

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

**ALABAMA POWER COMPANY
PLANT BARRY
ASH POND**

January 31, 2018

Prepared for

Alabama Power Company
Birmingham, Alabama

By

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ABBREVIATIONS

AL	Alabama
APC	Alabama Power Company
APCEL	Alabama Power Company Environmental Laboratory
ASTM	American Society for Testing Materials
BGS	below ground surface
CCR	coal combustion residuals
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
RL	reporting limit
RPD	relative percent difference
SM	Standard Method(s)
SSI	statistically significant increase
TAL	Test America laboratories
TOC	top of casing
QA/QC	quality assurance/quality control
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 Barry Ash Pond and satisfies the requirements of §257.90(e). Semi-annual monitoring and reporting for Plant Barry 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 James M. Barry Electric Generating Plant (Plant Barry) is in northeastern Mobile County, Alabama, approximately 23 miles north of Mobile, AL and 1 mile east of the city of Bucks, AL. The physical address is 153000 U.S. Highway 43 North, Bucks, Alabama 36512. Plant Barry lies in Section 36 of Township 1 North, Range 1 West, Sections 31 and 32 of Township 1 North, Range 1 East, Section 1 of Township 1 South, Range 1 West, and Sections 5 and 6 of Township 1 South, Range 1 East. Section/Township/Range data are based on visual inspection of USGS topographic quadrangle maps and GIS maps (USGS, 1980, 1982a, 1982b, 1983).

The Ash Pond is located east-southeast of the main plant, between the Mobile River and Plant Barry barge canal. **Figure 1, Site Location Map**, depicts the location of the Plant and Gypsum Pond with respect to the surrounding area.

3.0 SITE GEOLOGY AND HYDROGEOLOGY

3.1 Physical Setting

Plant Barry is located within the Southern Pine Hills and the Alluvial-deltaic Plain districts of the East Gulf Coastal Plain physiographic section. The Alluvial-deltaic Plain district is comprised of alluvium and terrace deposits of the Mobile River delta and is characterized by very little topographical relief (Gillet et al., 2000). The Southern Pine Hills district is a southward sloping plain developed on Miocene Series clay, sand, and gravel deposits. The Southern Pine Hills district is dissected by surface water features, and near Plant Barry, displays gentle topographic relief (Davis, 1987). Local site elevations near the Ash Pond range from approximately 50 to 0 feet above mean seal level (MSL). The embankment elevations that form the perimeter of the Ash Pond reside between 26 and 20 feet MSL.

3.2 Geology and Hydrogeology

The geology of the site is characterized by sedimentary deposits ranging in age from Tertiary to Quaternary. The Pliocene age Citronelle formation, while present regionally, was not encountered at the site. Sedimentary alluvial and terrace deposits of the Quaternary Period overlie largely unconsolidated Tertiary deposits in and adjacent to the flood plains of the Mobile River. At the site, Holocene age alluvial and low terrace deposits overlie undifferentiated Miocene Series sediments. Miocene Series sediments were primarily deposited in a regressive marine depositional environment. The Miocene Series is comprised of fine to very coarse-grained sand with interbedded sandy clays, silts, and shell fragments (Walter and Kidd, 1979). Siliciclastic sediments of the Miocene Series are often micaceous and pyritic, and contain wood

fragments, shell debris, and heavy minerals (Chandler et al., 1985). Alluvial, low terrace, and coastal deposits reflect estuarine, deltaic, lagoonal, and shoreface deposition in lowland areas from late Pleistocene to Holocene time. These deposits consist of fine to coarse sand, which can be rich in heavy detrital minerals (Hsu, 1960), silt, sandy clay, clay, and shell fragments (Chandler et al., 1985). **Figure 2, Site Geologic Map**, illustrates the surface geology at the site and neighboring areas.

Around the site, the uppermost stratigraphic layer varies from approximately 5 to 20 feet and is defined as fill material composed of sandy and silty lean clays that were placed during the construction of the ash pond. Beneath the fill material, generalized near-surface stratigraphy of the site, in descending order, consists of an (Unit 1) organic-rich fat clay to lean clay, (Unit 2) sandy lean clay to clayey sand with interbedded silty sand, and (Unit 3) a poorly graded sand with lenses of sandy lean clay and gravel. The stratigraphy of the site displays vertical and horizontal heterogeneity common with alluvial, low terrace, and coastal deposits.

Unit 1 is described as a mottled gray to dark gray and red fat clay with some interlayered sandy lean clays. Toward the base of the unit the fat clay grades into a very dark brown to black color, high plasticity, and increased organic content and occasional wood fragments. Unit 1 is somewhat spatially uniform, as it is present at all boring locations in varying thickness. Unit 1 extends from the base of fill materials to elevations of approximately -10 to -25 feet mean sea level (MSL).

Unit 2 consists of mottled light gray, brownish yellow, and red sandy lean clay with medium plasticity and trace amounts of interlayered sand. Lenses of clayey sands and silty sands are also present within this unit. The clayey sands are mottled very dark gray with trace amounts of interbedded clays. Visible shells and shell fragments are present in the lower portions of some sections. Silty sands are greenish gray to dark gray in color with zones of interbedded clayey sand that increase with depth. Unit 2 displays more heterogeneity and is thicker towards the south. Unit 2, extends from the base of the organic clay layer to elevations of approximately -30 to -40 feet MSL to the south and pinches out further north, grading laterally into sand of Unit 3, described below.

Unit 3 is described as a pale brown or light gray poorly graded sand with silt content. Fine gravel appears in the lower portion of Unit 3. Lenses of sandy clay and clayey sand are present in the upper portions of Unit 3, but are not prevalent. Borings conducted at the site, largely, did not penetrate the entire vertical extent of this sand unit.

The two major aquifers in northern Mobile County are the Miocene-Pliocene Aquifer and the Watercourse Aquifer. The thickness of the Miocene-Pliocene Aquifer, which consists of the Miocene Series undifferentiated and the Pliocene-age Citronelle Formation, is about 3,400 feet in coastal areas to the south, but it is much thinner in northern Mobile County. This aquifer consists of beds of sand, gravel and clay, where groundwater flows through sand and gravel beds that are irregular in thickness and of limited lateral extent. Clay intervals between the sand units are not laterally extensive enough to prevent downward movement of ground water, but they do provide semi-confinement in some areas. Correlation of one sand unit to another is difficult, due to the discontinuous nature of these deposits. In Northern Mobile County, the principal water-bearing sands in the aquifer are at the base of the Miocene- Pliocene sequence (Gillett et al., 2000).

The Watercourse Aquifer is comprised of Quaternary alluvial and low terrace deposits consisting of interbedded sand, gravel, and clay. Buried sand and gravel channels, which yield large amounts of water, are surrounded by silty and clayey sediments that do not yield significant amounts of water but allow infiltration of water to recharge the sand and gravel beds (Gillett et al., 2000).

3.3 Uppermost Aquifer

The uppermost aquifer beneath the site corresponds to Unit 3 sands -- which are part of the Watercourse Aquifer system. At the site, Watercourse Aquifer generally consists of fine to medium grained sands with discrete gravelly, coarse sand and gravel. Clay nodules, lenses, and stringers are present within Unit 3, but are not prevalent. Depth to the top of the Watercourse Aquifer generally ranges between 45 and 70 feet below ground surface (BGS). Groundwater recharge to the Watercourse Aquifer is largely accomplished via infiltration of precipitation and subsequent percolation down to the water table. Temporary recharge to the aquifer may occur during high stage or flood events of the Mobile River where surface water may infiltrate via hydraulically connected sand beds or infiltration of flooded water. Regionally, the Watercourse and Miocene-Pliocene Aquifers are considered to be hydraulically connected due to the discontinuous nature of clay aquitards. However, locally semi-confined to confined conditions may be present when a sufficient aquitard separates the aquifers or sand units.

3.4 Flow Interpretation

Potentiometric surfaces generated for the site generally conform to the geometry of the Mobile River. Groundwater flow is generally from west to east at the site. There are some components of northerly and southerly groundwater flow perpendicular to bends in the river. Groundwater flow is accomplished via

porous or Darcian flow mechanics through sands of the Watercourse Aquifer. A potentiometric surface map for the site is presented in a later section.

4.0 GROUNDWATER MONITORING SYSTEM

Pursuant to §257.91, Plant Barry 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 and downgradient monitoring points based on groundwater flow direction as determined by the potentiometric surface elevation measurements. Monitoring wells were screened in sands of the Watercourse Aquifer. All groundwater monitoring wells were designed and constructed using “Design and Installation of Groundwater Monitoring Wells in Aquifers”, ASTM Subcommittee D18.21, as a guide.

4.1 Monitoring Wells

The groundwater monitoring network is comprised of 16 monitoring wells: 3 upgradient and 13 downgradient. 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 well.

4.1.1 Upgradient Wells

Monitoring well locations MW-2 through MW-4 serve as upgradient locations for the ash pond as determined by water level monitoring and potentiometric surface maps constructed for the site. Upgradient wells are screened within the same uppermost aquifer as downgradient locations and are representative of background groundwater quality at the site.

4.1.2 Downgradient Wells

Monitoring well locations MW-1 and MW-5 through MW-16 are utilized as downgradient locations for the ash pond as determined by water level monitoring and potentiometric surface maps constructed for the site.

Table 1. Groundwater Monitoring Network Details

Well Name	Installation Date	Northing	Easting	Ground Elevation	Top of Casing Elevation	Top of Screen Elevation	Bottom of Screen Elevation	Purpose
BY-AP-MW-1	10/7/2015	362905.452	1811513.200	22.91	25.80	-10.304	-20.304	Downgradient
BY-AP-MW-2	10/7/2015	363375.014	1811104.860	21.10	23.89	-31.515	-41.515	Upgradient
BY-AP-MW-3	10/7/2015	364009.973	1810627.965	23.60	26.61	-46.581	-56.581	Upgradient
BY-AP-MW-4	10/7/2015	364620.885	1810128.368	24.05	26.97	-47.942	-57.942	Upgradient
BY-AP-MW-5	10/7/2015	365528.959	1809431.284	25.97	28.93	-30.023	-40.023	Downgradient
BY-AP-MW-6	10/7/2015	365906.041	1810555.372	23.78	26.69	-51.821	-61.821	Downgradient
BY-AP-MW-7	10/7/2015	366714.007	1811745.255	22.90	25.94	-53.98	-63.98	Downgradient
BY-AP-MW-8	10/7/2015	367064.508	1813172.112	25.57	28.45	-29.688	-39.688	Downgradient
BY-AP-MW-9	10/7/2015	366387.185	1814330.505	21.91	24.39	-37.082	-47.082	Downgradient
BY-AP-MW-10	10/7/2015	365296.811	1815400.957	23.61	26.89	-34.578	-44.578	Downgradient
BY-AP-MW-11	10/7/2015	364079.137	1815715.187	23.20	26.08	-37.999	-47.999	Downgradient
BY-AP-MW-12	10/7/2015	362704.953	1815677.689	21.24	23.88	-49.054	-59.054	Downgradient
BY-AP-MW-13	10/7/2015	361251.169	1815627.420	21.29	24.22	-39.29	-49.29	Downgradient
BY-AP-MW-14	10/1/2013	360520.621	1814694.666	8.89	11.74	-36.284	-46.284	Downgradient
BY-AP-MW-15	10/7/2015	360594.416	1813618.877	21.23	23.89	-48.791	-58.791	Downgradient
BY-AP-MW-16	10/7/2015	361610.794	1812571.016	22.05	25.01	-32.706	-42.706	Downgradient

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 (ft MSL).

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 September 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 (i.e., background, detection, etc.)

5.2 Historical Groundwater Flow

Potentiometric surfaces generated for the site generally conform to the geometry of the Mobile River. Groundwater flow is generally from west to east at the site. There are some components of northerly and southerly groundwater flow perpendicular to bends in the river. Groundwater flow is accomplished via porous or Darcian flow mechanics through sands of the Watercourse Aquifer.

Groundwater elevations fluctuate in response to rainfall. Seasonal variations of 5 to 7 feet are typical at the site. These fluctuations are consistent in monitoring wells across the site indicating a uniform response to rainfall events. Potentiometric surfaces presented in **Figure 4, Potentiometric Surface Map**, confirm that groundwater flow direction is consistent despite seasonal fluctuations. Groundwater elevation data indicates that water levels tend to be higher in the early spring and lower during the fall and winter seasons. **Table 3, Historical Groundwater Elevations Summary**, provides the observed ranges of water levels at 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	4/2016	6/2016	8/2016	10/2016	1/2017	5/2017	6/2017	9/2017

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

Table 3. Historical Groundwater Elevations Summary

Well ID	Average GW Elevation (ft MSL)	Highest GW Elevation (ft MSL)	Lowest GW Elevation (ft MSL)	GW Elevation Variation (ft)
BY-AP-MW-1	5.13	8.19	2.86	5.33
BY-AP-MW-2	4.26	7.59	2.49	5.10
BY-AP-MW-3	4.14	7.53	2.31	5.22
BY-AP-MW-4	3.99	7.41	2.10	5.31
BY-AP-MW-5	3.67	7.39	1.58	5.81
BY-AP-MW-6	3.63	7.48	1.36	6.12
BY-AP-MW-7	3.67	7.86	1.25	6.61
BY-AP-MW-8	3.46	7.90	0.92	6.98
BY-AP-MW-9	3.30	7.64	0.74	6.90
BY-AP-MW-10	3.35	7.77	0.88	6.89
BY-AP-MW-11	3.55	7.82	1.04	6.78
BY-AP-MW-12	3.23	7.43	0.73	6.70
BY-AP-MW-13	3.31	7.49	0.81	6.68
BY-AP-MW-14	2.86	6.89	0.36	6.53
BY-AP-MW-15	3.30	7.21	0.99	6.22
BY-AP-MW-16	3.75	7.34	1.76	5.58

GROUNDWATER SAMPLING AND ANALYSIS

6.1 Sampling Event Summary

Groundwater sampling for the initial detection monitoring event was performed in September 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 Barry Ash Pond are equipped with a dedicated bladder 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 COC 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 September 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 Alabama Power Company 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 COC records for the monitoring events are presented in Appendix A.

6.6 Quality Assurance/Quality Control

During each sampling event, quality assurance/quality control (QA/QC) samples 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 (RPDs), 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 foot 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 levels obtained prior to purging and sampling ranged from 11.38 to 27.53 feet below the top of the casing. Groundwater levels for the most recent sampling event are included in **Table 4, Groundwater Elevations (September 2017)**.

The most recent potentiometric surface map presented in **Figure 4, Potentiometric Surface Map (September 2017)**, shows that groundwater flows from west to east at the site. There are some components of northerly and southerly groundwater flow perpendicular to river bends.

Table 4. Groundwater Elevations (September 2017)

Well ID	TOC Elev (ft MSL)	Depth to GW (ft bTOC)	GW Elevation
MW-1	25.80	22.34	3.46
MW-2	23.89	21.40	2.49
MW-3	26.61	24.30	2.31
MW-4	26.97	24.09	2.88
MW-5	28.93	27.35	1.58
MW-6	26.69	25.33	1.36
MW-7	25.94	24.69	1.25
MW-8	28.45	27.53	0.92
MW-9	24.39	23.65	0.74
MW-10	26.89	26.01	0.88
MW-11	26.08	25.04	1.04
MW-12	23.88	23.15	0.73
MW-13	24.22	23.41	0.81
MW-14	11.74	11.38	0.36
MW-15	23.89	22.90	0.99
MW-16	25.01	23.25	1.76

8.0 BACKGROUND GROUNDWATER QUALITY DATA

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 and intrawell prediction limit methods, combined with resampling strategies for each method. Intrawell prediction limits, combined with a 1-of-3 verification resample plan, were used for pH to determine whether there had been an initial statistically significant increase (SSI) over background groundwater quality. Interwell prediction limits, combined with a 1-of-2 verification resample plan, were used to evaluate boron, calcium, chloride, fluoride, sulfate, and TDS.

Intrawell prediction limits use historical data within a given well to establish limits for parameters at that well. The most recent sample from the same well is compared to its respective background to identify SSIs over background. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent. The most recent sample from each downgradient well is compared to the background limit to identify SSIs.

Time series plots were used to screen proposed background data for suspected outliers, or extreme values that would result in limits that are not conservative from a regulatory perspective. Suspected outliers at all wells for Appendix III parameters are formally tested using Tukey’s box plot method and, when identified, flagged in the computer database 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. 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 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 background 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, except for chloride in well BY-AP-MW-1. However, the estimated average concentrations at this well were within background levels so no adjustments were recommended for this record or any records.

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

- Annual false positive rate of 10%
- 1-of-3 verification resample plan option – Intrawell Prediction Limits
- 1-of-2 verification resample plan option – Interwell Prediction Limits
- Semi-annual sampling
- Constituents = 7 (Appendix III)
- Downgradient wells = 13

Parametric prediction limits (PL) 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 were 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% non-detects 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.

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

8.2 Statistical Exceedances

Analytical data from the initial detection monitoring event in September 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 some 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 Barry 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

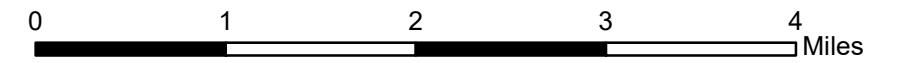
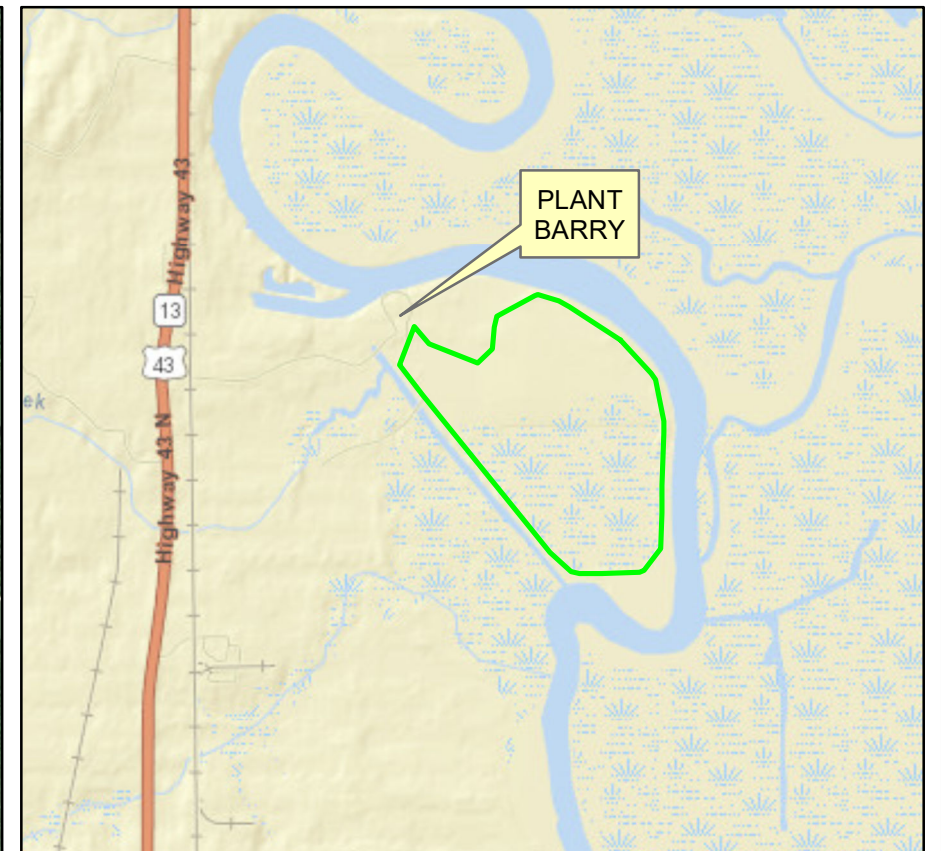
In accordance with §257.94(b), eight (8) independent samples were collected from each background and downgradient well and analyzed for the constituents listed in appendix III and IV. Background sampling was performed over the period of March 2016 to June 2017. Groundwater sampling for the first detection monitoring event was performed in September 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.

