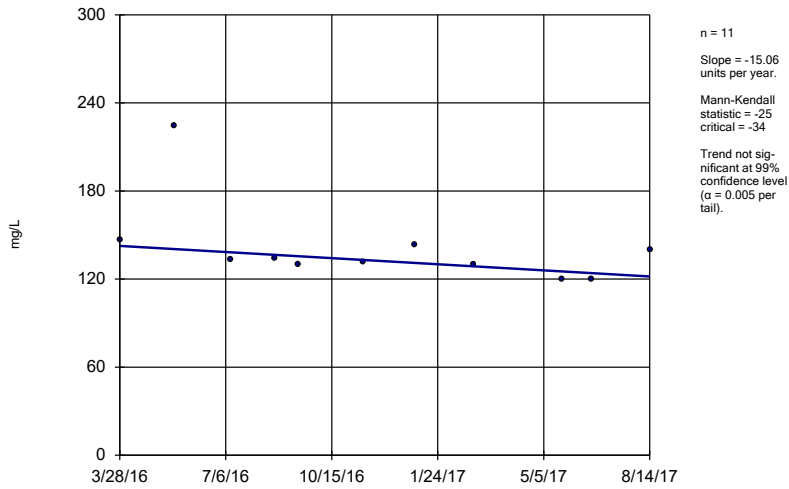
GN-AP-MW-14



Constituent: Sulfate Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

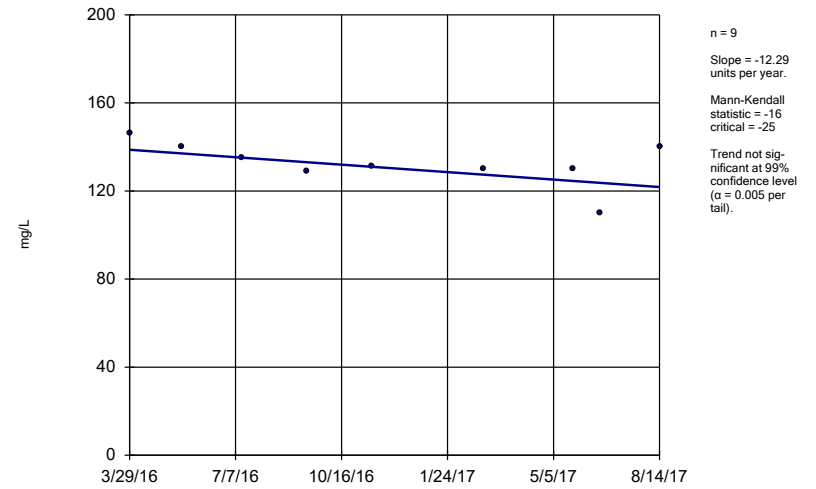
GN-AP-MW-15R



Constituent: Sulfate Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

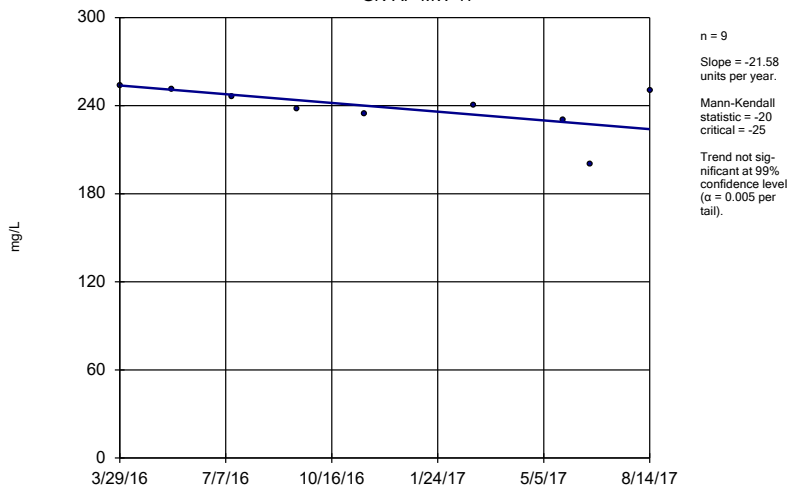
GN-AP-MW-16



Constituent: Sulfate Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

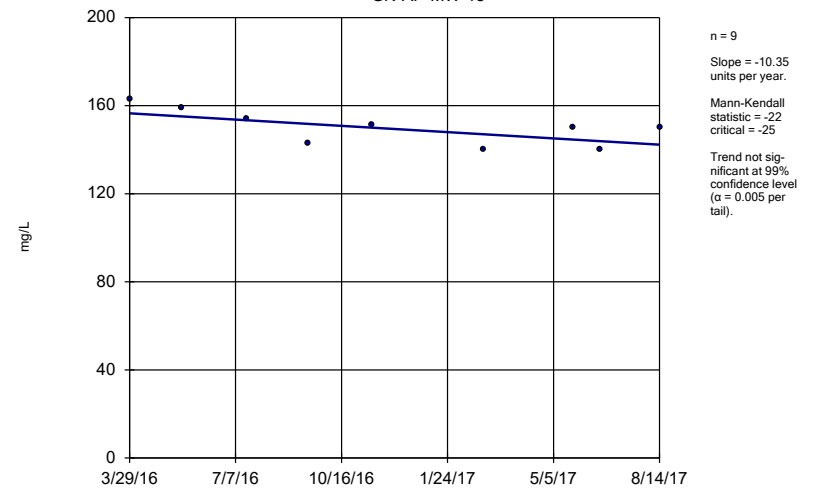