11.0 REFERENCES

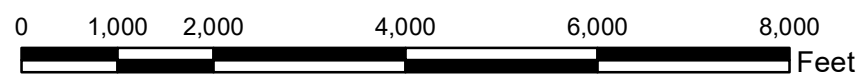
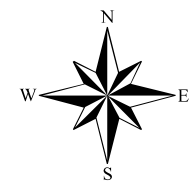
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- United States Geological Survey (USGS), 1982b, Mount Vernon Alabama Quadrangle, 7.5 Minute Series Topographic Map
- United States Geological Survey (USGS), 1983, Stiggins Lake Alabama Quadrangle, 7.5 Minute Series Topographic Map
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Figures



Legend

Ash Pond Boundary



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

FOR

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

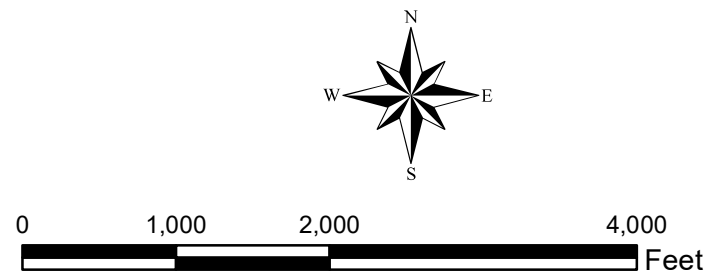
Alabama Power Company					
SCALE	PROJ. I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
1:24k		ES4051-S1	1		



Legend

MAP_UNIT

- Alluvial, coastal, and low terrace deposits
- Citronelle Formation
- Miocene Series undifferentiated
- Ash Pond Boundary



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

FOR

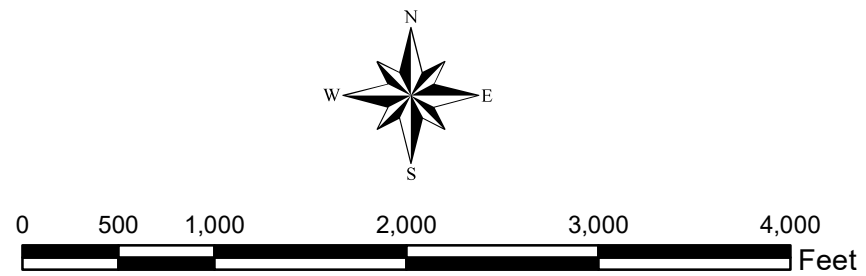
**PLANT BARRY
ASH POND
FIGURE 2
SITE GEOLOGIC MAP**

Alabama Power Company					
SCALE	PROJ I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
1:24k		ES4051-S2	1		



Legend

- ◆ Monitoring Well
- Ash Pond Boundary



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

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

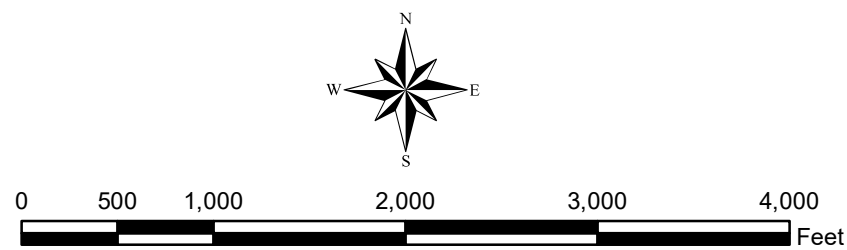
FOR

Alabama Power Company					
SCALE	PROJ I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
1:12k		ES4051-S3	1		



Legend

	Monitoring Well	BY-AP-MW-1	Well ID
		3.46	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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**PLANT BARRY
ASH POND
FIGURE 4
POTENTIOMETRIC SURFACE MAP
SEPTEMBER 12, 2017**

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

FOR

Alabama Power Company

SCALE	PROJ I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
1:12k		ES4051-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 : WMWBARAP_16

Project/Site : Barry Ash Pond
Bucks, AL 36512

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

Barry Ash Pond

WMWBARAP_16

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>
AW05464	564675	564678	564681	WMWBARAP_16
AW05465	564675	564678	564681	WMWBARAP_16
AW05466	564675	564678	564681	WMWBARAP_16
AW05467	564675	564678	564681	WMWBARAP_16
AW05468	564675	564678	564681	WMWBARAP_16
AW05469	564675	564678	564681	WMWBARAP_16
AW05470	564675	564678	564681	WMWBARAP_16
AW05471	564675	564678	564681	WMWBARAP_16
AW05472	564675	564678	564681	WMWBARAP_16
AW05473	564675	564678	564681	WMWBARAP_16
AW05474	564676	564679	564682	WMWBARAP_16
AW05475	564676	564679	564682	WMWBARAP_16
AW05476	564676	564679	564682	WMWBARAP_16
AW05478	564676	564679	564682	WMWBARAP_16
AW05479	564676	564679	564682	WMWBARAP_16
AW05480	564676	564679	564682	WMWBARAP_16
AW05481	564676	564679	564682	WMWBARAP_16
AW05482	564676	564679	564682	WMWBARAP_16
AW05483	564676	564679	564682	WMWBARAP_16
AW05484	564676	564679	564682	WMWBARAP_16
AW05485	564683	564684	564685	WMWBARAP_16

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 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. All samples were analyzed without a dilution.
 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

Barry Ash Pond

WMWBARAP_16

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>
AW05464	20160324B	WMWBARAP_16
AW05465	20160324B	WMWBARAP_16
AW05466	20160324B	WMWBARAP_16
AW05467	20160324B	WMWBARAP_16
AW05468	20160324B	WMWBARAP_16
AW05469	20160324B	WMWBARAP_16
AW05470	20160324B	WMWBARAP_16
AW05471	20160324B	WMWBARAP_16
AW05472	20160324B	WMWBARAP_16
AW05473	20160324B	WMWBARAP_16
AW05474	20160324C	WMWBARAP_16
AW05475	20160324C	WMWBARAP_16
AW05476	20160324C	WMWBARAP_16
AW05478	20160324C	WMWBARAP_16
AW05479	20160324C	WMWBARAP_16
AW05480	20160324C	WMWBARAP_16
AW05481	20160324C	WMWBARAP_16
AW05482	20160324C	WMWBARAP_16
AW05483	20160324C	WMWBARAP_16
AW05484	20160324C	WMWBARAP_16
AW05485	20160324D	WMWBARAP_16

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. Boron for samples AW05473 and AW05484 were reported from batches 20160329 and 20160329A, respectively.
8. Samples AW05471 and AW05478 original undiluted data was unrecoverable. Dilution data used for Boron, Lithium and Calcium.



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.
- 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 except for the following:

<u>Analyte</u>	<u>Sample ID</u>
Boron	AW05473
Boron	AW05484

Both of the above samples and all corresponding QC for Boron were re-prepared and re-analyzed with passing criteria for precision. Results and QC were reported from the passing analytical run.

9. All samples were analyzed without a dilution with the following exceptions: The following samples were diluted due to Calcium sample concentrations from the undiluted analysis were over the high standard of the calibration curve. Results were reported for the dilution analysis for Boron and Lithium due to irretrievable undiluted results.

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



<u>Sample ID</u>	<u>Analyte</u>	<u>Dilution Factor</u>
AW05471	Calcium, Boron, Lithium	10.15x
AW05478	Calcium, Boron, Lithium	10.15x

10. The raw data results include both results corrected for dilution and results not corrected for dilution with the exception of AW05471 and AW05478. Both samples were reported at dilution factor 10.15X for all analytes.



Metals ICPMS

Barry Ash Pond

WMWBARAP_16

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>
AW05464	559653	WMWBARAP_16
AW05465	559653	WMWBARAP_16
AW05466	559653	WMWBARAP_16
AW05467	559653	WMWBARAP_16
AW05468	559653	WMWBARAP_16
AW05469	559653	WMWBARAP_16
AW05470	559653	WMWBARAP_16
AW05471	559653	WMWBARAP_16
AW05472	559653	WMWBARAP_16
AW05473	559653	WMWBARAP_16
AW05474	559654	WMWBARAP_16
AW05475	559654	WMWBARAP_16
AW05476	559654	WMWBARAP_16
AW05478	559654	WMWBARAP_16
AW05479	559654	WMWBARAP_16
AW05480	559654	WMWBARAP_16
AW05481	559654	WMWBARAP_16
AW05482	559654	WMWBARAP_16
AW05483	559654	WMWBARAP_16
AW05484	559654	WMWBARAP_16
AW05485	559655	WMWBARAP_16

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. The highest point of the calibration curve (1.25ppm) was removed for Co, Mo, Cd, Sb, Ba, and Tl 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.
- 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

Barry Ash Pond

WMWBARAP_16

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>
AW05464	559915	WMWBARAP_16
AW05465	559915	WMWBARAP_16
AW05466	559915	WMWBARAP_16
AW05467	559915	WMWBARAP_16
AW05468	559915	WMWBARAP_16
AW05469	559915	WMWBARAP_16
AW05470	559915	WMWBARAP_16
AW05471	559915	WMWBARAP_16
AW05472	559915	WMWBARAP_16
AW05473	559915	WMWBARAP_16
AW05474	559916	WMWBARAP_16
AW05475	559916	WMWBARAP_16
AW05476	559916	WMWBARAP_16
AW05478	559916	WMWBARAP_16
AW05479	559916	WMWBARAP_16
AW05480	559916	WMWBARAP_16
AW05481	559916	WMWBARAP_16
AW05482	559916	WMWBARAP_16
AW05483	559916	WMWBARAP_16
AW05484	559919	WMWBARAP_16
AW05485	559919	WMWBARAP_16

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

Barry Ash Pond

WMWBARAP_16

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>
AW05464	559561	WMWBARAP_16
AW05465	559561	WMWBARAP_16
AW05466	559561	WMWBARAP_16
AW05467	559561	WMWBARAP_16
AW05468	559561	WMWBARAP_16
AW05469	559561	WMWBARAP_16
AW05470	559561	WMWBARAP_16
AW05471	559561	WMWBARAP_16
AW05472	559561	WMWBARAP_16
AW05473	559561	WMWBARAP_16
AW05474	559561	WMWBARAP_16
AW05475	559784	WMWBARAP_16
AW05476	559784	WMWBARAP_16
AW05478	559784	WMWBARAP_16
AW05479	559784	WMWBARAP_16
AW05480	559784	WMWBARAP_16
AW05481	559784	WMWBARAP_16
AW05482	559784	WMWBARAP_16
AW05483	559784	WMWBARAP_16
AW05484	559784	WMWBARAP_16
AW05485	559784	WMWBARAP_16

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. This has 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%. However, the duplicate was analyzed after 12 samples in batch 559561.
- 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 AW05473, AW05474 and AW05480 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: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AW05464

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/5/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	0.0277	mg/L
* Barium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	0.136	mg/L
* Beryllium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	3/24/2016	EPA 200.7		1.015	0.02	0.1	J 0.0462	mg/L
* Calcium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.1	0.5	15.0	mg/L
* Cadmium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	3/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	3/7/2016	SM 2540C		1		25	273	mg/L
* Chloride, Total	SES	3/3/2016	EPA 300.0		1	0.04	0.25	19.7	mg/L
* Fluoride, Total	SES	3/3/2016	EPA 300.0		1	0.01	0.3	J 0.04	mg/L
* Sulfate, Total	SES	3/3/2016	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 1/19/17
 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: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AW05464

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW05473 Selenium, Total	mg/L	0.0000584	0.0044	0.10	0.0896	0.0921	0.0911	0.085 to 0.115	89.6	70 to 130	2.75	20	
AW05472 Boron, Total	mg/L	-0.00252	0.044				0.968	0.85 to 1.15		70 to 130		20	
AW05473 Calcium, Total	mg/L	0.00364	0.22	5.000	5.38	5.22	5.35	4.25 to 5.75	108	70 to 130	3.02	20	
AW05473 Barium, Total	mg/L	0.00000327	0.0044	0.10	0.0918	0.0958	0.0919	0.085 to 0.115	91.8	70 to 130	4.25	20	
AW05473 Beryllium, Total	mg/L	0.0000107	0.00132	0.10	0.0971	0.102	0.0985	0.085 to 0.115	97.1	70 to 130	4.58	20	
AW05473 Lithium, Total	mg/L	-0.0000403	0.022	0.200	0.208	0.206	0.195	0.17 to 0.23	104	70 to 130	0.966	20	
AW05473 Antimony, Total	mg/L	0.000100	0.00132	0.10	0.0879	0.0915	0.0885	0.085 to 0.115	87.9	70 to 130	4.01	20	
AW05473 Arsenic, Total	mg/L	0.0000108	0.0022	0.10	0.0882	0.0905	0.0881	0.085 to 0.115	88.2	70 to 130	2.52	20	
AW05473 Chromium, Total	mg/L	0.0000327	0.0044	0.10	0.0872	0.0896	0.0863	0.085 to 0.115	87.2	70 to 130	2.69	20	
AW05473 Lead, Total	mg/L	0.0000297	0.0022	0.10	0.0837	0.0846	0.0863	0.085 to 0.115	83.7	70 to 130	1.01	20	
AW05473 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00395	0.00398	0.00384	0.0034 to 0.0046	98.8	70 to 130	0.757	20	
AW05473 Cadmium, Total	mg/L	-0.0000102	0.00044	0.10	0.0890	0.0890	0.0879	0.085 to 0.115	89.0	70 to 130	0.0421	20	
AW05473 Cobalt, Total	mg/L	-0.0000803	0.0044	0.10	0.0954	0.0987	0.0930	0.085 to 0.115	95.4	70 to 130	3.38	20	
AW05473 Molybdenum, Total	mg/L	0.0000250	0.0044	0.10	0.0940	0.0966	0.0942	0.085 to 0.115	94.0	70 to 130	2.73	20	
AW05473 Thallium, Total	mg/L	-0.0000877	0.00044	0.10	0.0914	0.0921	0.0910	0.085 to 0.115	91.4	70 to 130	0.713	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: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AW05464

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW05473	Chloride, Total	mg/L	0.00	0.25	10.0	10.4	0.00	10.5	9 to 11	104	80 to 120	0	20
AW05473	Fluoride, Total	mg/L	0.00	0.3	2.0	2.08	0.00	2.15	1.8 to 2.2	104	80 to 120	200	20
AW05471	Solids, Dissolved	mg/L	-2	25			442	41.0	40 to 60			1.84	5
AW05473	Sulfate, Total	mg/L	0.00	1.0	20.0	20.0	0.00	20.1	18 to 22	100	80 to 120	0	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: 7/26/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AW05465

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/5/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	0.0360	mg/L
* Barium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	0.142	mg/L
* Beryllium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	3/24/2016	EPA 200.7		1.015	0.02	0.1	1.72	mg/L
* Calcium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.1	0.5	36.1	mg/L
* Cadmium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	3/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	3/7/2016	SM 2540C		1		25	309	mg/L
* Chloride, Total	SES	3/3/2016	EPA 300.0		1	0.04	0.25	24.5	mg/L
* Fluoride, Total	SES	3/3/2016	EPA 300.0		1	0.01	0.3	J 0.03	mg/L
* Sulfate, Total	SES	3/3/2016	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: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AW05465

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW05473 Selenium, Total	mg/L	0.0000584	0.0044	0.10	0.0896	0.0921	0.0911	0.085 to 0.115		89.6	70 to 130	2.75	20
AW05472 Boron, Total	mg/L	-0.00252	0.044				0.968	0.85 to 1.15			70 to 130		20
AW05473 Calcium, Total	mg/L	0.00364	0.22	5.000	5.38	5.22	5.35	4.25 to 5.75		108	70 to 130	3.02	20
AW05473 Barium, Total	mg/L	0.00000327	0.0044	0.10	0.0918	0.0958	0.0919	0.085 to 0.115		91.8	70 to 130	4.25	20
AW05473 Beryllium, Total	mg/L	0.0000107	0.00132	0.10	0.0971	0.102	0.0985	0.085 to 0.115		97.1	70 to 130	4.58	20
AW05473 Lithium, Total	mg/L	-0.0000403	0.022	0.200	0.208	0.206	0.195	0.17 to 0.23		104	70 to 130	0.966	20
AW05473 Antimony, Total	mg/L	0.000100	0.00132	0.10	0.0879	0.0915	0.0885	0.085 to 0.115		87.9	70 to 130	4.01	20
AW05473 Arsenic, Total	mg/L	0.0000108	0.0022	0.10	0.0882	0.0905	0.0881	0.085 to 0.115		88.2	70 to 130	2.52	20
AW05473 Chromium, Total	mg/L	0.0000327	0.0044	0.10	0.0872	0.0896	0.0863	0.085 to 0.115		87.2	70 to 130	2.69	20
AW05473 Lead, Total	mg/L	0.0000297	0.0022	0.10	0.0837	0.0846	0.0863	0.085 to 0.115		83.7	70 to 130	1.01	20
AW05473 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00395	0.00398	0.00384	0.0034 to 0.0046		98.8	70 to 130	0.757	20
AW05473 Cadmium, Total	mg/L	-0.0000102	0.00044	0.10	0.0890	0.0890	0.0879	0.085 to 0.115		89.0	70 to 130	0.0421	20
AW05473 Cobalt, Total	mg/L	-0.0000803	0.0044	0.10	0.0954	0.0987	0.0930	0.085 to 0.115		95.4	70 to 130	3.38	20
AW05473 Molybdenum, Total	mg/L	0.0000250	0.0044	0.10	0.0940	0.0966	0.0942	0.085 to 0.115		94.0	70 to 130	2.73	20
AW05473 Thallium, Total	mg/L	-0.0000877	0.00044	0.10	0.0914	0.0921	0.0910	0.085 to 0.115		91.4	70 to 130	0.713	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: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AW05465