GN-AP-MW-17



Constituent: Sulfate Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

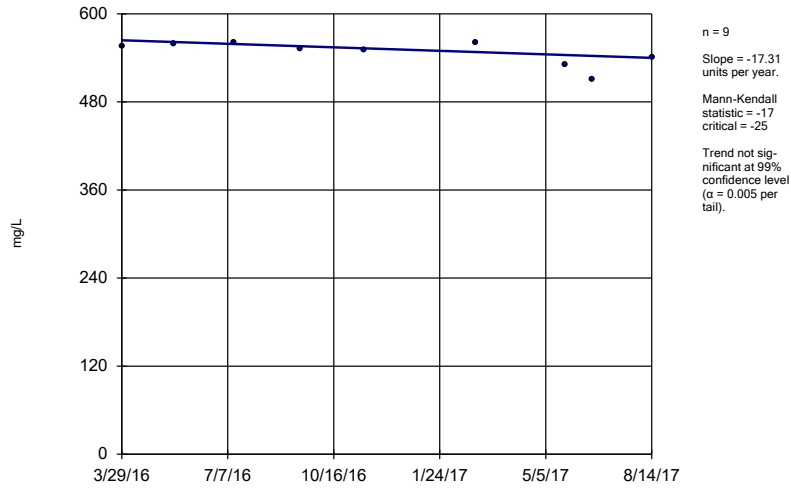
GN-AP-MW-18



Constituent: Sulfate Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

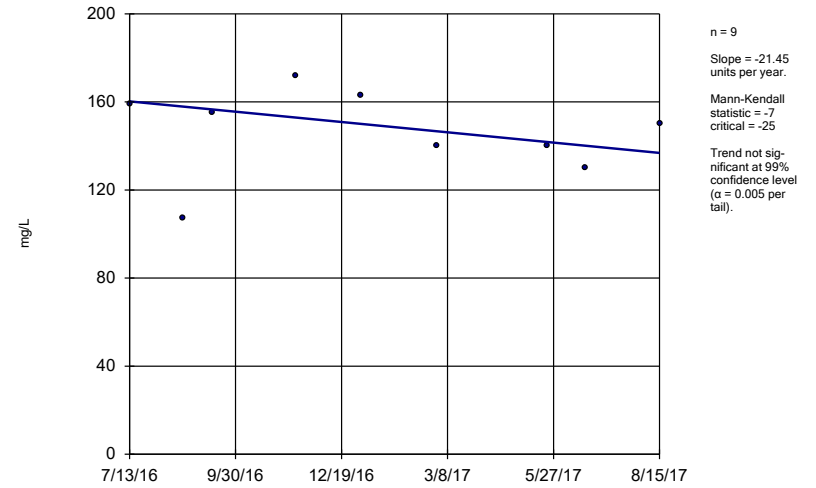
GN-AP-MW-20



Constituent: Sulfate Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
 Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

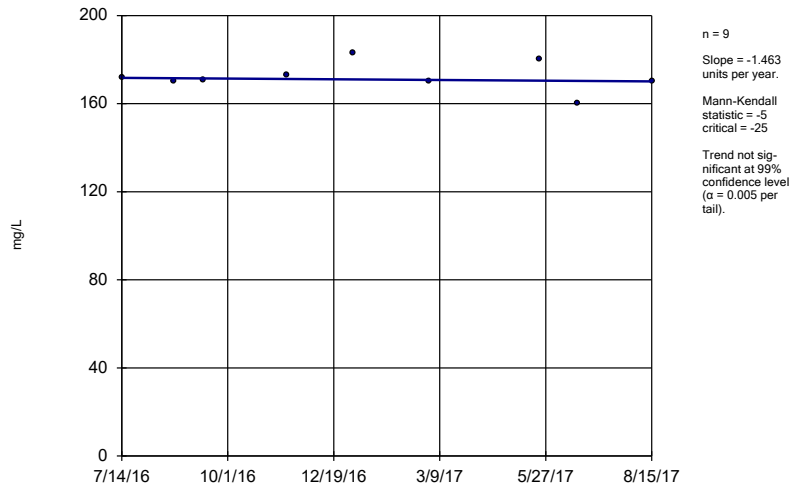
GN-AP-MW-21



Constituent: Sulfate Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
 Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

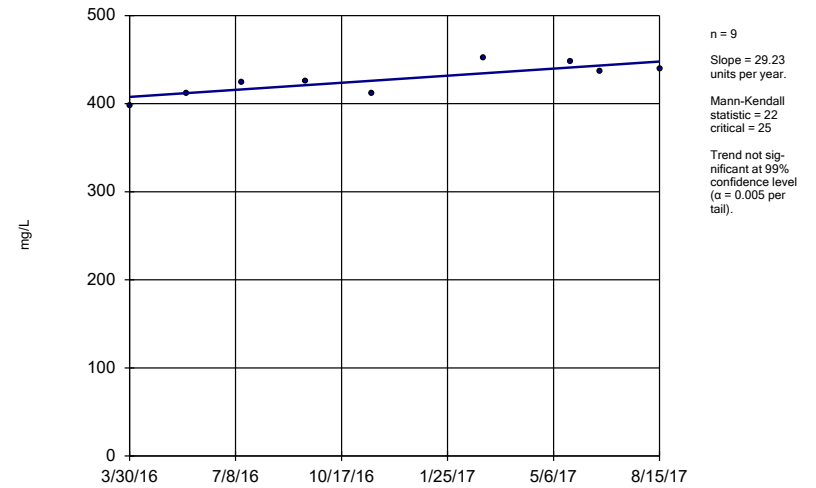
GN-AP-MW-22



Constituent: Sulfate Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
 Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

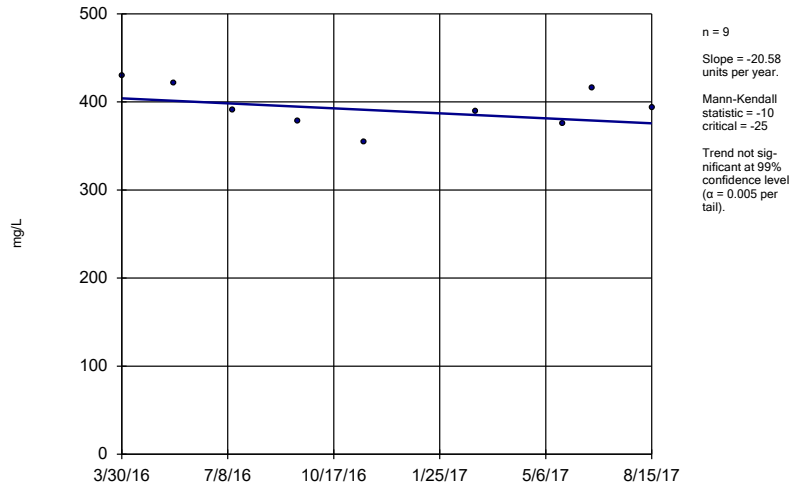
GN-AP-MW-5



Constituent: TDS Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
 Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