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW05473	Chloride, Total	mg/L	0.00	0.25	10.0	10.4	0.00	10.5	9 to 11	104	80 to 120	0	20
AW05473	Fluoride, Total	mg/L	0.00	0.3	2.0	2.08	0.00	2.15	1.8 to 2.2	104	80 to 120	200	20
AW05471	Solids, Dissolved	mg/L	-2	25			442	41.0	40 to 60			1.84	5
AW05473	Sulfate, Total	mg/L	0.00	1.0	20.0	20.0	0.00	20.1	18 to 22	100	80 to 120	0	20

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CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-8 DUP

Laboratory ID Number: AW05466

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/5/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	0.0361	mg/L
* Barium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	0.142	mg/L
* Beryllium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	3/24/2016	EPA 200.7		1.015	0.02	0.1	1.71	mg/L
* Calcium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.1	0.5	35.8	mg/L
* Cadmium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	3/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	3/7/2016	SM 2540C		1		25	279	mg/L
* Chloride, Total	SES	3/3/2016	EPA 300.0		1	0.04	0.25	24.5	mg/L
* Fluoride, Total	SES	3/3/2016	EPA 300.0		1	0.01	0.3	J 0.03	mg/L
* Sulfate, Total	SES	3/3/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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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: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-8 DUP

Laboratory ID Number: AW05466

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW05473 Selenium, Total	mg/L	0.0000584	0.0044	0.10	0.0896	0.0921	0.0911	0.085 to 0.115	89.6	70 to 130	2.75	20	
AW05472 Boron, Total	mg/L	-0.00252	0.044				0.968	0.85 to 1.15		70 to 130		20	
AW05473 Calcium, Total	mg/L	0.00364	0.22	5.000	5.38	5.22	5.35	4.25 to 5.75	108	70 to 130	3.02	20	
AW05473 Antimony, Total	mg/L	0.000100	0.00132	0.10	0.0879	0.0915	0.0885	0.085 to 0.115	87.9	70 to 130	4.01	20	
AW05473 Arsenic, Total	mg/L	0.0000108	0.0022	0.10	0.0882	0.0905	0.0881	0.085 to 0.115	88.2	70 to 130	2.52	20	
AW05473 Chromium, Total	mg/L	0.0000327	0.0044	0.10	0.0872	0.0896	0.0863	0.085 to 0.115	87.2	70 to 130	2.69	20	
AW05473 Lead, Total	mg/L	0.0000297	0.0022	0.10	0.0837	0.0846	0.0863	0.085 to 0.115	83.7	70 to 130	1.01	20	
AW05473 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00395	0.00398	0.00384	0.0034 to 0.0046	98.8	70 to 130	0.757	20	
AW05473 Barium, Total	mg/L	0.00000327	0.0044	0.10	0.0918	0.0958	0.0919	0.085 to 0.115	91.8	70 to 130	4.25	20	
AW05473 Beryllium, Total	mg/L	0.0000107	0.00132	0.10	0.0971	0.102	0.0985	0.085 to 0.115	97.1	70 to 130	4.58	20	
AW05473 Lithium, Total	mg/L	-0.0000403	0.022	0.200	0.208	0.206	0.195	0.17 to 0.23	104	70 to 130	0.966	20	
AW05473 Cadmium, Total	mg/L	-0.0000102	0.00044	0.10	0.0890	0.0890	0.0879	0.085 to 0.115	89.0	70 to 130	0.0421	20	
AW05473 Cobalt, Total	mg/L	-0.0000803	0.0044	0.10	0.0954	0.0987	0.0930	0.085 to 0.115	95.4	70 to 130	3.38	20	
AW05473 Molybdenum, Total	mg/L	0.0000250	0.0044	0.10	0.0940	0.0966	0.0942	0.085 to 0.115	94.0	70 to 130	2.73	20	
AW05473 Thallium, Total	mg/L	-0.0000877	0.00044	0.10	0.0914	0.0921	0.0910	0.085 to 0.115	91.4	70 to 130	0.713	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 RL has now been corrected. SGC 1/19/17
 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: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-8 DUP

Laboratory ID Number: AW05466

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW05473	Fluoride, Total	mg/L	0.00	0.3	2.0	2.08	0.00	2.15	1.8 to 2.2	104	80 to 120	200	20
AW05473	Chloride, Total	mg/L	0.00	0.25	10.0	10.4	0.00	10.5	9 to 11	104	80 to 120	0	20
AW05471	Solids, Dissolved	mg/L	-2	25			442	41.0	40 to 60			1.84	5
AW05473	Sulfate, Total	mg/L	0.00	1.0	20.0	20.0	0.00	20.1	18 to 22	100	80 to 120	0	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 1/19/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/26/2017
 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: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AW05467

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/5/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	0.0166	mg/L
* Barium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	0.0519	mg/L
* Beryllium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	3/24/2016	EPA 200.7		1.015	0.02	0.1	J 0.0546	mg/L
* Calcium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.1	0.5	7.65	mg/L
* Cadmium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	0.0110	mg/L
* Chromium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	3/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	3/7/2016	SM 2540C		1		25	129	mg/L
* Chloride, Total	SES	3/3/2016	EPA 300.0		1	0.04	0.25	11.2	mg/L
* Fluoride, Total	SES	3/3/2016	EPA 300.0		1	0.01	0.3	J 0.06	mg/L
* Sulfate, Total	SES	3/3/2016	EPA 300.0		1	0.3	1	J 0.30	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

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Customer Account: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AW05467

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW05473 Selenium, Total	mg/L	0.0000584	0.0044	0.10	0.0896	0.0921	0.0911	0.085 to 0.115	89.6	70 to 130	2.75	20	
AW05473 Cadmium, Total	mg/L	-0.0000102	0.00044	0.10	0.0890	0.0890	0.0879	0.085 to 0.115	89.0	70 to 130	0.0421	20	
AW05473 Cobalt, Total	mg/L	-0.0000803	0.0044	0.10	0.0954	0.0987	0.0930	0.085 to 0.115	95.4	70 to 130	3.38	20	
AW05473 Molybdenum, Total	mg/L	0.0000250	0.0044	0.10	0.0940	0.0966	0.0942	0.085 to 0.115	94.0	70 to 130	2.73	20	
AW05473 Thallium, Total	mg/L	-0.0000877	0.00044	0.10	0.0914	0.0921	0.0910	0.085 to 0.115	91.4	70 to 130	0.713	20	
AW05473 Barium, Total	mg/L	0.00000327	0.0044	0.10	0.0918	0.0958	0.0919	0.085 to 0.115	91.8	70 to 130	4.25	20	
AW05473 Beryllium, Total	mg/L	0.0000107	0.00132	0.10	0.0971	0.102	0.0985	0.085 to 0.115	97.1	70 to 130	4.58	20	
AW05473 Lithium, Total	mg/L	-0.0000403	0.022	0.200	0.208	0.206	0.195	0.17 to 0.23	104	70 to 130	0.966	20	
AW05472 Boron, Total	mg/L	-0.00252	0.044				0.968	0.85 to 1.15		70 to 130		20	
AW05473 Calcium, Total	mg/L	0.00364	0.22	5.000	5.38	5.22	5.35	4.25 to 5.75	108	70 to 130	3.02	20	
AW05473 Antimony, Total	mg/L	0.000100	0.00132	0.10	0.0879	0.0915	0.0885	0.085 to 0.115	87.9	70 to 130	4.01	20	
AW05473 Arsenic, Total	mg/L	0.0000108	0.0022	0.10	0.0882	0.0905	0.0881	0.085 to 0.115	88.2	70 to 130	2.52	20	
AW05473 Chromium, Total	mg/L	0.0000327	0.0044	0.10	0.0872	0.0896	0.0863	0.085 to 0.115	87.2	70 to 130	2.69	20	
AW05473 Lead, Total	mg/L	0.0000297	0.0022	0.10	0.0837	0.0846	0.0863	0.085 to 0.115	83.7	70 to 130	1.01	20	
AW05473 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00395	0.00398	0.00384	0.0034 to 0.0046	98.8	70 to 130	0.757	20	

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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AW05467

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
			Limit	Limit			Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW05473	Chloride, Total	mg/L	0.00	0.25	10.0	10.4	0.00	10.5	9 to 11	104	80 to 120	0	20
AW05473	Fluoride, Total	mg/L	0.00	0.3	2.0	2.08	0.00	2.15	1.8 to 2.2	104	80 to 120	200	20
AW05471	Solids, Dissolved	mg/L	-2	25			442	41.0	40 to 60			1.84	5
AW05473	Sulfate, Total	mg/L	0.00	1.0	20.0	20.0	0.00	20.1	18 to 22	100	80 to 120	0	20

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AW05468

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/5/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	0.0100	mg/L
* Barium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	0.122	mg/L
* Beryllium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	3/24/2016	EPA 200.7		1.015	0.02	0.1	J 0.0482	mg/L
* Calcium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.1	0.5	35.3	mg/L
* Cadmium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	J 0.00213	mg/L
* Mercury, Total by CVAA	MCW	3/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	3/7/2016	SM 2540C		1		25	395	mg/L
* Chloride, Total	SES	3/3/2016	EPA 300.0		1	0.04	0.25	21.7	mg/L
* Fluoride, Total	SES	3/3/2016	EPA 300.0		1	0.01	0.3	J 0.06	mg/L
* Sulfate, Total	SES	3/3/2016	EPA 300.0		1	0.3	1	1.02	mg/L

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 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AW05468

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW05473 Selenium, Total	mg/L	0.0000584	0.0044	0.10	0.0896	0.0921	0.0911	0.085 to 0.115	89.6	70 to 130	2.75	20	
AW05472 Boron, Total	mg/L	-0.00252	0.044				0.968	0.85 to 1.15		70 to 130		20	
AW05473 Calcium, Total	mg/L	0.00364	0.22	5.000	5.38	5.22	5.35	4.25 to 5.75	108	70 to 130	3.02	20	
AW05473 Barium, Total	mg/L	0.00000327	0.0044	0.10	0.0918	0.0958	0.0919	0.085 to 0.115	91.8	70 to 130	4.25	20	
AW05473 Beryllium, Total	mg/L	0.0000107	0.00132	0.10	0.0971	0.102	0.0985	0.085 to 0.115	97.1	70 to 130	4.58	20	
AW05473 Lithium, Total	mg/L	-0.0000403	0.022	0.200	0.208	0.206	0.195	0.17 to 0.23	104	70 to 130	0.966	20	
AW05473 Antimony, Total	mg/L	0.000100	0.00132	0.10	0.0879	0.0915	0.0885	0.085 to 0.115	87.9	70 to 130	4.01	20	
AW05473 Arsenic, Total	mg/L	0.0000108	0.0022	0.10	0.0882	0.0905	0.0881	0.085 to 0.115	88.2	70 to 130	2.52	20	
AW05473 Chromium, Total	mg/L	0.0000327	0.0044	0.10	0.0872	0.0896	0.0863	0.085 to 0.115	87.2	70 to 130	2.69	20	
AW05473 Lead, Total	mg/L	0.0000297	0.0022	0.10	0.0837	0.0846	0.0863	0.085 to 0.115	83.7	70 to 130	1.01	20	
AW05473 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00395	0.00398	0.00384	0.0034 to 0.0046	98.8	70 to 130	0.757	20	
AW05473 Cadmium, Total	mg/L	-0.0000102	0.00044	0.10	0.0890	0.0890	0.0879	0.085 to 0.115	89.0	70 to 130	0.0421	20	
AW05473 Cobalt, Total	mg/L	-0.0000803	0.0044	0.10	0.0954	0.0987	0.0930	0.085 to 0.115	95.4	70 to 130	3.38	20	
AW05473 Molybdenum, Total	mg/L	0.0000250	0.0044	0.10	0.0940	0.0966	0.0942	0.085 to 0.115	94.0	70 to 130	2.73	20	
AW05473 Thallium, Total	mg/L	-0.0000877	0.00044	0.10	0.0914	0.0921	0.0910	0.085 to 0.115	91.4	70 to 130	0.713	20	

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 John Pugh

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 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AW05468

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
			Limit	Limit			Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW05473	Chloride, Total	mg/L	0.00	0.25	10.0	10.4	0.00	10.5	9 to 11	104	80 to 120	0	20
AW05473	Fluoride, Total	mg/L	0.00	0.3	2.0	2.08	0.00	2.15	1.8 to 2.2	104	80 to 120	200	20
AW05471	Solids, Dissolved	mg/L	-2	25			442	41.0	40 to 60			1.84	5
AW05473	Sulfate, Total	mg/L	0.00	1.0	20.0	20.0	0.00	20.1	18 to 22	100	80 to 120	0	20

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AW05469

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/5/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	0.0115	mg/L
* Barium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	0.0947	mg/L
* Beryllium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	3/24/2016	EPA 200.7		1.015	0.02	0.1	J 0.0328	mg/L
* Calcium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.1	0.5	16.7	mg/L
* Cadmium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	J 0.00656	mg/L
* Mercury, Total by CVAA	MCW	3/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	3/7/2016	SM 2540C		1		25	319	mg/L
* Chloride, Total	SES	3/3/2016	EPA 300.0		1	0.04	0.25	47.3	mg/L
* Fluoride, Total	SES	3/3/2016	EPA 300.0		1	0.01	0.3	J 0.05	mg/L
* Sulfate, Total	SES	3/3/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AW05469

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW05473 Selenium, Total	mg/L	0.0000584	0.0044	0.10	0.0896	0.0921	0.0911	0.085 to 0.115	89.6	70 to 130	2.75	20	
AW05473 Barium, Total	mg/L	0.00000327	0.0044	0.10	0.0918	0.0958	0.0919	0.085 to 0.115	91.8	70 to 130	4.25	20	
AW05473 Beryllium, Total	mg/L	0.0000107	0.00132	0.10	0.0971	0.102	0.0985	0.085 to 0.115	97.1	70 to 130	4.58	20	
AW05473 Lithium, Total	mg/L	-0.0000403	0.022	0.200	0.208	0.206	0.195	0.17 to 0.23	104	70 to 130	0.966	20	
AW05472 Boron, Total	mg/L	-0.00252	0.044				0.968	0.85 to 1.15		70 to 130		20	
AW05473 Calcium, Total	mg/L	0.00364	0.22	5.000	5.38	5.22	5.35	4.25 to 5.75	108	70 to 130	3.02	20	
AW05473 Cadmium, Total	mg/L	-0.0000102	0.00044	0.10	0.0890	0.0890	0.0879	0.085 to 0.115	89.0	70 to 130	0.0421	20	
AW05473 Cobalt, Total	mg/L	-0.0000803	0.0044	0.10	0.0954	0.0987	0.0930	0.085 to 0.115	95.4	70 to 130	3.38	20	
AW05473 Molybdenum, Total	mg/L	0.0000250	0.0044	0.10	0.0940	0.0966	0.0942	0.085 to 0.115	94.0	70 to 130	2.73	20	
AW05473 Thallium, Total	mg/L	-0.0000877	0.00044	0.10	0.0914	0.0921	0.0910	0.085 to 0.115	91.4	70 to 130	0.713	20	
AW05473 Antimony, Total	mg/L	0.000100	0.00132	0.10	0.0879	0.0915	0.0885	0.085 to 0.115	87.9	70 to 130	4.01	20	
AW05473 Arsenic, Total	mg/L	0.0000108	0.0022	0.10	0.0882	0.0905	0.0881	0.085 to 0.115	88.2	70 to 130	2.52	20	
AW05473 Chromium, Total	mg/L	0.0000327	0.0044	0.10	0.0872	0.0896	0.0863	0.085 to 0.115	87.2	70 to 130	2.69	20	
AW05473 Lead, Total	mg/L	0.0000297	0.0022	0.10	0.0837	0.0846	0.0863	0.085 to 0.115	83.7	70 to 130	1.01	20	
AW05473 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00395	0.00398	0.00384	0.0034 to 0.0046	98.8	70 to 130	0.757	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 1/19/17
 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: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AW05469

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW05473	Chloride, Total	mg/L	0.00	0.25	10.0	10.4	0.00	10.5	9 to 11	104	80 to 120	0	20
AW05473	Fluoride, Total	mg/L	0.00	0.3	2.0	2.08	0.00	2.15	1.8 to 2.2	104	80 to 120	200	20
AW05471	Solids, Dissolved	mg/L	-2	25			442	41.0	40 to 60			1.84	5
AW05473	Sulfate, Total	mg/L	0.00	1.0	20.0	20.0	0.00	20.1	18 to 22	100	80 to 120	0	20

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Expiration: June 30, 2018

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CC:

Reported: 7/26/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AW05470

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/5/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	0.0128	mg/L
* Barium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	0.0468	mg/L
* Beryllium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	3/24/2016	EPA 200.7		1.015	0.02	0.1	J 0.0447	mg/L
* Calcium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.1	0.5	6.61	mg/L
* Cadmium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	0.0279	mg/L
* Chromium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	3/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	J 0.00238	mg/L
* Lead, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	3/7/2016	SM 2540C		1		25	182	mg/L
* Chloride, Total	SES	3/3/2016	EPA 300.0		1	0.04	0.25	20.9	mg/L
* Fluoride, Total	SES	3/3/2016	EPA 300.0		1	0.01	0.3	J 0.18	mg/L
* Sulfate, Total	SES	3/3/2016	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: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AW05470