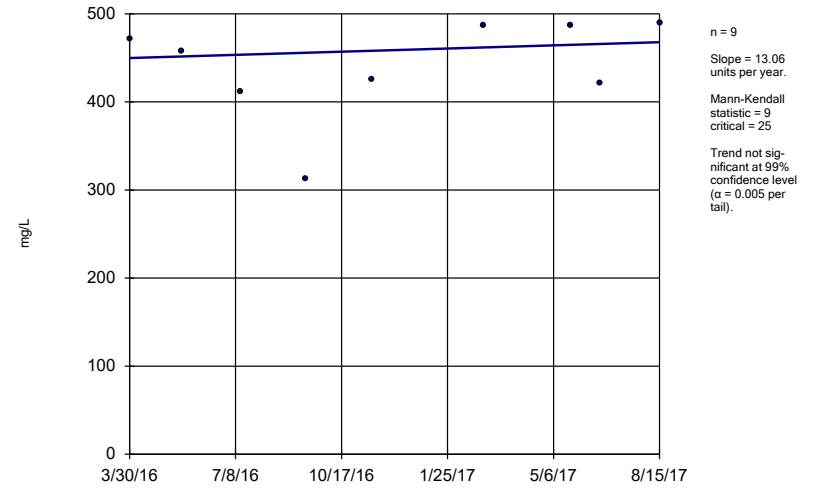
GN-AP-MW-6



Constituent: TDS Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

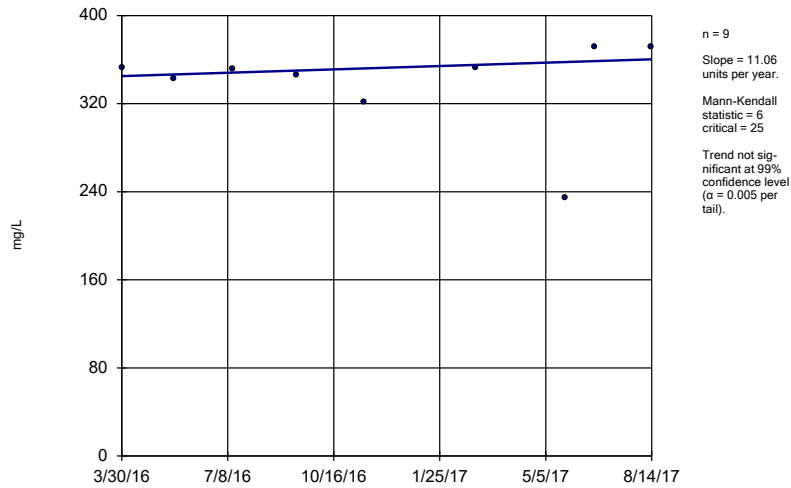
GN-AP-MW-7



Constituent: TDS Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

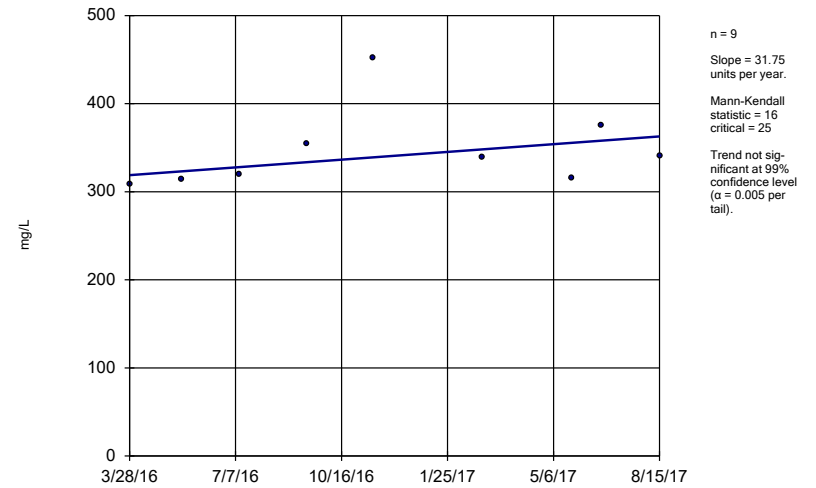
GN-AP-MW-12



Constituent: TDS Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

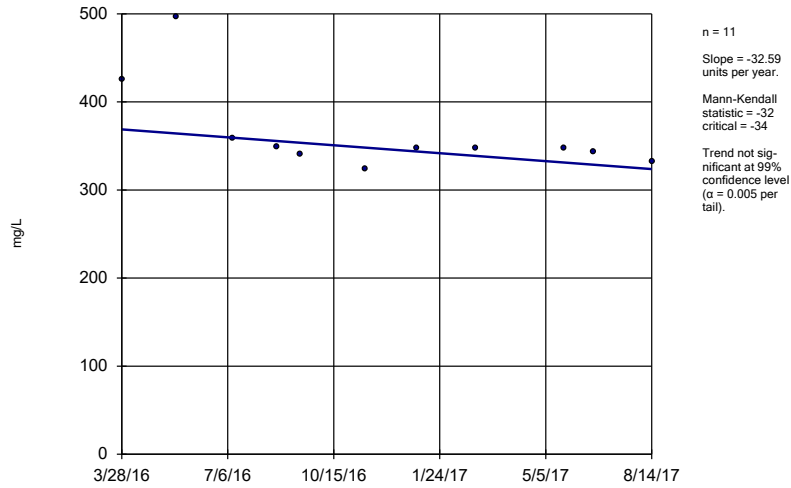
GN-AP-MW-14



Constituent: TDS Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