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW05473 Selenium, Total	mg/L	0.0000584	0.0044	0.10	0.0896	0.0921	0.0911	0.085 to 0.115	89.6	70 to 130	2.75	20	
AW05472 Boron, Total	mg/L	-0.00252	0.044				0.968	0.85 to 1.15		70 to 130		20	
AW05473 Calcium, Total	mg/L	0.00364	0.22	5.000	5.38	5.22	5.35	4.25 to 5.75	108	70 to 130	3.02	20	
AW05473 Barium, Total	mg/L	0.00000327	0.0044	0.10	0.0918	0.0958	0.0919	0.085 to 0.115	91.8	70 to 130	4.25	20	
AW05473 Beryllium, Total	mg/L	0.0000107	0.00132	0.10	0.0971	0.102	0.0985	0.085 to 0.115	97.1	70 to 130	4.58	20	
AW05473 Lithium, Total	mg/L	-0.0000403	0.022	0.200	0.208	0.206	0.195	0.17 to 0.23	104	70 to 130	0.966	20	
AW05473 Antimony, Total	mg/L	0.000100	0.00132	0.10	0.0879	0.0915	0.0885	0.085 to 0.115	87.9	70 to 130	4.01	20	
AW05473 Arsenic, Total	mg/L	0.0000108	0.0022	0.10	0.0882	0.0905	0.0881	0.085 to 0.115	88.2	70 to 130	2.52	20	
AW05473 Chromium, Total	mg/L	0.0000327	0.0044	0.10	0.0872	0.0896	0.0863	0.085 to 0.115	87.2	70 to 130	2.69	20	
AW05473 Lead, Total	mg/L	0.0000297	0.0022	0.10	0.0837	0.0846	0.0863	0.085 to 0.115	83.7	70 to 130	1.01	20	
AW05473 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00395	0.00398	0.00384	0.0034 to 0.0046	98.8	70 to 130	0.757	20	
AW05473 Cadmium, Total	mg/L	-0.0000102	0.00044	0.10	0.0890	0.0890	0.0879	0.085 to 0.115	89.0	70 to 130	0.0421	20	
AW05473 Cobalt, Total	mg/L	-0.0000803	0.0044	0.10	0.0954	0.0987	0.0930	0.085 to 0.115	95.4	70 to 130	3.38	20	
AW05473 Molybdenum, Total	mg/L	0.0000250	0.0044	0.10	0.0940	0.0966	0.0942	0.085 to 0.115	94.0	70 to 130	2.73	20	
AW05473 Thallium, Total	mg/L	-0.0000877	0.00044	0.10	0.0914	0.0921	0.0910	0.085 to 0.115	91.4	70 to 130	0.713	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: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AW05470

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW05473	Fluoride, Total	mg/L	0.00	0.3	2.0	2.08	0.00	2.15	1.8 to 2.2	104	80 to 120	200	20
AW05473	Chloride, Total	mg/L	0.00	0.25	10.0	10.4	0.00	10.5	9 to 11	104	80 to 120	0	20
AW05471	Solids, Dissolved	mg/L	-2	25			442	41.0	40 to 60			1.84	5
AW05473	Sulfate, Total	mg/L	0.00	1.0	20.0	20.0	0.00	20.1	18 to 22	100	80 to 120	0	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: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AW05471

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/5/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	0.0760	mg/L
* Barium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	0.219	mg/L
* Beryllium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	3/24/2016	EPA 200.7		10.15	0.20	1	2.03	mg/L
* Calcium, Total	HRG	3/24/2016	EPA 200.7		10.15	1.0	5.0	46.5	mg/L
* Cadmium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	J 0.00591	mg/L
* Mercury, Total by CVAA	MCW	3/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/24/2016	EPA 200.7		10.15	0.10	0.5	U Not Detected	mg/L
* Molybdenum, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	3/7/2016	SM 2540C		1		50	426	mg/L
* Chloride, Total	SES	3/3/2016	EPA 300.0		1	0.04	0.25	2.18	mg/L
* Fluoride, Total	SES	3/3/2016	EPA 300.0		1	0.01	0.3	J 0.03	mg/L
* Sulfate, Total	SES	3/3/2016	EPA 300.0		1	0.3	1	J 0.31	mg/L

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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AW05471

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW05473 Selenium, Total	mg/L	0.0000584	0.0044	0.10	0.0896	0.0921	0.0911	0.085 to 0.115	89.6	70 to 130	2.75	20	
AW05472 Boron, Total	mg/L	-0.00252	0.044				0.968	0.85 to 1.15		70 to 130		20	
AW05473 Calcium, Total	mg/L	0.00364	0.22	5.000	5.38	5.22	5.35	4.25 to 5.75	108	70 to 130	3.02	20	
AW05473 Barium, Total	mg/L	0.00000327	0.0044	0.10	0.0918	0.0958	0.0919	0.085 to 0.115	91.8	70 to 130	4.25	20	
AW05473 Beryllium, Total	mg/L	0.0000107	0.00132	0.10	0.0971	0.102	0.0985	0.085 to 0.115	97.1	70 to 130	4.58	20	
AW05473 Lithium, Total	mg/L	-0.0000403	0.022	0.200	0.208	0.206	0.195	0.17 to 0.23	104	70 to 130	0.966	20	
AW05473 Cadmium, Total	mg/L	-0.0000102	0.00044	0.10	0.0890	0.0890	0.0879	0.085 to 0.115	89.0	70 to 130	0.0421	20	
AW05473 Cobalt, Total	mg/L	-0.0000803	0.0044	0.10	0.0954	0.0987	0.0930	0.085 to 0.115	95.4	70 to 130	3.38	20	
AW05473 Molybdenum, Total	mg/L	0.0000250	0.0044	0.10	0.0940	0.0966	0.0942	0.085 to 0.115	94.0	70 to 130	2.73	20	
AW05473 Thallium, Total	mg/L	-0.0000877	0.00044	0.10	0.0914	0.0921	0.0910	0.085 to 0.115	91.4	70 to 130	0.713	20	
AW05473 Antimony, Total	mg/L	0.000100	0.00132	0.10	0.0879	0.0915	0.0885	0.085 to 0.115	87.9	70 to 130	4.01	20	
AW05473 Arsenic, Total	mg/L	0.0000108	0.0022	0.10	0.0882	0.0905	0.0881	0.085 to 0.115	88.2	70 to 130	2.52	20	
AW05473 Chromium, Total	mg/L	0.0000327	0.0044	0.10	0.0872	0.0896	0.0863	0.085 to 0.115	87.2	70 to 130	2.69	20	
AW05473 Lead, Total	mg/L	0.0000297	0.0022	0.10	0.0837	0.0846	0.0863	0.085 to 0.115	83.7	70 to 130	1.01	20	
AW05473 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00395	0.00398	0.00384	0.0034 to 0.0046	98.8	70 to 130	0.757	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: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AW05471

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW05473	Chloride, Total	mg/L	0.00	0.25	10.0	10.4	0.00	10.5	9 to 11	104	80 to 120	0	20
AW05473	Fluoride, Total	mg/L	0.00	0.3	2.0	2.08	0.00	2.15	1.8 to 2.2	104	80 to 120	200	20
AW05471	Solids, Dissolved	mg/L	-2	25			442	41.0	40 to 60			1.84	5
AW05473	Sulfate, Total	mg/L	0.00	1.0	20.0	20.0	0.00	20.1	18 to 22	100	80 to 120	0	20

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CC:

Reported: 7/26/2017
 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: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AW05472

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/5/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	0.0306	mg/L
* Beryllium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	3/24/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.1	0.5	1.11	mg/L
* Cadmium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	3/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	3/7/2016	SM 2540C		1		25	27.3	mg/L
* Chloride, Total	SES	3/3/2016	EPA 300.0		1	0.04	0.25	8.04	mg/L
* Fluoride, Total	SES	3/3/2016	EPA 300.0		1	0.01	0.3	J 0.01	mg/L
* Sulfate, Total	SES	3/3/2016	EPA 300.0		1	0.3	1	J 0.79	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 1/19/17
 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: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AW05472

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW05473 Selenium, Total	mg/L	0.0000584	0.0044	0.10	0.0896	0.0921	0.0911	0.085 to 0.115	89.6	70 to 130	2.75	20	
AW05473 Barium, Total	mg/L	0.00000327	0.0044	0.10	0.0918	0.0958	0.0919	0.085 to 0.115	91.8	70 to 130	4.25	20	
AW05473 Beryllium, Total	mg/L	0.0000107	0.00132	0.10	0.0971	0.102	0.0985	0.085 to 0.115	97.1	70 to 130	4.58	20	
AW05473 Lithium, Total	mg/L	-0.0000403	0.022	0.200	0.208	0.206	0.195	0.17 to 0.23	104	70 to 130	0.966	20	
AW05472 Boron, Total	mg/L	-0.00252	0.044				0.968	0.85 to 1.15		70 to 130		20	
AW05473 Calcium, Total	mg/L	0.00364	0.22	5.000	5.38	5.22	5.35	4.25 to 5.75	108	70 to 130	3.02	20	
AW05473 Antimony, Total	mg/L	0.000100	0.00132	0.10	0.0879	0.0915	0.0885	0.085 to 0.115	87.9	70 to 130	4.01	20	
AW05473 Arsenic, Total	mg/L	0.0000108	0.0022	0.10	0.0882	0.0905	0.0881	0.085 to 0.115	88.2	70 to 130	2.52	20	
AW05473 Chromium, Total	mg/L	0.0000327	0.0044	0.10	0.0872	0.0896	0.0863	0.085 to 0.115	87.2	70 to 130	2.69	20	
AW05473 Lead, Total	mg/L	0.0000297	0.0022	0.10	0.0837	0.0846	0.0863	0.085 to 0.115	83.7	70 to 130	1.01	20	
AW05473 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00395	0.00398	0.00384	0.0034 to 0.0046	98.8	70 to 130	0.757	20	
AW05473 Cadmium, Total	mg/L	-0.0000102	0.00044	0.10	0.0890	0.0890	0.0879	0.085 to 0.115	89.0	70 to 130	0.0421	20	
AW05473 Cobalt, Total	mg/L	-0.0000803	0.0044	0.10	0.0954	0.0987	0.0930	0.085 to 0.115	95.4	70 to 130	3.38	20	
AW05473 Molybdenum, Total	mg/L	0.0000250	0.0044	0.10	0.0940	0.0966	0.0942	0.085 to 0.115	94.0	70 to 130	2.73	20	
AW05473 Thallium, Total	mg/L	-0.0000877	0.00044	0.10	0.0914	0.0921	0.0910	0.085 to 0.115	91.4	70 to 130	0.713	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: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AW05472

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW05473	Chloride, Total	mg/L	0.00	0.25	10.0	10.4	0.00	10.5	9 to 11	104	80 to 120	0	20
AW05473	Fluoride, Total	mg/L	0.00	0.3	2.0	2.08	0.00	2.15	1.8 to 2.2	104	80 to 120	200	20
AW05471	Solids, Dissolved	mg/L	-2	25			442	41.0	40 to 60			1.84	5
AW05473	Sulfate, Total	mg/L	0.00	1.0	20.0	20.0	0.00	20.1	18 to 22	100	80 to 120	0	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: 7/26/2017
 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: WMWBARAPEB
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AW05473

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/5/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	3/29/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	3/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	3/7/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	3/3/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	3/3/2016	EPA 300.0		1	0.01	0.3	J 0.01	mg/L
* Sulfate, Total	SES	3/3/2016	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
 Precision for Fluoride is out of range.
 Fluoride result is an estimate and will not be qualified SGC 10/5/16

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: WMWBARAPEB
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AW05473

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW05473 Boron, Total	mg/L	0.00270	0.044	1.00	0.994	0.996	0.999	0.85 to 1.15	99.4	70 to 130	0.239	20	
AW05473 Calcium, Total	mg/L	0.00364	0.22	5.000	5.38	5.22	5.35	4.25 to 5.75	108	70 to 130	3.02	20	
AW05473 Selenium, Total	mg/L	0.0000584	0.0044	0.10	0.0896	0.0921	0.0911	0.085 to 0.115	89.6	70 to 130	2.75	20	
AW05473 Barium, Total	mg/L	0.00000327	0.0044	0.10	0.0918	0.0958	0.0919	0.085 to 0.115	91.8	70 to 130	4.25	20	
AW05473 Beryllium, Total	mg/L	0.0000107	0.00132	0.10	0.0971	0.102	0.0985	0.085 to 0.115	97.1	70 to 130	4.58	20	
AW05473 Lithium, Total	mg/L	-0.0000403	0.022	0.200	0.208	0.206	0.195	0.17 to 0.23	104	70 to 130	0.966	20	
AW05473 Cadmium, Total	mg/L	-0.0000102	0.00044	0.10	0.0890	0.0890	0.0879	0.085 to 0.115	89.0	70 to 130	0.0421	20	
AW05473 Cobalt, Total	mg/L	-0.0000803	0.0044	0.10	0.0954	0.0987	0.0930	0.085 to 0.115	95.4	70 to 130	3.38	20	
AW05473 Molybdenum, Total	mg/L	0.0000250	0.0044	0.10	0.0940	0.0966	0.0942	0.085 to 0.115	94.0	70 to 130	2.73	20	
AW05473 Thallium, Total	mg/L	-0.0000877	0.00044	0.10	0.0914	0.0921	0.0910	0.085 to 0.115	91.4	70 to 130	0.713	20	
AW05473 Antimony, Total	mg/L	0.000100	0.00132	0.10	0.0879	0.0915	0.0885	0.085 to 0.115	87.9	70 to 130	4.01	20	
AW05473 Arsenic, Total	mg/L	0.0000108	0.0022	0.10	0.0882	0.0905	0.0881	0.085 to 0.115	88.2	70 to 130	2.52	20	
AW05473 Chromium, Total	mg/L	0.0000327	0.0044	0.10	0.0872	0.0896	0.0863	0.085 to 0.115	87.2	70 to 130	2.69	20	
AW05473 Lead, Total	mg/L	0.0000297	0.0022	0.10	0.0837	0.0846	0.0863	0.085 to 0.115	83.7	70 to 130	1.01	20	
AW05473 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00395	0.00398	0.00384	0.0034 to 0.0046	98.8	70 to 130	0.757	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 1/19/17
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17
 Precision for Fluoride is out of range.
 Fluoride result is an estimate and will not be qualified SGC 10/5/16

Reported: 7/26/2017
 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: WMWBARAPEB
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AW05473

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW05473	Fluoride, Total	mg/L	0.00	0.3	2.0	2.08	0.00	2.15	1.8 to 2.2	104	80 to 120	200	20
AW05473	Chloride, Total	mg/L	0.00	0.25	10.0	10.4	0.00	10.5	9 to 11	104	80 to 120	0	20
AW05471	Solids, Dissolved	mg/L	-2	25			442	41.0	40 to 60			1.84	5
AW05473	Sulfate, Total	mg/L	0.00	1.0	20.0	20.0	0.00	20.1	18 to 22	100	80 to 120	0	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: WMWBARAPFB
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW05474

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/5/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	3/24/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	3/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	3/7/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	3/3/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	3/3/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	3/3/2016	EPA 300.0		1	0.3	1	U Not Detected	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: WMWBARAPFB
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW05474

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW05484 Calcium, Total	mg/L	0.00191	0.22	5.000	8.76	8.82	4.99	4.25 to 5.75	98.0	70 to 130	0.683	20	
AW05484 Barium, Total	mg/L	0.00000327	0.0044	0.10	0.122	0.129	0.0919	0.085 to 0.115	93.5	70 to 130	5.02	20	
AW05484 Molybdenum, Total	mg/L	0.0000250	0.0044	0.10	0.0981	0.101	0.0942	0.085 to 0.115	98.1	70 to 130	2.86	20	
AW05484 Cadmium, Total	mg/L	-0.0000102	0.00044	0.10	0.0905	0.0926	0.0879	0.085 to 0.115	90.5	70 to 130	2.37	20	
AW05484 Cobalt, Total	mg/L	-0.0000803	0.0044	0.10	0.107	0.111	0.0930	0.085 to 0.115	98.6	70 to 130	3.71	20	
AW05484 Thallium, Total	mg/L	-0.0000877	0.00044	0.10	0.0930	0.0964	0.0910	0.085 to 0.115	93.0	70 to 130	3.53	20	
AW05484 Arsenic, Total	mg/L	0.0000108	0.0022	0.10	0.0925	0.0951	0.0881	0.085 to 0.115	89.9	70 to 130	2.78	20	
AW05484 Selenium, Total	mg/L	0.0000584	0.0044	0.10	0.0940	0.0951	0.0911	0.085 to 0.115	94.0	70 to 130	1.20	20	
AW05484 Beryllium, Total	mg/L	0.0000107	0.00132	0.10	0.104	0.106	0.0985	0.085 to 0.115	104	70 to 130	1.64	20	
AW05484 Lithium, Total	mg/L	-0.0000758	0.022	0.200	0.204	0.205	0.195	0.17 to 0.23	102	70 to 130	0.489	20	
AW05483 Boron, Total	mg/L	-0.00317	0.044				0.981	0.85 to 1.15		70 to 130		20	
AW05483 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00385	0.00386	0.00383	0.0034 to 0.0046	96.2	70 to 130	0.259	20	
AW05484 Antimony, Total	mg/L	0.000100	0.00132	0.10	0.0918	0.0948	0.0885	0.085 to 0.115	91.8	70 to 130	3.14	20	
AW05484 Chromium, Total	mg/L	0.0000327	0.0044	0.10	0.0892	0.0916	0.0863	0.085 to 0.115	89.2	70 to 130	2.72	20	
AW05484 Lead, Total	mg/L	0.0000297	0.0022	0.10	0.0857	0.0878	0.0863	0.085 to 0.115	85.7	70 to 130	2.47	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 1/19/17
 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: WMWBARAPFB
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW05474

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW05484	Sulfate, Total	mg/L	0.00	1.0	20.0	23.4	3.32	20.1	18 to 22	100	80 to 120	0.604	20
AW05471	Solids, Dissolved	mg/L	-2	25			442	41.0	40 to 60			1.84	5
AW05484	Fluoride, Total	mg/L	0.00	0.3	2.0	2.13	0.036	2.13	1.8 to 2.2	104	80 to 120	10.5	20
AW05484	Chloride, Total	mg/L	0.00	0.25	10.0	16.6	6.09	10.5	9 to 11	105	80 to 120	0.164	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: 7/26/2017
 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: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AW05475

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/5/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	0.0180	mg/L
* Beryllium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	3/24/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.1	0.5	1.07	mg/L
* Cadmium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	3/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	SES	3/8/2016	SM 2540C		1		25	27.3	mg/L
* Chloride, Total	SES	3/4/2016	EPA 300.0		1	0.04	0.25	7.74	mg/L
* Fluoride, Total	SES	3/4/2016	EPA 300.0		1	0.01	0.3	J 0.02	mg/L
* Sulfate, Total	SES	3/4/2016	EPA 300.0		1	0.3	1	2.58	mg/L

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

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 Calera, AL 35040
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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AW05475