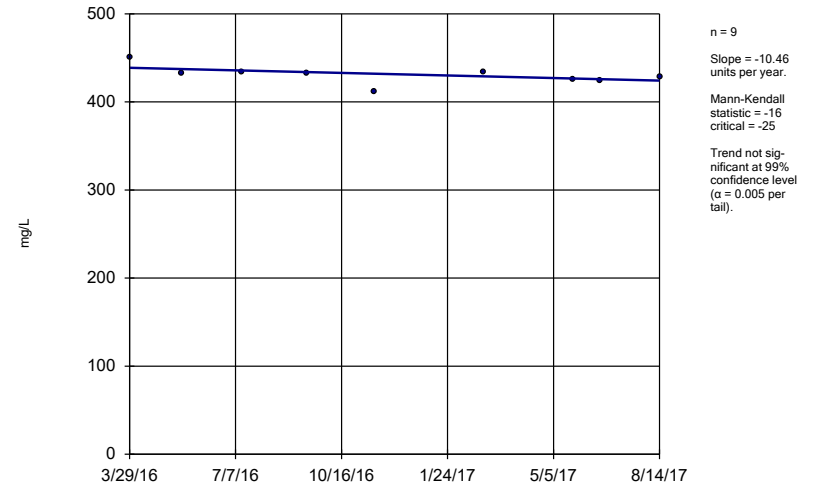
GN-AP-MW-15R



Constituent: TDS Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

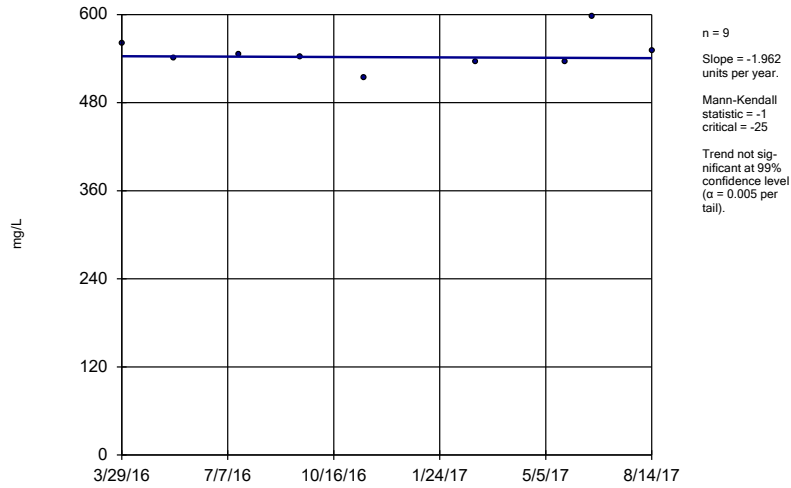
GN-AP-MW-17



Constituent: TDS Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

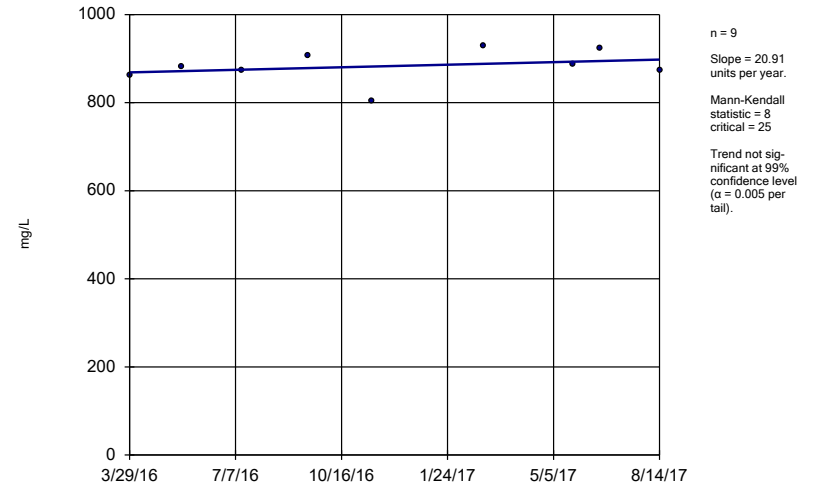
GN-AP-MW-18



Constituent: TDS Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

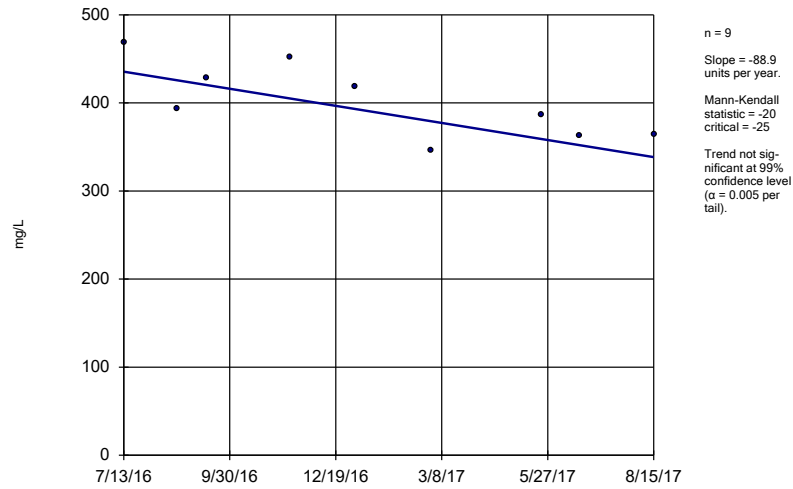
GN-AP-MW-20



Constituent: TDS Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Sen's Slope Estimator