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW05484 Calcium, Total	mg/L	0.00191	0.22	5.000	8.76	8.82	4.99	4.25 to 5.75	98.0	70 to 130	0.683	20	
AW05484 Barium, Total	mg/L	0.00000327	0.0044	0.10	0.122	0.129	0.0919	0.085 to 0.115	93.5	70 to 130	5.02	20	
AW05484 Arsenic, Total	mg/L	0.0000108	0.0022	0.10	0.0925	0.0951	0.0881	0.085 to 0.115	89.9	70 to 130	2.78	20	
AW05484 Selenium, Total	mg/L	0.0000584	0.0044	0.10	0.0940	0.0951	0.0911	0.085 to 0.115	94.0	70 to 130	1.20	20	
AW05484 Cadmium, Total	mg/L	-0.0000102	0.00044	0.10	0.0905	0.0926	0.0879	0.085 to 0.115	90.5	70 to 130	2.37	20	
AW05484 Cobalt, Total	mg/L	-0.0000803	0.0044	0.10	0.107	0.111	0.0930	0.085 to 0.115	98.6	70 to 130	3.71	20	
AW05484 Thallium, Total	mg/L	-0.0000877	0.00044	0.10	0.0930	0.0964	0.0910	0.085 to 0.115	93.0	70 to 130	3.53	20	
AW05484 Beryllium, Total	mg/L	0.0000107	0.00132	0.10	0.104	0.106	0.0985	0.085 to 0.115	104	70 to 130	1.64	20	
AW05484 Lithium, Total	mg/L	-0.0000758	0.022	0.200	0.204	0.205	0.195	0.17 to 0.23	102	70 to 130	0.489	20	
AW05483 Boron, Total	mg/L	-0.00317	0.044				0.981	0.85 to 1.15		70 to 130		20	
AW05483 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00385	0.00386	0.00383	0.0034 to 0.0046	96.2	70 to 130	0.259	20	
AW05484 Antimony, Total	mg/L	0.000100	0.00132	0.10	0.0918	0.0948	0.0885	0.085 to 0.115	91.8	70 to 130	3.14	20	
AW05484 Chromium, Total	mg/L	0.0000327	0.0044	0.10	0.0892	0.0916	0.0863	0.085 to 0.115	89.2	70 to 130	2.72	20	
AW05484 Lead, Total	mg/L	0.0000297	0.0022	0.10	0.0857	0.0878	0.0863	0.085 to 0.115	85.7	70 to 130	2.47	20	
AW05484 Molybdenum, Total	mg/L	0.0000250	0.0044	0.10	0.0981	0.101	0.0942	0.085 to 0.115	98.1	70 to 130	2.86	20	

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 Calera, AL 35040
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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AW05475

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
			Limit	Limit			Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW05484	Chloride, Total	mg/L	0.00	0.25	10.0	16.6	6.09	10.5	9 to 11	105	80 to 120	0.164	20
AW05484	Fluoride, Total	mg/L	0.00	0.3	2.0	2.13	0.036	2.13	1.8 to 2.2	104	80 to 120	10.5	20
AW05482	Solids, Dissolved	mg/L	-1	25			279	43.0	40 to 60			2.39	5
AW05484	Sulfate, Total	mg/L	0.00	1.0	20.0	23.4	3.32	20.1	18 to 22	100	80 to 120	0.604	20

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CC:

Reported: 7/26/2017
 Version: 2.0

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Certificate Of Analysis  **Alabama Power**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AW05476

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/5/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	0.0322	mg/L
* Barium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	0.114	mg/L
* Beryllium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	3/24/2016	EPA 200.7		1.015	0.02	0.1	1.79	mg/L
* Calcium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.1	0.5	40.3	mg/L
* Cadmium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	3/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	SES	3/8/2016	SM 2540C		1		25	314	mg/L
* Chloride, Total	SES	3/4/2016	EPA 300.0		1	0.04	0.25	20.4	mg/L
* Fluoride, Total	SES	3/4/2016	EPA 300.0		1	0.01	0.3	J 0.04	mg/L
* Sulfate, Total	SES	3/4/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AW05476

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW05484 Molybdenum, Total	mg/L	0.0000250	0.0044	0.10	0.0981	0.101	0.0942	0.085 to 0.115		98.1	70 to 130	2.86	20
AW05484 Barium, Total	mg/L	0.00000327	0.0044	0.10	0.122	0.129	0.0919	0.085 to 0.115		93.5	70 to 130	5.02	20
AW05484 Calcium, Total	mg/L	0.00191	0.22	5.000	8.76	8.82	4.99	4.25 to 5.75		98.0	70 to 130	0.683	20
AW05484 Beryllium, Total	mg/L	0.0000107	0.00132	0.10	0.104	0.106	0.0985	0.085 to 0.115		104	70 to 130	1.64	20
AW05484 Lithium, Total	mg/L	-0.0000758	0.022	0.200	0.204	0.205	0.195	0.17 to 0.23		102	70 to 130	0.489	20
AW05484 Cadmium, Total	mg/L	-0.0000102	0.00044	0.10	0.0905	0.0926	0.0879	0.085 to 0.115		90.5	70 to 130	2.37	20
AW05484 Cobalt, Total	mg/L	-0.0000803	0.0044	0.10	0.107	0.111	0.0930	0.085 to 0.115		98.6	70 to 130	3.71	20
AW05484 Thallium, Total	mg/L	-0.0000877	0.00044	0.10	0.0930	0.0964	0.0910	0.085 to 0.115		93.0	70 to 130	3.53	20
AW05484 Arsenic, Total	mg/L	0.0000108	0.0022	0.10	0.0925	0.0951	0.0881	0.085 to 0.115		89.9	70 to 130	2.78	20
AW05484 Selenium, Total	mg/L	0.0000584	0.0044	0.10	0.0940	0.0951	0.0911	0.085 to 0.115		94.0	70 to 130	1.20	20
AW05483 Boron, Total	mg/L	-0.00317	0.044				0.981	0.85 to 1.15			70 to 130		20
AW05483 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00385	0.00386	0.00383	0.0034 to 0.0046		96.2	70 to 130	0.259	20
AW05484 Antimony, Total	mg/L	0.000100	0.00132	0.10	0.0918	0.0948	0.0885	0.085 to 0.115		91.8	70 to 130	3.14	20
AW05484 Chromium, Total	mg/L	0.0000327	0.0044	0.10	0.0892	0.0916	0.0863	0.085 to 0.115		89.2	70 to 130	2.72	20
AW05484 Lead, Total	mg/L	0.0000297	0.0022	0.10	0.0857	0.0878	0.0863	0.085 to 0.115		85.7	70 to 130	2.47	20

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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AW05476

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW05484	Fluoride, Total	mg/L	0.00	0.3	2.0	2.13	0.036	2.13	1.8 to 2.2	104	80 to 120	10.5	20
AW05484	Chloride, Total	mg/L	0.00	0.25	10.0	16.6	6.09	10.5	9 to 11	105	80 to 120	0.164	20
AW05482	Solids, Dissolved	mg/L	-1	25			279	43.0	40 to 60			2.39	5
AW05484	Sulfate, Total	mg/L	0.00	1.0	20.0	23.4	3.32	20.1	18 to 22	100	80 to 120	0.604	20

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CC:

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 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: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AW05478

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/5/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	0.0264	mg/L
* Barium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	0.0634	mg/L
* Beryllium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	3/24/2016	EPA 200.7		10.15	0.20	1	1.39	mg/L
* Calcium, Total	HRG	3/24/2016	EPA 200.7		10.15	1.0	5.0	50.6	mg/L
* Cadmium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	3/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/24/2016	EPA 200.7		10.15	0.10	0.5	U Not Detected	mg/L
* Molybdenum, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	SES	3/8/2016	SM 2540C		1		50	326	mg/L
* Chloride, Total	SES	3/4/2016	EPA 300.0		1	0.04	0.25	19.6	mg/L
* Fluoride, Total	SES	3/4/2016	EPA 300.0		1	0.01	0.3	J 0.02	mg/L
* Sulfate, Total	SES	3/4/2016	EPA 300.0		1	0.3	1	J 0.34	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AW05478

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW05484 Calcium, Total	mg/L	0.00191	0.22	5.000	8.76	8.82	4.99	4.25 to 5.75	98.0	70 to 130	0.683	20	
AW05484 Molybdenum, Total	mg/L	0.0000250	0.0044	0.10	0.0981	0.101	0.0942	0.085 to 0.115	98.1	70 to 130	2.86	20	
AW05484 Barium, Total	mg/L	0.00000327	0.0044	0.10	0.122	0.129	0.0919	0.085 to 0.115	93.5	70 to 130	5.02	20	
AW05484 Arsenic, Total	mg/L	0.0000108	0.0022	0.10	0.0925	0.0951	0.0881	0.085 to 0.115	89.9	70 to 130	2.78	20	
AW05484 Selenium, Total	mg/L	0.0000584	0.0044	0.10	0.0940	0.0951	0.0911	0.085 to 0.115	94.0	70 to 130	1.20	20	
AW05484 Cadmium, Total	mg/L	-0.0000102	0.00044	0.10	0.0905	0.0926	0.0879	0.085 to 0.115	90.5	70 to 130	2.37	20	
AW05484 Cobalt, Total	mg/L	-0.0000803	0.0044	0.10	0.107	0.111	0.0930	0.085 to 0.115	98.6	70 to 130	3.71	20	
AW05484 Thallium, Total	mg/L	-0.0000877	0.00044	0.10	0.0930	0.0964	0.0910	0.085 to 0.115	93.0	70 to 130	3.53	20	
AW05484 Beryllium, Total	mg/L	0.0000107	0.00132	0.10	0.104	0.106	0.0985	0.085 to 0.115	104	70 to 130	1.64	20	
AW05484 Lithium, Total	mg/L	-0.0000758	0.022	0.200	0.204	0.205	0.195	0.17 to 0.23	102	70 to 130	0.489	20	
AW05483 Boron, Total	mg/L	-0.00317	0.044				0.981	0.85 to 1.15		70 to 130		20	
AW05483 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00385	0.00386	0.00383	0.0034 to 0.0046	96.2	70 to 130	0.259	20	
AW05484 Antimony, Total	mg/L	0.000100	0.00132	0.10	0.0918	0.0948	0.0885	0.085 to 0.115	91.8	70 to 130	3.14	20	
AW05484 Chromium, Total	mg/L	0.0000327	0.0044	0.10	0.0892	0.0916	0.0863	0.085 to 0.115	89.2	70 to 130	2.72	20	
AW05484 Lead, Total	mg/L	0.0000297	0.0022	0.10	0.0857	0.0878	0.0863	0.085 to 0.115	85.7	70 to 130	2.47	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 1/19/17
 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: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AW05478

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW05484	Chloride, Total	mg/L	0.00	0.25	10.0	16.6	6.09	10.5	9 to 11	105	80 to 120	0.164	20
AW05484	Fluoride, Total	mg/L	0.00	0.3	2.0	2.13	0.036	2.13	1.8 to 2.2	104	80 to 120	10.5	20
AW05482	Solids, Dissolved	mg/L	-1	25			279	43.0	40 to 60			2.39	5
AW05484	Sulfate, Total	mg/L	0.00	1.0	20.0	23.4	3.32	20.1	18 to 22	100	80 to 120	0.604	20

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Expiration: June 30, 2018

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CC:

Reported: 7/26/2017
 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: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AW05479

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/5/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	J 0.00142	mg/L
* Barium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	0.0278	mg/L
* Beryllium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	3/24/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.1	0.5	1.87	mg/L
* Cadmium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	3/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	SES	3/8/2016	SM 2540C		1		25	45.3	mg/L
* Chloride, Total	SES	3/4/2016	EPA 300.0		1	0.04	0.25	5.77	mg/L
* Fluoride, Total	SES	3/4/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	3/4/2016	EPA 300.0		1	0.3	1	J 0.36	mg/L

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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: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AW05479

Sample Analysis	Units	MB	MB				LFB		Rec		Prec	Limit
			Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit		
AW05484 Molybdenum, Total	mg/L	0.0000250	0.0044	0.10	0.0981	0.101	0.0942	0.085 to 0.115	98.1	70 to 130	2.86	20
AW05484 Barium, Total	mg/L	0.00000327	0.0044	0.10	0.122	0.129	0.0919	0.085 to 0.115	93.5	70 to 130	5.02	20
AW05484 Calcium, Total	mg/L	0.00191	0.22	5.000	8.76	8.82	4.99	4.25 to 5.75	98.0	70 to 130	0.683	20
AW05484 Beryllium, Total	mg/L	0.0000107	0.00132	0.10	0.104	0.106	0.0985	0.085 to 0.115	104	70 to 130	1.64	20
AW05484 Lithium, Total	mg/L	-0.0000758	0.022	0.200	0.204	0.205	0.195	0.17 to 0.23	102	70 to 130	0.489	20
AW05483 Boron, Total	mg/L	-0.00317	0.044				0.981	0.85 to 1.15		70 to 130		20
AW05483 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00385	0.00386	0.00383	0.0034 to 0.0046	96.2	70 to 130	0.259	20
AW05484 Antimony, Total	mg/L	0.000100	0.00132	0.10	0.0918	0.0948	0.0885	0.085 to 0.115	91.8	70 to 130	3.14	20
AW05484 Chromium, Total	mg/L	0.0000327	0.0044	0.10	0.0892	0.0916	0.0863	0.085 to 0.115	89.2	70 to 130	2.72	20
AW05484 Lead, Total	mg/L	0.0000297	0.0022	0.10	0.0857	0.0878	0.0863	0.085 to 0.115	85.7	70 to 130	2.47	20
AW05484 Arsenic, Total	mg/L	0.0000108	0.0022	0.10	0.0925	0.0951	0.0881	0.085 to 0.115	89.9	70 to 130	2.78	20
AW05484 Selenium, Total	mg/L	0.0000584	0.0044	0.10	0.0940	0.0951	0.0911	0.085 to 0.115	94.0	70 to 130	1.20	20
AW05484 Cadmium, Total	mg/L	-0.0000102	0.00044	0.10	0.0905	0.0926	0.0879	0.085 to 0.115	90.5	70 to 130	2.37	20
AW05484 Cobalt, Total	mg/L	-0.0000803	0.0044	0.10	0.107	0.111	0.0930	0.085 to 0.115	98.6	70 to 130	3.71	20
AW05484 Thallium, Total	mg/L	-0.0000877	0.00044	0.10	0.0930	0.0964	0.0910	0.085 to 0.115	93.0	70 to 130	3.53	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.
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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: WMWBARAP
 Sample Date: 01-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AW05479

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample		LFB Limit	Rec		Prec Limit	
							Duplicate	LFB		Rec	Limit		
AW05484	Fluoride, Total	mg/L	0.00	0.3	2.0	2.13	0.036	2.13	1.8 to 2.2	104	80 to 120	10.5	20
AW05484	Chloride, Total	mg/L	0.00	0.25	10.0	16.6	6.09	10.5	9 to 11	105	80 to 120	0.164	20
AW05482	Solids, Dissolved	mg/L	-1	25			279	43.0	40 to 60			2.39	5
AW05484	Sulfate, Total	mg/L	0.00	1.0	20.0	23.4	3.32	20.1	18 to 22	100	80 to 120	0.604	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

Certificate Of Analysis  **Alabama Power**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAPFB
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW05480

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/5/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	3/24/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	3/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	SES	3/8/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	3/4/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	3/4/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	3/4/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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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: WMWBARAPFB
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW05480

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW05484 Calcium, Total	mg/L	0.00191	0.22	5.000	8.76	8.82	4.99	4.25 to 5.75	98.0	70 to 130	0.683	20	
AW05484 Molybdenum, Total	mg/L	0.0000250	0.0044	0.10	0.0981	0.101	0.0942	0.085 to 0.115	98.1	70 to 130	2.86	20	
AW05484 Barium, Total	mg/L	0.00000327	0.0044	0.10	0.122	0.129	0.0919	0.085 to 0.115	93.5	70 to 130	5.02	20	
AW05484 Cadmium, Total	mg/L	-0.0000102	0.00044	0.10	0.0905	0.0926	0.0879	0.085 to 0.115	90.5	70 to 130	2.37	20	
AW05484 Cobalt, Total	mg/L	-0.0000803	0.0044	0.10	0.107	0.111	0.0930	0.085 to 0.115	98.6	70 to 130	3.71	20	
AW05484 Thallium, Total	mg/L	-0.0000877	0.00044	0.10	0.0930	0.0964	0.0910	0.085 to 0.115	93.0	70 to 130	3.53	20	
AW05484 Beryllium, Total	mg/L	0.0000107	0.00132	0.10	0.104	0.106	0.0985	0.085 to 0.115	104	70 to 130	1.64	20	
AW05484 Lithium, Total	mg/L	-0.0000758	0.022	0.200	0.204	0.205	0.195	0.17 to 0.23	102	70 to 130	0.489	20	
AW05483 Boron, Total	mg/L	-0.00317	0.044				0.981	0.85 to 1.15		70 to 130		20	
AW05483 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00385	0.00386	0.00383	0.0034 to 0.0046	96.2	70 to 130	0.259	20	
AW05484 Antimony, Total	mg/L	0.000100	0.00132	0.10	0.0918	0.0948	0.0885	0.085 to 0.115	91.8	70 to 130	3.14	20	
AW05484 Chromium, Total	mg/L	0.0000327	0.0044	0.10	0.0892	0.0916	0.0863	0.085 to 0.115	89.2	70 to 130	2.72	20	
AW05484 Lead, Total	mg/L	0.0000297	0.0022	0.10	0.0857	0.0878	0.0863	0.085 to 0.115	85.7	70 to 130	2.47	20	
AW05484 Arsenic, Total	mg/L	0.0000108	0.0022	0.10	0.0925	0.0951	0.0881	0.085 to 0.115	89.9	70 to 130	2.78	20	
AW05484 Selenium, Total	mg/L	0.0000584	0.0044	0.10	0.0940	0.0951	0.0911	0.085 to 0.115	94.0	70 to 130	1.20	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 1/19/17
 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: WMWBARAPFB
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW05480

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW05484	Fluoride, Total	mg/L	0.00	0.3	2.0	2.13	0.036	2.13	1.8 to 2.2	104	80 to 120	10.5	20
AW05484	Chloride, Total	mg/L	0.00	0.25	10.0	16.6	6.09	10.5	9 to 11	105	80 to 120	0.164	20
AW05482	Solids, Dissolved	mg/L	-1	25			279	43.0	40 to 60			2.39	5
AW05484	Sulfate, Total	mg/L	0.00	1.0	20.0	23.4	3.32	20.1	18 to 22	100	80 to 120	0.604	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: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AW05481

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/5/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	0.0215	mg/L
* Barium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	0.0815	mg/L
* Beryllium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	3/24/2016	EPA 200.7		1.015	0.02	0.1	J 0.0502	mg/L
* Calcium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.1	0.5	21.0	mg/L
* Cadmium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	J 0.00235	mg/L
* Chromium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	J 0.00420	mg/L
* Mercury, Total by CVAA	MCW	3/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	SES	3/8/2016	SM 2540C		1		25	351	mg/L
* Chloride, Total	SES	3/4/2016	EPA 300.0		1	0.04	0.25	22.2	mg/L
* Fluoride, Total	SES	3/4/2016	EPA 300.0		1	0.01	0.3	J 0.04	mg/L
* Sulfate, Total	SES	3/4/2016	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: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L.
 The RL has now been corrected. SGC 1/19/17
 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: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AW05481

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW05484 Molybdenum, Total	mg/L	0.0000250	0.0044	0.10	0.0981	0.101	0.0942	0.085 to 0.115	98.1	70 to 130	2.86	20	
AW05484 Calcium, Total	mg/L	0.00191	0.22	5.000	8.76	8.82	4.99	4.25 to 5.75	98.0	70 to 130	0.683	20	
AW05484 Barium, Total	mg/L	0.00000327	0.0044	0.10	0.122	0.129	0.0919	0.085 to 0.115	93.5	70 to 130	5.02	20	
AW05484 Arsenic, Total	mg/L	0.0000108	0.0022	0.10	0.0925	0.0951	0.0881	0.085 to 0.115	89.9	70 to 130	2.78	20	
AW05484 Selenium, Total	mg/L	0.0000584	0.0044	0.10	0.0940	0.0951	0.0911	0.085 to 0.115	94.0	70 to 130	1.20	20	
AW05484 Cadmium, Total	mg/L	-0.0000102	0.00044	0.10	0.0905	0.0926	0.0879	0.085 to 0.115	90.5	70 to 130	2.37	20	
AW05484 Cobalt, Total	mg/L	-0.0000803	0.0044	0.10	0.107	0.111	0.0930	0.085 to 0.115	98.6	70 to 130	3.71	20	
AW05484 Thallium, Total	mg/L	-0.0000877	0.00044	0.10	0.0930	0.0964	0.0910	0.085 to 0.115	93.0	70 to 130	3.53	20	
AW05484 Beryllium, Total	mg/L	0.0000107	0.00132	0.10	0.104	0.106	0.0985	0.085 to 0.115	104	70 to 130	1.64	20	
AW05484 Lithium, Total	mg/L	-0.0000758	0.022	0.200	0.204	0.205	0.195	0.17 to 0.23	102	70 to 130	0.489	20	
AW05483 Boron, Total	mg/L	-0.00317	0.044				0.981	0.85 to 1.15		70 to 130		20	
AW05483 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00385	0.00386	0.00383	0.0034 to 0.0046	96.2	70 to 130	0.259	20	
AW05484 Antimony, Total	mg/L	0.000100	0.00132	0.10	0.0918	0.0948	0.0885	0.085 to 0.115	91.8	70 to 130	3.14	20	
AW05484 Chromium, Total	mg/L	0.0000327	0.0044	0.10	0.0892	0.0916	0.0863	0.085 to 0.115	89.2	70 to 130	2.72	20	
AW05484 Lead, Total	mg/L	0.0000297	0.0022	0.10	0.0857	0.0878	0.0863	0.085 to 0.115	85.7	70 to 130	2.47	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: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AW05481

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW05484	Fluoride, Total	mg/L	0.00	0.3	2.0	2.13	0.036	2.13	1.8 to 2.2	104	80 to 120	10.5	20
AW05484	Chloride, Total	mg/L	0.00	0.25	10.0	16.6	6.09	10.5	9 to 11	105	80 to 120	0.164	20
AW05482	Solids, Dissolved	mg/L	-1	25			279	43.0	40 to 60			2.39	5
AW05484	Sulfate, Total	mg/L	0.00	1.0	20.0	23.4	3.32	20.1	18 to 22	100	80 to 120	0.604	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: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AW05482

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/5/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	0.0101	mg/L
* Barium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	0.0491	mg/L
* Beryllium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	3/24/2016	EPA 200.7		1.015	0.02	0.1	J 0.0395	mg/L
* Calcium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.1	0.5	9.53	mg/L
* Cadmium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	J 0.00552	mg/L
* Mercury, Total by CVAA	MCW	3/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	SES	3/8/2016	SM 2540C		1		25	266	mg/L
* Chloride, Total	SES	3/4/2016	EPA 300.0		1	0.04	0.25	36.6	mg/L
* Fluoride, Total	SES	3/4/2016	EPA 300.0		1	0.01	0.3	J 0.07	mg/L
* Sulfate, Total	SES	3/4/2016	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 1/19/17

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: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AW05482

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW05484 Calcium, Total	mg/L	0.00191	0.22	5.000	8.76	8.82	4.99	4.25 to 5.75	98.0	70 to 130	0.683	20	
AW05484 Molybdenum, Total	mg/L	0.0000250	0.0044	0.10	0.0981	0.101	0.0942	0.085 to 0.115	98.1	70 to 130	2.86	20	
AW05484 Barium, Total	mg/L	0.00000327	0.0044	0.10	0.122	0.129	0.0919	0.085 to 0.115	93.5	70 to 130	5.02	20	
AW05484 Arsenic, Total	mg/L	0.0000108	0.0022	0.10	0.0925	0.0951	0.0881	0.085 to 0.115	89.9	70 to 130	2.78	20	
AW05484 Selenium, Total	mg/L	0.0000584	0.0044	0.10	0.0940	0.0951	0.0911	0.085 to 0.115	94.0	70 to 130	1.20	20	
AW05483 Boron, Total	mg/L	-0.00317	0.044				0.981	0.85 to 1.15		70 to 130		20	
AW05483 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00385	0.00386	0.00383	0.0034 to 0.0046	96.2	70 to 130	0.259	20	
AW05484 Antimony, Total	mg/L	0.000100	0.00132	0.10	0.0918	0.0948	0.0885	0.085 to 0.115	91.8	70 to 130	3.14	20	
AW05484 Chromium, Total	mg/L	0.0000327	0.0044	0.10	0.0892	0.0916	0.0863	0.085 to 0.115	89.2	70 to 130	2.72	20	
AW05484 Lead, Total	mg/L	0.0000297	0.0022	0.10	0.0857	0.0878	0.0863	0.085 to 0.115	85.7	70 to 130	2.47	20	
AW05484 Cadmium, Total	mg/L	-0.0000102	0.00044	0.10	0.0905	0.0926	0.0879	0.085 to 0.115	90.5	70 to 130	2.37	20	
AW05484 Cobalt, Total	mg/L	-0.0000803	0.0044	0.10	0.107	0.111	0.0930	0.085 to 0.115	98.6	70 to 130	3.71	20	
AW05484 Thallium, Total	mg/L	-0.0000877	0.00044	0.10	0.0930	0.0964	0.0910	0.085 to 0.115	93.0	70 to 130	3.53	20	
AW05484 Beryllium, Total	mg/L	0.0000107	0.00132	0.10	0.104	0.106	0.0985	0.085 to 0.115	104	70 to 130	1.64	20	
AW05484 Lithium, Total	mg/L	-0.0000758	0.022	0.200	0.204	0.205	0.195	0.17 to 0.23	102	70 to 130	0.489	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 RL has now been corrected. SGC 1/19/17
 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: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AW05482

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW05484	Chloride, Total	mg/L	0.00	0.25	10.0	16.6	6.09	10.5	9 to 11	105	80 to 120	0.164	20
AW05484	Fluoride, Total	mg/L	0.00	0.3	2.0	2.13	0.036	2.13	1.8 to 2.2	104	80 to 120	10.5	20
AW05482	Solids, Dissolved	mg/L	-1	25			279	43.0	40 to 60			2.39	5
AW05484	Sulfate, Total	mg/L	0.00	1.0	20.0	23.4	3.32	20.1	18 to 22	100	80 to 120	0.604	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: 7/26/2017
 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: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AW05483

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/5/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	0.0102	mg/L
* Barium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	0.0921	mg/L
* Beryllium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	3/24/2016	EPA 200.7		1.015	0.02	0.1	1.47	mg/L
* Calcium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.1	0.5	14.6	mg/L
* Cadmium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	0.0212	mg/L
* Chromium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	3/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	SES	3/8/2016	SM 2540C		1		25	263	mg/L
* Chloride, Total	SES	3/4/2016	EPA 300.0		1	0.04	0.25	16.6	mg/L
* Fluoride, Total	SES	3/4/2016	EPA 300.0		1	0.01	0.3	J 0.04	mg/L
* Sulfate, Total	SES	3/4/2016	EPA 300.0		1	0.3	1	U Not Detected	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: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AW05483

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW05484 Molybdenum, Total	mg/L	0.0000250	0.0044	0.10	0.0981	0.101	0.0942	0.085 to 0.115	98.1	70 to 130	2.86	20	
AW05484 Barium, Total	mg/L	0.00000327	0.0044	0.10	0.122	0.129	0.0919	0.085 to 0.115	93.5	70 to 130	5.02	20	
AW05484 Calcium, Total	mg/L	0.00191	0.22	5.000	8.76	8.82	4.99	4.25 to 5.75	98.0	70 to 130	0.683	20	
AW05484 Arsenic, Total	mg/L	0.0000108	0.0022	0.10	0.0925	0.0951	0.0881	0.085 to 0.115	89.9	70 to 130	2.78	20	
AW05484 Selenium, Total	mg/L	0.0000584	0.0044	0.10	0.0940	0.0951	0.0911	0.085 to 0.115	94.0	70 to 130	1.20	20	
AW05484 Beryllium, Total	mg/L	0.0000107	0.00132	0.10	0.104	0.106	0.0985	0.085 to 0.115	104	70 to 130	1.64	20	
AW05484 Lithium, Total	mg/L	-0.0000758	0.022	0.200	0.204	0.205	0.195	0.17 to 0.23	102	70 to 130	0.489	20	
AW05484 Cadmium, Total	mg/L	-0.0000102	0.00044	0.10	0.0905	0.0926	0.0879	0.085 to 0.115	90.5	70 to 130	2.37	20	
AW05484 Cobalt, Total	mg/L	-0.0000803	0.0044	0.10	0.107	0.111	0.0930	0.085 to 0.115	98.6	70 to 130	3.71	20	
AW05484 Thallium, Total	mg/L	-0.0000877	0.00044	0.10	0.0930	0.0964	0.0910	0.085 to 0.115	93.0	70 to 130	3.53	20	
AW05483 Boron, Total	mg/L	-0.00317	0.044				0.981	0.85 to 1.15		70 to 130		20	
AW05483 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00385	0.00386	0.00383	0.0034 to 0.0046	96.2	70 to 130	0.259	20	
AW05484 Antimony, Total	mg/L	0.000100	0.00132	0.10	0.0918	0.0948	0.0885	0.085 to 0.115	91.8	70 to 130	3.14	20	
AW05484 Chromium, Total	mg/L	0.0000327	0.0044	0.10	0.0892	0.0916	0.0863	0.085 to 0.115	89.2	70 to 130	2.72	20	
AW05484 Lead, Total	mg/L	0.0000297	0.0022	0.10	0.0857	0.0878	0.0863	0.085 to 0.115	85.7	70 to 130	2.47	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 1/19/17
 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: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AW05483

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW05484	Fluoride, Total	mg/L	0.00	0.3	2.0	2.13	0.036	2.13	1.8 to 2.2	104	80 to 120	10.5	20
AW05484	Chloride, Total	mg/L	0.00	0.25	10.0	16.6	6.09	10.5	9 to 11	105	80 to 120	0.164	20
AW05482	Solids, Dissolved	mg/L	-1	25			279	43.0	40 to 60			2.39	5
AW05484	Sulfate, Total	mg/L	0.00	1.0	20.0	23.4	3.32	20.1	18 to 22	100	80 to 120	0.604	20

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CC:

Reported: 7/26/2017
 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: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AW05484

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/5/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	J 0.00263	mg/L
* Barium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	0.0285	mg/L
* Beryllium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	3/29/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.1	0.5	3.86	mg/L
* Cadmium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	J 0.00842	mg/L
* Chromium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	3/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	SES	3/8/2016	SM 2540C		1		25	42.0	mg/L
* Chloride, Total	SES	3/4/2016	EPA 300.0		1	0.04	0.25	6.08	mg/L
* Fluoride, Total	SES	3/4/2016	EPA 300.0		1	0.01	0.3	J 0.04	mg/L
* Sulfate, Total	SES	3/4/2016	EPA 300.0		1	0.3	1	3.30	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AW05484

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW05484 Molybdenum, Total	mg/L	0.0000250	0.0044	0.10	0.0981	0.101	0.0942	0.085 to 0.115	98.1	70 to 130	2.86	20	
AW05484 Arsenic, Total	mg/L	0.0000108	0.0022	0.10	0.0925	0.0951	0.0881	0.085 to 0.115	89.9	70 to 130	2.78	20	
AW05484 Selenium, Total	mg/L	0.0000584	0.0044	0.10	0.0940	0.0951	0.0911	0.085 to 0.115	94.0	70 to 130	1.20	20	
AW05484 Antimony, Total	mg/L	0.000100	0.00132	0.10	0.0918	0.0948	0.0885	0.085 to 0.115	91.8	70 to 130	3.14	20	
AW05484 Chromium, Total	mg/L	0.0000327	0.0044	0.10	0.0892	0.0916	0.0863	0.085 to 0.115	89.2	70 to 130	2.72	20	
AW05484 Lead, Total	mg/L	0.0000297	0.0022	0.10	0.0857	0.0878	0.0863	0.085 to 0.115	85.7	70 to 130	2.47	20	
AW05484 Boron, Total	mg/L	0.00217	0.044	1.00	1.01	1.02	0.993	0.85 to 1.15	101	70 to 130	0.476	20	
AW05484 Calcium, Total	mg/L	0.00191	0.22	5.000	8.76	8.82	4.99	4.25 to 5.75	98.0	70 to 130	0.683	20	
AW05484 Beryllium, Total	mg/L	0.0000107	0.00132	0.10	0.104	0.106	0.0985	0.085 to 0.115	104	70 to 130	1.64	20	
AW05484 Lithium, Total	mg/L	-0.0000758	0.022	0.200	0.204	0.205	0.195	0.17 to 0.23	102	70 to 130	0.489	20	
AW05484 Barium, Total	mg/L	0.00000327	0.0044	0.10	0.122	0.129	0.0919	0.085 to 0.115	93.5	70 to 130	5.02	20	
AW05485 Mercury, Total by CVAA	mg/L	0.00011	0.0005	0.004	0.00395	0.00399	0.00388	0.0034 to 0.0046	98.8	70 to 130	1.01	20	
AW05484 Cadmium, Total	mg/L	-0.0000102	0.00044	0.10	0.0905	0.0926	0.0879	0.085 to 0.115	90.5	70 to 130	2.37	20	
AW05484 Cobalt, Total	mg/L	-0.0000803	0.0044	0.10	0.107	0.111	0.0930	0.085 to 0.115	98.6	70 to 130	3.71	20	
AW05484 Thallium, Total	mg/L	-0.0000877	0.00044	0.10	0.0930	0.0964	0.0910	0.085 to 0.115	93.0	70 to 130	3.53	20	

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Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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The RL has now been corrected. SGC 1/19/17

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: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AW05484

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW05484	Fluoride, Total	mg/L	0.00	0.3	2.0	2.13	0.036	2.13	1.8 to 2.2	104	80 to 120	10.5	20
AW05484	Chloride, Total	mg/L	0.00	0.25	10.0	16.6	6.09	10.5	9 to 11	105	80 to 120	0.164	20
AW05482	Solids, Dissolved	mg/L	-1	25			279	43.0	40 to 60			2.39	5
AW05484	Sulfate, Total	mg/L	0.00	1.0	20.0	23.4	3.32	20.1	18 to 22	100	80 to 120	0.604	20

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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
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 FAX (205) 257-1654

Certificate Of Analysis  **Alabama Power**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-2 DUP

Laboratory ID Number: AW05485

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium,GPEL	SGC	10/5/2016	GA		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	J 0.00255	mg/L
* Barium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	0.0276	mg/L
* Beryllium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	3/24/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.1	0.5	3.86	mg/L
* Cadmium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	J 0.00834	mg/L
* Chromium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	3/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/24/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	3/8/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	3/8/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	SES	3/8/2016	SM 2540C		1		25	33.3	mg/L
* Chloride, Total	SES	3/4/2016	EPA 300.0		1	0.04	0.25	5.99	mg/L
* Fluoride, Total	SES	3/4/2016	EPA 300.0		1	0.01	0.3	J 0.04	mg/L
* Sulfate, Total	SES	3/4/2016	EPA 300.0		1	0.3	1	3.37	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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-2 DUP

Laboratory ID Number: AW05485

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW05485 Selenium, Total	mg/L	0.00000626	0.0044	0.10	0.0888	0.0952	0.0913	0.085 to 0.115	88.8	70 to 130	6.87	20	
AW05485 Lead, Total	mg/L	0.0000243	0.0022	0.10	0.0829	0.0871	0.0868	0.085 to 0.115	82.9	70 to 130	4.97	20	
AW05485 Antimony, Total	mg/L	0.0000851	0.00132	0.10	0.0891	0.0941	0.0902	0.085 to 0.115	89.1	70 to 130	5.42	20	
AW05485 Calcium, Total	mg/L	0.00229	0.22	5.000	8.90	8.66	5.04	4.25 to 5.75	101	70 to 130	2.73	20	
AW05485 Arsenic, Total	mg/L	0.00000788	0.0022	0.10	0.0898	0.0950	0.0888	0.085 to 0.115	87.2	70 to 130	5.61	20	
AW05485 Beryllium, Total	mg/L	0.00000184	0.00132	0.10	0.0932	0.105	0.0960	0.085 to 0.115	93.2	70 to 130	11.8	20	
AW05485 Cadmium, Total	mg/L	-0.00000852	0.00044	0.10	0.0880	0.0916	0.0882	0.085 to 0.115	88.0	70 to 130	4.10	20	
AW05485 Lithium, Total	mg/L	-0.000104	0.022	0.200	0.207	0.203	0.194	0.17 to 0.23	104	70 to 130	1.95	20	
AW05485 Boron, Total	mg/L	-0.00376	0.044	1.000	1.19	0.997	0.965	0.85 to 1.15	119	70 to 130	17.6	20	
AW05485 Chromium, Total	mg/L	0.0000282	0.0044	0.10	0.0855	0.0911	0.0864	0.085 to 0.115	85.5	70 to 130	6.35	20	
AW05485 Cobalt, Total	mg/L	-0.0000914	0.0044	0.10	0.103	0.110	0.0946	0.085 to 0.115	94.7	70 to 130	5.89	20	
AW05485 Thallium, Total	mg/L	-0.0000918	0.00044	0.10	0.0906	0.0952	0.0917	0.085 to 0.115	90.6	70 to 130	4.93	20	
AW05485 Barium, Total	mg/L	0.0000109	0.0044	0.10	0.122	0.130	0.0934	0.085 to 0.115	94.4	70 to 130	6.53	20	
AW05485 Mercury, Total by CVAA	mg/L	0.00011	0.0005	0.004	0.00395	0.00399	0.00388	0.0034 to 0.0046	98.8	70 to 130	1.01	20	
AW05485 Molybdenum, Total	mg/L	0.0000211	0.0044	0.10	0.0944	0.1000	0.0957	0.085 to 0.115	94.4	70 to 130	5.71	20	

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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: WMWBARAP
 Sample Date: 02-Mar-16
 Customer ID:
 Delivery Date: 03-Mar-16