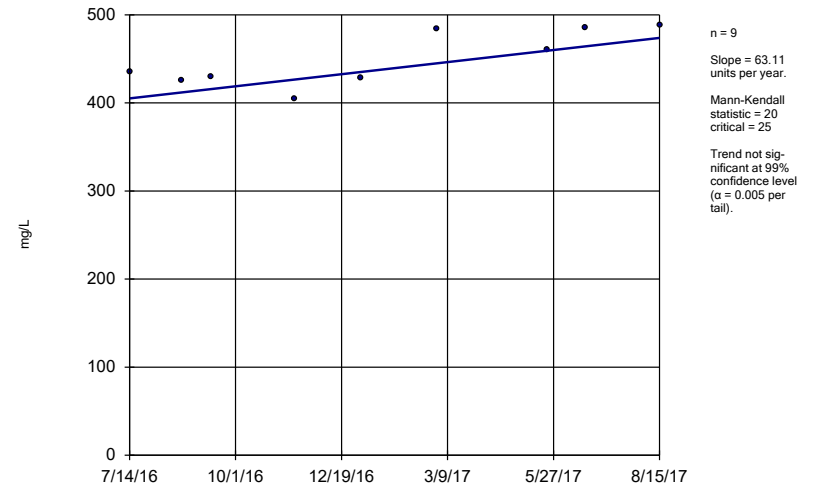
GN-AP-MW-21



Constituent: TDS Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

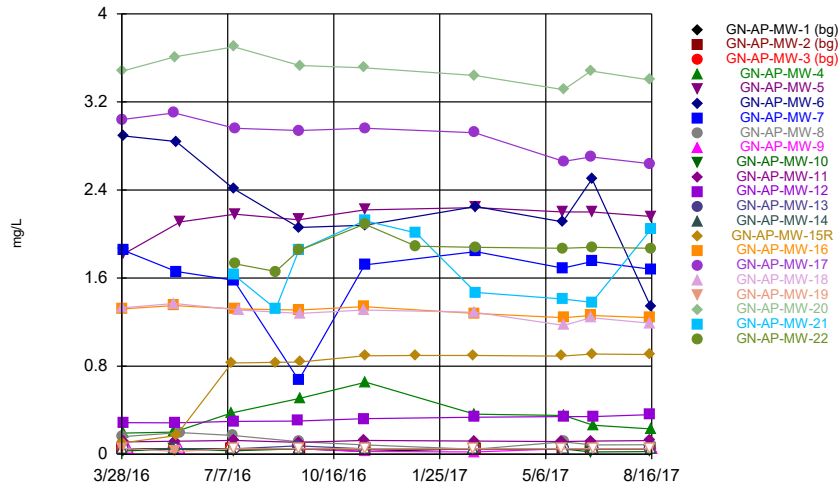
Sen's Slope Estimator

GN-AP-MW-22



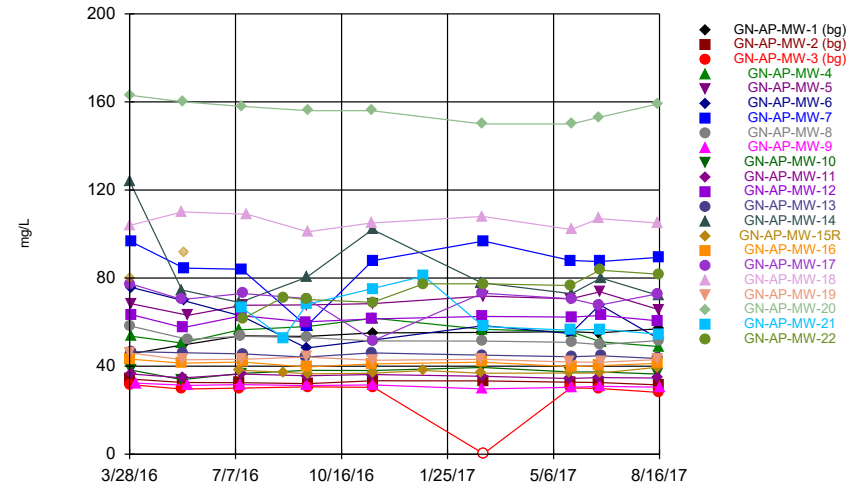
Constituent: TDS Analysis Run 11/3/2017 12:36 PM View: Trend Tests - PL Exceedances
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Time Series