Description: Barry Ash Pond - MW-2 DUP

Laboratory ID Number: AW05485

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW05485	Fluoride, Total	mg/L	0.00	0.3	2.0	2.13	0.036	2.15	1.8 to 2.2	104	80 to 120	10.5	20
AW05485	Sulfate, Total	mg/L	0.00	1.0	20.0	23.8	3.34	20.3	18 to 22	102	80 to 120	0.894	20
AW05482	Solids, Dissolved	mg/L	-1	25			279	43.0	40 to 60			2.39	5
AW05485	Chloride, Total	mg/L	0.00	0.25	10.0	16.7	6.03	10.5	9 to 11	107	80 to 120	0.666	20

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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 03/03/2016 12:00

Requested Complete Date	<input type="text" value="Routine"/>	Results To	<input type="text" value="Dustin Brooks"/>
Site Representative	<input type="text" value="Bo Cotton"/>	Requested By	<input type="text" value="Greg Dyer"/>
Collector	<input type="text" value="Nick Pitts"/>	Location	<input type="text" value="Barry Ash Pond"/>
Analysis Requested	<input type="text" value="Metals, Anions, TDS (2) 500mL Bottles; Radiological (2) 2L Bottles"/>		
Comments	<input type="text" value="added 1.5 mL HNO3 to all Radiological samples 3/3/16; AW05477 deleted-Radiological QC only. SGC"/>		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler	Lab Preserve	Lab Id
MW-4	03/01/2016	10:55	4	Groundwater		4950-25064-10-4		AW05475
MW-9	03/01/2016	12:25	4	Groundwater		4950-25064-10-4		AW05476
MW-10	03/01/2016	14:05	4	Groundwater		4950-25064-10-4		AW05478
MW-6	03/01/2016	15:30	4	Groundwater		4950-25070-10-1		AW05479
FB-2	03/02/2016	09:40	4	Field Blank		4950-25061-10-1		AW05480
MW-12	03/02/2016	09:55	4	Groundwater		4950-25061-10-1		AW05481
MW-14	03/02/2016	10:55	4	Groundwater		4950-25061-10-1		AW05482
MW-16	03/02/2016	12:05	4	Groundwater		4950-25061-10-1		AW05483
MW-2	03/02/2016	13:55	4	Groundwater		4950-25066-10-6		AW05484
MW-2 Dup	03/02/2016	13:55	4	Sample Duplicate		4950-25066-10-6		AW05485

Relinquished By	Received By	Date/Time
		03/03/2016 13:07

SmarTroll ID	<input type="text" value="4696-23441-1-1"/>	Cooler Temp	<input type="text" value="1.4, 0.5, 1.2, 1.1 degrees Celsius"/>
Turbidity ID	<input type="text" value="4677-23343-4-2"/>	Thermometer ID	<input type="text" value="1506-3968-4-4"/>
		pH Strip ID	<input type="text" value="4831-24384-20-11"/>



Chain of Custody

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

 Field Complete

 Lab Complete

 Lab ETA 03/03/2016 12:00

Requested Complete Date	<input type="text" value="Routine"/>	Results To	<input type="text" value="Dustin Brooks"/>
Site Representative	<input type="text" value="Bo Cotton"/>	Requested By	<input type="text" value="Greg Dyer"/>
Collector	<input type="text" value="Jason Rouss"/>	Location	<input type="text" value="Barry Ash Pond"/>
Analysis Requested	<input type="text" value="Metals, Anions, TDS (2) 500mL Bottles; Radiological (2) 2L Bottles"/>		
Comments	<input type="text" value="added 1.5mL HNO3 to all Radiological samples 3/3/16"/>		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler	Lab Preserve	Lab Id
MW-5	03/01/2016	10:00	4	Groundwater		4950-25063-10-3		AW05464
MW-8	03/01/2016	11:25	4	Groundwater		4950-25070-10-1		AW05465
MW-8 DUF	03/01/2016	11:25	4	Sample Duplicate		4950-25070-10-1		AW05466
MW-7	03/01/2016	13:25	4	Groundwater		4950-25063-10-3		AW05467
MW-11	03/01/2016	15:30	4	Groundwater		4950-25063-10-3		AW05468
MW-13	03/02/2016	09:55	4	Groundwater		4950-25062-10-2		AW05469
MW-15	03/02/2016	11:07	4	Groundwater		4950-25062-10-2		AW05470
MW-1	03/02/2016	12:20	4	Groundwater		4950-25062-10-2		AW05471
MW-3	03/02/2016	13:35	4	Groundwater		4950-25062-10-2		AW05472
EB	03/02/2016	14:35	4	Equipment Blank		4950-25066-10-6		AW05473
FB-1	03/01/2016	14:30	4	Field Blank		4950-25063-10-3		AW05474

Relinquished By	Received By	Date/Time
		03/02/2016 15:09
		03/03/2016 13:06

SmarTroll ID	<input type="text" value="4696-23444-3-3"/>	Cooler Temp	<input type="text" value="0.7, 0.5, 0.7, 1.1 degrees Celsius"/>
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="4831-24384-20-11"/>

Report To Sarah Copeland
 APC GSC Building 8

Sample #	Location	Sample Description	Customer Sample ID	Date Collected	Test Method
102220001	Barry Ash Pond	MW-5 Groundwater	AW05464, Water	3/1/2016 10:00:00 AM	Ga Tech
102220002	Barry Ash Pond	MW-8 Groundwater	AW05465, Water	3/1/2016 11:25:00 AM	Ga Tech
102220003	Barry Ash Pond	MW-8 DUP	AW05466, Water	3/1/2016 11:25:00 AM	Ga Tech
102220004	Barry Ash Pond	MW-7 Groundwater	AW05467, Water	3/1/2016 1:25:00 PM	Ga Tech
102220005	Barry Ash Pond	MW-11 Groundwater	AW05468, Water	3/1/2016 3:30:00 PM	Ga Tech
102220006	Barry Ash Pond	MW-13 Groundwater	AW05469, Water	3/2/2016 9:55:00 AM	Ga Tech
102220007	Barry Ash Pond	MW-15 Groundwater	AW05470, Water	3/2/2016 11:07:00 AM	Ga Tech
102220008	Barry Ash Pond	MW-1 Groundwater	AW05471, Water	3/2/2016 12:20:00 PM	Ga Tech
102220009	Barry Ash Pond	MW-3 Groundwater	AW05472, Water	3/2/2016 1:35:00 PM	Ga Tech
102220010	Barry Ash Pond	EB Equipment Blank	AW05473, Water	3/2/2016 2:35:00 PM	Ga Tech
102220011	Barry Ash Pond	FB-1 Field Blank	AW05474, Water	3/1/2016 2:30:00 PM	Ga Tech
102220012	Barry Ash Pond	MW-4 Groundwater	AW05475, Water	3/1/2016 10:55:00 AM	Ga Tech
102220013	Barry Ash Pond	MW-9 Groundwater	AW05476, Water	3/1/2016 12:25:00 PM	Ga Tech
102220015	Barry Ash Pond	MW-10 Groundwater	AW05478, Water	3/1/2016 2:05:00 PM	Ga Tech
102220016	Barry Ash Pond	MW-6 Groundwater	AW05479, Water	3/1/2016 3:30:00 PM	Ga Tech
102220017	Barry Ash Pond	FB-2 Field Blank	AW05480, Water	3/2/2016 9:40:00 AM	Ga Tech
102220018	Barry Ash Pond	MW-12 Groundwater	AW05481, Water	3/2/2016 9:55:00 AM	Ga Tech
102220019	Barry Ash Pond	MW-14 Groundwater	AW05482, Water	3/2/2016 10:55:00 AM	Ga Tech
102220020	Barry Ash Pond	MW-16 Groundwater	AW05483, Water	3/2/2016 12:05:00 PM	Ga Tech
102220021	Barry Ash Pond	MW-2 Groundwater	AW05484, Water	3/2/2016 1:55:00 PM	Ga Tech
102220022	Barry Ash Pond	MW-2 DUP	AW05485, Water	3/2/2016 1:55:00 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 102220001
 Collection Date 3/1/2016 10:00:00 AM
 Sampling Media Water
 Station AW05464
 Sample ID MW-5 Groundwater Barry Ash
 Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.69E-01
Ra-228	Ga Tech	pCi/L	1.68E+00	+/- 1.32E+00	
Total Isotopic Radium	Ga Tech	pCi/L	1.68E+00		

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102220002
 Collection Date 3/1/2016 11:25:00 AM
 Sampling Media Water
 Station AW05465
 Sample ID MW-8 Groundwater Barry Ash
 Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.44E-01
Ra-228	Ga Tech	pCi/L			7.42E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102220003
 Collection Date 3/1/2016 11:25:00 AM
 Sampling Media Water
 Station AW05466
 Sample ID MW-8 DUP Groundwater Barry
 Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.08E-01
Ra-228	Ga Tech	pCi/L			6.68E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102220004
 Collection Date 3/1/2016 1:25:00 PM
 Sampling Media Water
 Station AW05467
 Sample ID MW-7 Groundwater Barry Ash
 Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.32E-01
Ra-228	Ga Tech	pCi/L			4.96E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102220005
 Collection Date 3/1/2016 3:30:00 PM
 Sampling Media Water
 Station AW05468
 Sample ID MW-11 Groundwater Barry Ash
 Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.80E-01
Ra-228	Ga Tech	pCi/L			7.65E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102220006
 Collection Date 3/2/2016 9:55:00 AM
 Sampling Media Water
 Station AW05469
 Sample ID MW-13 Groundwater Barry Ash
 Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.21E-01
Ra-228	Ga Tech	pCi/L			7.84E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102220007
 Collection Date 3/2/2016 11:07:00 AM
 Sampling Media Water
 Station AW05470
 Sample ID MW-15 Groundwater Barry Ash
 Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.96E-01
Ra-228	Ga Tech	pCi/L			8.26E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102220008
 Collection Date 3/2/2016 12:20:00 PM
 Sampling Media Water
 Station AW05471
 Sample ID MW-1 Groundwater Barry Ash
 Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.04E-01
Ra-228	Ga Tech	pCi/L			7.88E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102220009
 Collection Date 3/2/2016 1:35:00 PM
 Sampling Media Water
 Station AW05472
 Sample ID MW-3 Groundwater Barry Ash
 Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.14E-01
Ra-228	Ga Tech	pCi/L			5.11E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102220010
 Collection Date 3/2/2016 2:35:00 PM
 Sampling Media Water
 Station AW05473
 Sample ID EB Equipment Blank Barry Ash
 Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			6.48E-01
Ra-228	Ga Tech	pCi/L			9.26E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102220011
 Collection Date 3/1/2016 2:30:00 PM
 Sampling Media Water
 Station AW05474
 Sample ID FB-1 Field Blank Barry Ash
 Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			6.17E-01
Ra-228	Ga Tech	pCi/L			8.76E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102220012
 Collection Date 3/1/2016 10:55:00 AM
 Sampling Media Water
 Station AW05475
 Sample ID MW-4 Groundwater Barry Ash
 Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.52E-01
Ra-228	Ga Tech	pCi/L			5.99E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102220013
 Collection Date 3/1/2016 12:25:00 PM
 Sampling Media Water
 Station AW05476
 Sample ID MW-9 Groundwater Barry Ash
 Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.38E-01
Ra-228	Ga Tech	pCi/L	1.55E+00	+/- 1.35E+00	
Total Isotopic Radium	Ga Tech	pCi/L	1.55E+00		

Georgia Power Company
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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102220015
 Collection Date 3/1/2016 2:05:00 PM
 Sampling Media Water
 Station AW05478
 Sample ID MW-10 Groundwater Barry Ash
 Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.91E-01
Ra-228	Ga Tech	pCi/L			6.78E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102220016
 Collection Date 3/1/2016 3:30:00 PM
 Sampling Media Water
 Station AW05479
 Sample ID MW-6 Groundwater Barry Ash
 Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.33E-01
Ra-228	Ga Tech	pCi/L			5.96E-01

Georgia Power Company
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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102220017
 Collection Date 3/2/2016 9:40:00 AM
 Sampling Media Water
 Station AW05480
 Sample ID FB-2 Field Blank Barry Ash
 Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.66E-01
Ra-228	Ga Tech	pCi/L			6.75E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102220018
 Collection Date 3/2/2016 9:55:00 AM
 Sampling Media Water
 Station AW05481
 Sample ID MW-12 Groundwater Barry Ash
 Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.84E-01
Ra-228	Ga Tech	pCi/L			6.12E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102220019
 Collection Date 3/2/2016 10:55:00 AM
 Sampling Media Water
 Station AW05482
 Sample ID MW-14 Groundwater Barry 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			4.90E-01

Georgia Power Company
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 (404) 799-2100 fax (404) 799-2141

Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102220020
 Collection Date 3/2/2016 12:05:00 PM
 Sampling Media Water
 Station AW05483
 Sample ID MW-16 Groundwater Barry Ash
 Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.91E-01
Ra-228	Ga Tech	pCi/L			8.20E-01

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Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 102220021
 Collection Date 3/2/2016 1:55:00 PM
 Sampling Media Water
 Station AW05484
 Sample ID MW-2 Groundwater Barry Ash
 Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.65E-01
Ra-228	Ga Tech	pCi/L			5.51E-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 102220022
 Collection Date 3/2/2016 1:55:00 PM
 Sampling Media Water
 Station AW05485
 Sample ID MW-2 DUP Groundwater Barry
 Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.60E-01
Ra-228	Ga Tech	pCi/L			4.92E-01

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**

Company: Alabama Power Company
 Report To: Sarah Copeland
 Address: sycopela@southernco.com

Phone/Fax: 205-464-1121
 Contact: Sarah Copeland
 Project Location: Barry Ash Pond
 Account Number: 6
 Special Instructions: 7

Sample Shipment Date: 8
 Sampled By: CS/J.R./N.P.
Print Name

Signature _____
 Sample Received Date: 10
 Sample Received By: 11
Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

**LAB
 USE
 ONLY**

Work Order No. 10220
 Reviewed By: _____

¹² Page 1 of 3
 ¹³ Standard Turnaround Time
 # of Business Days (Rush)
(Must be cleared through Env. Lab. prior to shipment)

LAB USE ONLY LAB ID	Sample Number ¹⁵	Collection ¹⁶		Sample Description ¹⁷	Sample Type	Matrix	No. of Containers	ANALYSIS REQUESTED ²²				PRESERVATIVE ²¹	Sample Type Key: 23 G-Grab D-Other C-Composite	Matrix Key: 24 O-Oil S-Solid SW-Surface Water GW-Ground Water WW-Waste Water W-Wipe LD-Liquid DW-Drinking Water DW-Other Water	Preservative Key: 25 H-Hydrochloric Acid N-Nitric Acid S-Sulfuric Acid SH-Sodium Hydroxide P-Phosphoric Acid ST-Sodium Thiosulfate I-Ice U-Unpreserved O-Other (Specify)	LAB USE ONLY 26 Comments	
		Date	Time					18	19	20							
10220001	AN05404	3/1/16	1000	MW-5 Groundwater	GW	GW	2	X	X	X							
2	AN05405	3/1/16	1125	MW-8 Groundwater	GW	GW	2	X	X	X							
3	AN05406	3/1/16	1125	MW-8 DUP Groundwater	GW	GW	2	X	X	X							
4	AN05407	3/1/16	1325	MW-7 Groundwater	GW	GW	2	X	X	X							
5	AN05408	3/1/16	1530	MW-11 Groundwater	GW	GW	2	X	X	X							
6	AN05409	3/2/16	0955	MW-13 Groundwater	GW	GW	2	X	X	X							
7	AN05470	3/2/16	1107	MW-15 Groundwater	GW	GW	2	X	X	X							
8	AN05471	3/2/16	1220	MW-1 Groundwater	GW	GW	2	X	X	X							
9	AN05472	3/2/16	1335	MW-3 Groundwater	GW	GW	2	X	X	X							
10	AN05473	3/2/16	1435	EB Equipment Blank	GW	GW	2	X	X	X							

LAB USE ONLY: Sample Receipt Information 30

Relinquished by: 28 SDR Date/Time 3/9/16/0800 24°C (GPEL-IR-3P) hand delivered, no seal, no ice, 1142
 Received by: 29 _____ Date/Time _____
 Relinquished by: _____ Date/Time _____
 Received by: _____ Date/Time 3-9-16 @ 1105

Georgia Power Environmental Laboratory
 2480 Maner Road, Bln 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. 102220

Reviewed By: _____

12 Page 2 of 3

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: scopela@southernco.com

Sample Shipment Date: 8
 Sampled By: SS/S.R./N.P.
 Print Name

Signature _____
 Sample Received Date: 10
 Sample Received By: 11
 Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

Phone/Fax: 205-664-6121
 Contact: Sarah Copeland
 Project Location: BARRY Ash Pond
 Account Number: 6
 Special Instructions: 7

PRESERVATIVE 21		Sample Type Key: 23	
N		G-Grab	C-Composite
ANALYSIS REQUESTED 22			
		Matrix Key: 24	
		SM-Surface Water	
		GM-Ground Water	
		SL-Solid	
		WM-Waste Water	
		LD-Liquid	
		Preservative Key: 25	
		H-Hydrochloric Acid	
		N-Nitric Acid	
		S-Sulfuric Acid	
		SH-Sodium Hydroxide	
		P-Phosphoric Acid	
		SI-Sodium Metasilicate	
		U-Unpreserved	
		O-Other (Specify)	
		LAB USE ONLY 26	
		Comments	

LAB USE ONLY 14 LAB ID	Sample Number 15	Collection 16		Sample Description 17	Sample Type 18	Matrix 19	No. of Containers 20
		Date	Time				
102220011	AN05474	3/1/10	1430	FB-1 Field Blank	GMW		2
12	AN05475	3/1/10	1055	MW-4 Groundwater	GMW		2
13	AN05476	3/1/10	1225	MW-9 Groundwater	GMW		2
14	AN05477	3/1/10	1225	MW-9 DUP RD. DUP	GMW		2
15	AN05478	3/1/10	1405	MW-10 Groundwater	GMW		2
16	AN05479	3/1/10	1530	MW-10 Groundwater	GMW		2
17	AN05480	3/2/10	0940	FB-2 Field Blank	GMW		2
18	AN05481	3/2/10	0955	MW-12 Groundwater	GMW		2
19	AN05482	3/2/10	1055	MW-14 Groundwater	GMW		2
20	AN05483	3/2/10	1205	MW-10 Groundwater	GMW		2

FOR CHAIN OF CUSTODY USE ONLY 27

Reinquired by: 28 SS/S.R./N.P. Date/Time 3/9/10 0800 2.14°C (GREL-IR-3P) head delivered, no seal, no ice, pH 2

Received by: 29 SS/S.R./N.P. Date/Time _____

Reinquired by: _____ Date/Time _____

Received by: 30 SS/S.R./N.P. Date/Time 3-9-10 0115 Sample description information for sample number AN05477 does not match between label information and COL. Samples will be logged in based on sample description COL

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

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

Company: 1 Alabama Power Company
 Report To: Sarah Copeland
 Address: 2 Sycopela@southernco.com