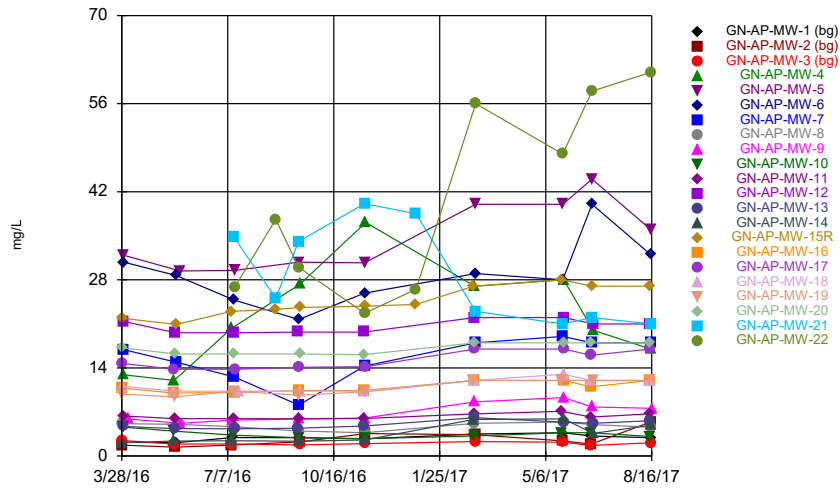
Constituent: Boron Analysis Run 12/13/2017 2:04 PM View: Time Series - All Data
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Time Series



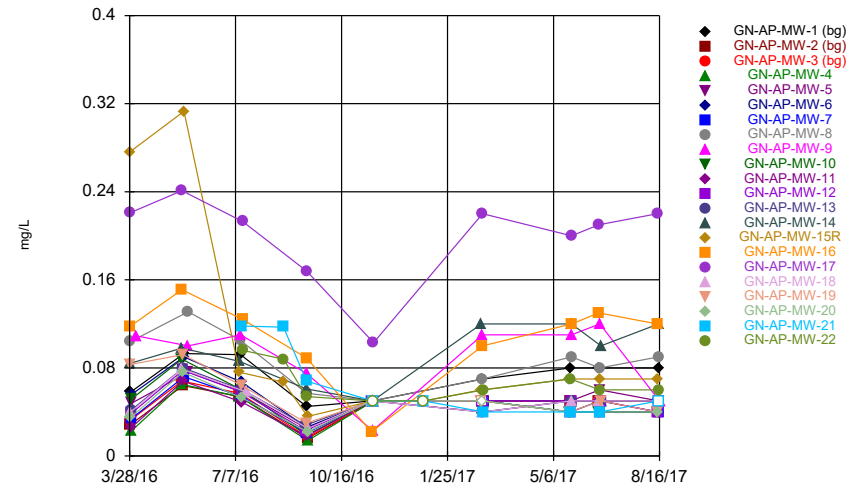
Constituent: Calcium Analysis Run 12/13/2017 2:04 PM View: Time Series - All Data
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Time Series



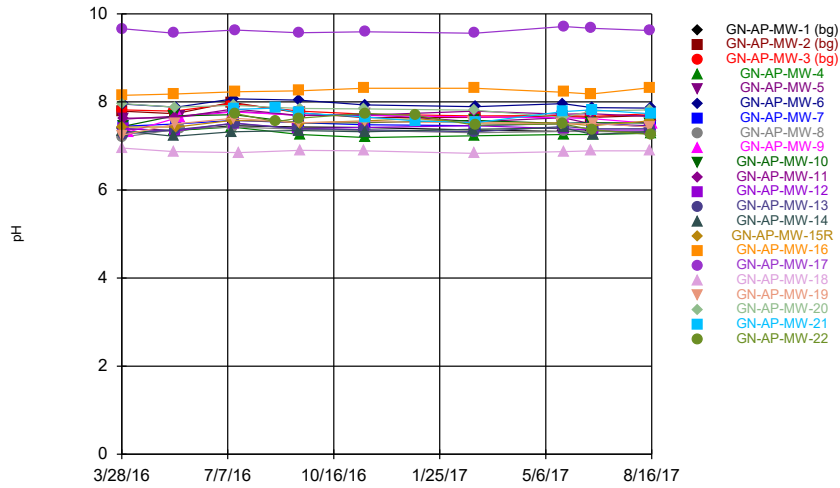
Constituent: Chloride Analysis Run 12/13/2017 2:04 PM View: Time Series - All Data
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Time Series



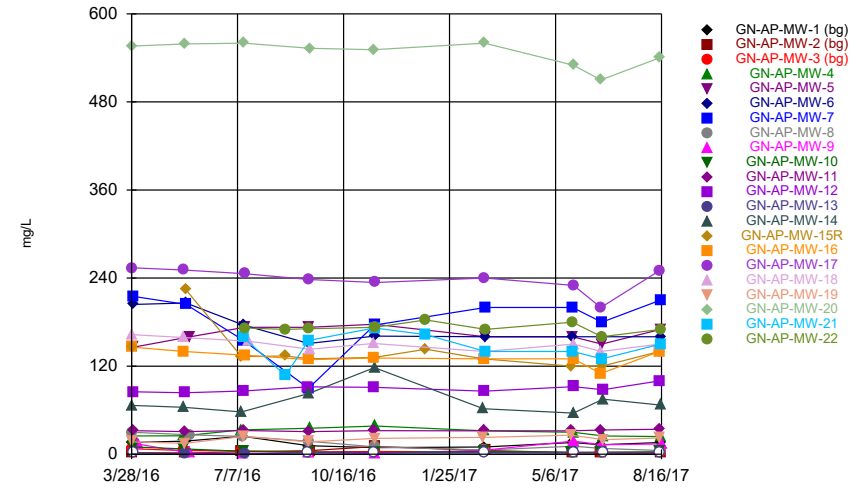
Constituent: Fluoride Analysis Run 12/13/2017 2:04 PM View: Time Series - All Data
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Time Series



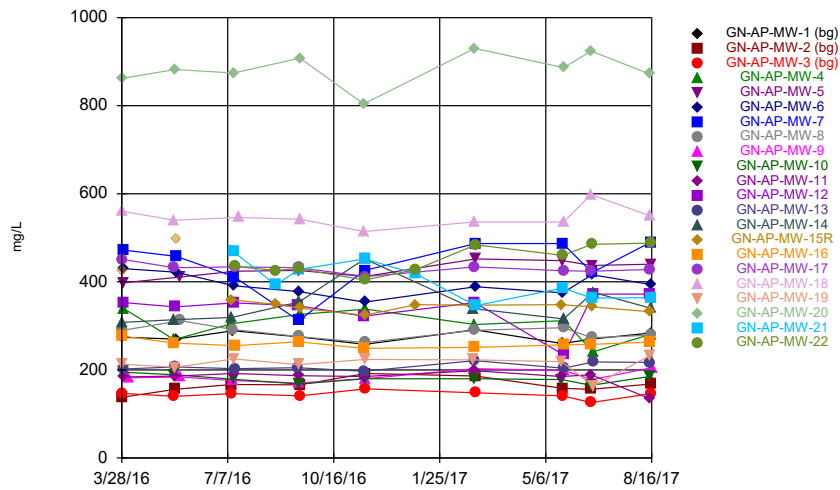
Constituent: pH Analysis Run 12/13/2017 2:04 PM View: Time Series - All Data
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Time Series



Constituent: Sulfate Analysis Run 12/13/2017 2:04 PM View: Time Series - All Data
Plant Gaston Client: Southern Company Data: Gaston Ash Pond

Time Series



Constituent: TDS Analysis Run 12/13/2017 2:04 PM View: Time Series - All Data
Plant Gaston Client: Southern Company Data: Gaston Ash Pond