Sample Shipment Date: 8
 Sampled By: 9 J.R./N.P. Print Name

Phone/Fax: 3 205-464-1421
 Contact: 4 Sarah Copeland
 Project Location: 5 Barry Ash Pond
 Account Number: 6
 Special Instructions: 7

Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

LAB USE ONLY

Work Order No. 102220
 Reviewed By: _____

Page 3 of 3

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

PRESERVATIVE 21
 Sample Type Key: 23
 G-Grab C-Composite
 Matrix Key: 24
 S-Solid SW-Surface Water
 S-Sludge GW-Ground Water
 W-Sludge LW-Asse Water
 W-Sludge DW-Drinking Water
 LQ-Liquid OW-Other Water

ANALYSIS REQUESTED 22
 Preservative Key: 25
 H-Hydrochloric Acid
 N-Nitric Acid
 S-Sulfuric Acid
 SH-Sodium Hydroxide
 P-Phosphoric Acid
 S-Sodium Thiosulfate
 H-HC
 U-Unpreserved
 O-Other (Specify)

LAB USE ONLY 14 LAB ID	Sample Number 15	Collection 16		Sample Description 17	Sample Type 18	Matrix 19	No. of Containers 20	ANALYSIS REQUESTED 22		LAB USE ONLY 26 Comments
		Date	Time							
10222001	AW05469	3/2/16	1355	MW-2 Groundwater	GW		2	X	X	Ca-2210
	AW05495	3/2/16	1355	MW-2 DWP Groundwater	GW		2	X	X	Ca-2208

FOR CHAIN OF CUSTODY USE ONLY 27
 Relinquished by: 28 [Signature] Date/Time 3/9/16 0800
 Received by: 29 [Signature] Date/Time 3/9/16 0115
 Relinquished by: _____ Date/Time _____
 Received by: _____ Date/Time _____

Sample Receipt Checklist



Client: APC Lab
 Workorder No.: 102220
 Carrier: HAND

of Samples: 22
 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	False	
Cooler temperature is acceptable	True	
Cooler temperature is recorded	True	21.4
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	True	
Sample containers have legible labels	True	
Information on the sample label agrees with information on the COC	False	Sample description information for sample number AW05477 does not match between sample container label and COC. Sample was logged in based on COC information. There is also a mark-through present in the sample description field that is not initialed and dated.
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: 102220, 102221

QC Batch: 16865

Analysis Method: Ga Tech

QC Batch Method: Ga Tech

Associated Lab Samples: 102220004 – 102220013, 102220015-102220022, 102221001

METHOD BLANK:

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Radium-226	pCi/l	<4.80E-01	1.0	
Radium-228	pCi/l	<3.45E-01	1.0	

Laboratory Control Sample:

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Radium-226	pCi/l	4.791	5.248	110	70-130	
Radium-228	pCi/l	4.875	5.269	108	70-130	

Laboratory Control Sample Duplicate:

Parameter	Units	RPD	Max RPD	Qualifiers
Radium-226	pCi/l	8.5	20	
Radium-228	pCi/l	15.4	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

Workorder: 102171, 102220

QC Batch: 16857

Analysis Method: Ga Tech

QC Batch Method: Ga Tech

Associated Lab Samples: 102171015 - 102171030, 102220001 - 102220003

METHOD BLANK:

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Radium-226	pCi/l	<5.15E-01	1.0	
Radium-228	pCi/l	<6.62E-01	1.0	

Laboratory Control Sample:

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Radium-226	pCi/l	4.774	5.606	117	70-130	
Radium-228	pCi/l	4.924	5.369	109	70-130	

Laboratory Control Sample Duplicate:

Parameter	Units	RPD	Max RPD	Qualifiers
Radium-226	pCi/l	12.8	20	
Radium-228	pCi/l	3.6	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	

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 : WMWBARAP_21

Project/Site : Barry Ash Pond
Bucks, AL 36512

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

Barry Ash Pond

WMWBARAP_21

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>
AW10325	564759	564761	564763	WMWBARAP_21
AW10326	564759	564761	564763	WMWBARAP_21
AW10327	564764	564766	564768	WMWBARAP_21
AW10328	564759	564761	564763	WMWBARAP_21
AW10329	564764	564766	564768	WMWBARAP_21
AW10330	564764	564766	564768	WMWBARAP_21
AW10331	564764	564766	564768	WMWBARAP_21
AW10332	564764	564766	564768	WMWBARAP_21
AW10333	564764	564766	564768	WMWBARAP_21
AW10334	564764	564766	564768	WMWBARAP_21
AW10335	564764	564766	564768	WMWBARAP_21
AW10336	564764	564766	564768	WMWBARAP_21
AW10337	564764	564766	564768	WMWBARAP_21
AW10338	564765	564767	564769	WMWBARAP_21
AW10339	564765	564767	564769	WMWBARAP_21
AW10340	564765	564767	564769	WMWBARAP_21
AW10341	564765	564767	564769	WMWBARAP_21
AW10342	564765	564767	564769	WMWBARAP_21
AW10343	564765	564767	564769	WMWBARAP_21
AW10344	564765	564767	564769	WMWBARAP_21
AW10345	564765	564767	564769	WMWBARAP_21

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 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. All samples were analyzed without a dilution.
 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

Barry Ash Pond

WMWBARG_21

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>
AW10325	20160517E	WMWBARAP_21
AW10326	20160517E	WMWBARAP_21
AW10327	20160517E	WMWBARAP_21
AW10328	20160517E	WMWBARAP_21
AW10329	20160517E	WMWBARAP_21
AW10330	20160517E	WMWBARAP_21
AW10331	20160517E	WMWBARAP_21
AW10332	20160517F	WMWBARAP_21
AW10333	20160517F	WMWBARAP_21
AW10334	20160517F	WMWBARAP_21
AW10335	20160517F	WMWBARAP_21
AW10336	20160517F	WMWBARAP_21
AW10337	20160517F	WMWBARAP_21
AW10338	20160517F	WMWBARAP_21
AW10339	20160517F	WMWBARAP_21
AW10340	20160517F	WMWBARAP_21
AW10341	20160517F	WMWBARAP_21
AW10342	20160518A	WMWBARAP_21
AW10343	20160518A	WMWBARAP_21
AW10344	20160518A	WMWBARAP_21
AW10345	20160518A	WMWBARAP_21

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, with the exception of the following: samples AW10342 through AW10345 had a CCV failure. Samples were re-analyzed with passing criteria and reported.
- 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.
- 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, except for the following: The following samples were run at a dilution due to undiluted results exceeding the high range of the calibration curve.

Sample ID	Analyte	Dilution Factor
AW10332	Calcium	10.15x
AW10334	Calcium	10.15x
AW10335	Calcium	10.15x

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



Metals ICPMS

Barry Ash Pond

WMWBARAP_21

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>
AW10325	563794	WMWBARAP_21
AW10326	563794	WMWBARAP_21
AW10327	563794	WMWBARAP_21
AW10328	563794	WMWBARAP_21
AW10329	563794	WMWBARAP_21
AW10330	563794	WMWBARAP_21
AW10331	563794	WMWBARAP_21
AW10332	563795	WMWBARAP_21
AW10333	563795	WMWBARAP_21
AW10334	563795	WMWBARAP_21
AW10335	563795	WMWBARAP_21
AW10336	563795	WMWBARAP_21
AW10337	563795	WMWBARAP_21
AW10338	563795	WMWBARAP_21
AW10339	563795	WMWBARAP_21
AW10340	563795	WMWBARAP_21
AW10341	563795	WMWBARAP_21
AW10342	563796	WMWBARAP_21
AW10343	563796	WMWBARAP_21
AW10344	563796	WMWBARAP_21
AW10345	563796	WMWBARAP_21

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

Barry Ash Pond

WMWBARAP_21

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>
AW10325	564480	WMWBARAP_21
AW10326	564480	WMWBARAP_21
AW10327	564480	WMWBARAP_21
AW10328	564480	WMWBARAP_21
AW10329	564480	WMWBARAP_21
AW10330	564480	WMWBARAP_21
AW10331	564480	WMWBARAP_21
AW10332	564481	WMWBARAP_21
AW10333	564481	WMWBARAP_21
AW10334	564481	WMWBARAP_21
AW10335	564481	WMWBARAP_21
AW10336	564481	WMWBARAP_21
AW10337	564481	WMWBARAP_21
AW10338	564481	WMWBARAP_21
AW10339	564481	WMWBARAP_21
AW10340	564481	WMWBARAP_21
AW10341	564481	WMWBARAP_21
AW10342	564800	WMWBARAP_21
AW10343	564800	WMWBARAP_21
AW10344	564800	WMWBARAP_21
AW10345	564800	WMWBARAP_21



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 except AW10343. Response signal was broader than normal, so it was rerun to verify result. The second result confirmed the first result and was 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

Barry Ash Pond

WMWBARAP_21

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>
AW10325	563583	WMWBARAP_21
AW10326	563583	WMWBARAP_21
AW10327	563583	WMWBARAP_21
AW10328	563583	WMWBARAP_21
AW10329	563583	WMWBARAP_21
AW10330	563646	WMWBARAP_21
AW10331	563646	WMWBARAP_21
AW10332	563646	WMWBARAP_21
AW10333	563646	WMWBARAP_21
AW10334	563646	WMWBARAP_21
AW10335	563646	WMWBARAP_21
AW10336	563646	WMWBARAP_21
AW10337	563646	WMWBARAP_21
AW10338	563646	WMWBARAP_21
AW10339	563646	WMWBARAP_21
AW10340	563646	WMWBARAP_21
AW10341	563646	WMWBARAP_21
AW10342	563646	WMWBARAP_21
AW10343	563646	WMWBARAP_21
AW10344	563646	WMWBARAP_21
AW10345	563646	WMWBARAP_21

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. This has been corrected based on filter volumes 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%. However, the duplicate was analyzed after 20 samples in both batches.
- 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 AW10328, AW10337 and AW10345 which were <2.5.

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AW10325

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	0.0166	mg/L
* Beryllium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/17/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.1	0.5	0.969	mg/L
* Cadmium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/4/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/25/2016	SM 2540C		1		25	38.0	mg/L
* Chloride, Total	SES	4/23/2016	EPA 300.0		1	0.04	0.25	7.66	mg/L
* Fluoride, Total	SES	4/23/2016	EPA 300.0		1	0.01	0.3	J 0.016	mg/L
* Sulfate, Total	SES	4/23/2016	EPA 300.0		1	0.3	1	2.30	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. 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: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AW10325

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW10331 Lead, Total	mg/L	-0.0000249	0.0022	0.10	0.0949	0.0956	0.0937	0.085 to 0.115	94.9	70 to 130	0.713	20	
AW10331 Cobalt, Total	mg/L	-0.0000263	0.0044	0.10	0.0954	0.0968	0.0921	0.085 to 0.115	93.3	70 to 130	1.49	20	
AW10331 Arsenic, Total	mg/L	0.0000118	0.0022	0.10	0.118	0.120	0.0977	0.085 to 0.115	96.6	70 to 130	1.42	20	
AW10331 Cadmium, Total	mg/L	0.000000717	0.00044	0.10	0.0987	0.100	0.0965	0.085 to 0.115	98.7	70 to 130	1.30	20	
AW10331 Boron, Total	mg/L	0.00421	0.044	1.00	1.06	1.04	0.984	0.85 to 1.15	99.3	70 to 130	1.90	20	
AW10331 Thallium, Total	mg/L	-0.0000321	0.00044	0.10	0.0959	0.0965	0.0939	0.085 to 0.115	95.9	70 to 130	0.670	20	
AW10331 Calcium, Total	mg/L	-0.00111	0.22	5.00	24.6	24.6	4.85	4.25 to 5.75	90.0	70 to 130	0.00	20	
AW10331 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00396	0.00395	0.00405	0.0034 to 0.0046	99.0	70 to 130	0.253	20	
AW10331 Selenium, Total	mg/L	0.0000491	0.0044	0.10	0.0984	0.0993	0.104	0.085 to 0.115	98.4	70 to 130	0.933	20	
AW10331 Barium, Total	mg/L	0.00000493	0.0044	0.10	0.161	0.162	0.0881	0.085 to 0.115	91.8	70 to 130	0.577	20	
AW10331 Lithium, Total	mg/L	0.000225	0.022	0.20	0.207	0.203	0.194	0.17 to 0.23	104	70 to 130	1.95	20	
AW10331 Antimony, Total	mg/L	0.000176	0.00132	0.10	0.0929	0.0943	0.0898	0.085 to 0.115	92.9	70 to 130	1.44	20	
AW10331 Chromium, Total	mg/L	0.0000485	0.0044	0.10	0.100	0.101	0.0926	0.085 to 0.115	96.6	70 to 130	0.585	20	
AW10331 Beryllium, Total	mg/L	0.0000204	0.00132	0.10	0.0989	0.0983	0.103	0.085 to 0.115	98.9	70 to 130	0.605	20	
AW10331 Molybdenum, Total	mg/L	0.0000131	0.0044	0.10	0.0960	0.0963	0.0921	0.085 to 0.115	96.0	70 to 130	0.330	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

Alabama Power 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: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AW10325

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW10328	Sulfate, Total	mg/L	0.00	1.0	20.0	19.8	0.00	19.2	18 to 22	99.0	80 to 120	0	20
AW10328	Chloride, Total	mg/L	0.00	0.25	10.0	10.4	0.00	10.1	9 to 11	104	80 to 120	0	20
AW10328	Fluoride, Total	mg/L	0.00	0.3	2.0	2.22	0.00	2.11	1.8 to 2.2	111	80 to 120	0	20
AW10329	Solids, Dissolved	mg/L	2.0	25			249	41.0	40 to 60			1.97	5

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CC:

Reported: 7/27/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AW10326

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	0.0292	mg/L
* Beryllium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/17/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.1	0.5	1.01	mg/L
* Cadmium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/4/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/25/2016	SM 2540C		1		25	33.3	mg/L
* Chloride, Total	SES	4/23/2016	EPA 300.0		1	0.04	0.25	7.60	mg/L
* Fluoride, Total	SES	4/23/2016	EPA 300.0		1	0.01	0.3	J 0.014	mg/L
* Sulfate, Total	SES	4/23/2016	EPA 300.0		1	0.3	1	J 0.674	mg/L

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 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AW10326

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AW10331	Lead, Total	mg/L	-0.0000249	0.0022	0.10	0.0949	0.0956	0.0937	0.085 to 0.115	94.9	70 to 130	0.713	20
AW10331	Cobalt, Total	mg/L	-0.0000263	0.0044	0.10	0.0954	0.0968	0.0921	0.085 to 0.115	93.3	70 to 130	1.49	20
AW10331	Barium, Total	mg/L	0.00000493	0.0044	0.10	0.161	0.162	0.0881	0.085 to 0.115	91.8	70 to 130	0.577	20
AW10331	Lithium, Total	mg/L	0.000225	0.022	0.20	0.207	0.203	0.194	0.17 to 0.23	104	70 to 130	1.95	20
AW10331	Antimony, Total	mg/L	0.000176	0.00132	0.10	0.0929	0.0943	0.0898	0.085 to 0.115	92.9	70 to 130	1.44	20
AW10331	Chromium, Total	mg/L	0.0000485	0.0044	0.10	0.100	0.101	0.0926	0.085 to 0.115	96.6	70 to 130	0.585	20
AW10331	Boron, Total	mg/L	0.00421	0.044	1.00	1.06	1.04	0.984	0.85 to 1.15	99.3	70 to 130	1.90	20
AW10331	Thallium, Total	mg/L	-0.0000321	0.00044	0.10	0.0959	0.0965	0.0939	0.085 to 0.115	95.9	70 to 130	0.670	20
AW10331	Arsenic, Total	mg/L	0.0000118	0.0022	0.10	0.118	0.120	0.0977	0.085 to 0.115	96.6	70 to 130	1.42	20
AW10331	Cadmium, Total	mg/L	0.000000717	0.00044	0.10	0.0987	0.100	0.0965	0.085 to 0.115	98.7	70 to 130	1.30	20
AW10331	Beryllium, Total	mg/L	0.0000204	0.00132	0.10	0.0989	0.0983	0.103	0.085 to 0.115	98.9	70 to 130	0.605	20
AW10331	Molybdenum, Total	mg/L	0.0000131	0.0044	0.10	0.0960	0.0963	0.0921	0.085 to 0.115	96.0	70 to 130	0.330	20
AW10331	Calcium, Total	mg/L	-0.00111	0.22	5.00	24.6	24.6	4.85	4.25 to 5.75	90.0	70 to 130	0.00	20
AW10331	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00396	0.00395	0.00405	0.0034 to 0.0046	99.0	70 to 130	0.253	20
AW10331	Selenium, Total	mg/L	0.0000491	0.0044	0.10	0.0984	0.0993	0.104	0.085 to 0.115	98.4	70 to 130	0.933	20

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AW10326

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample		LFB Limit	Rec		Prec Limit	
							Duplicate	LFB		Rec	Limit		Prec
AW10328	Chloride, Total	mg/L	0.00	0.25	10.0	10.4	0.00	10.1	9 to 11	104	80 to 120	0	20
AW10328	Sulfate, Total	mg/L	0.00	1.0	20.0	19.8	0.00	19.2	18 to 22	99.0	80 to 120	0	20
AW10328	Fluoride, Total	mg/L	0.00	0.3	2.0	2.22	0.00	2.11	1.8 to 2.2	111	80 to 120	0	20
AW10329	Solids, Dissolved	mg/L	2.0	25			249	41.0	40 to 60			1.97	5

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AW10327

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	J 0.00247	mg/L
* Barium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	0.0268	mg/L
* Beryllium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/17/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.1	0.5	3.22	mg/L
* Cadmium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	J 0.00800	mg/L
* Chromium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/4/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/25/2016	SM 2540C		1		25	51.3	mg/L
* Chloride, Total	SES	4/23/2016	EPA 300.0		1	0.04	0.25	6.20	mg/L
* Fluoride, Total	SES	4/23/2016	EPA 300.0		1	0.01	0.3	J 0.038	mg/L
* Sulfate, Total	SES	4/23/2016	EPA 300.0		1	0.3	1	2.68	mg/L

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Batch QC Summary



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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AW10327

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW10331 Lead, Total	mg/L	-0.0000249	0.0022	0.10	0.0949	0.0956	0.0937	0.085 to 0.115	94.9	70 to 130	0.713	20	
AW10331 Cobalt, Total	mg/L	-0.0000263	0.0044	0.10	0.0954	0.0968	0.0921	0.085 to 0.115	93.3	70 to 130	1.49	20	
AW10331 Barium, Total	mg/L	0.00000493	0.0044	0.10	0.161	0.162	0.0881	0.085 to 0.115	91.8	70 to 130	0.577	20	
AW10331 Lithium, Total	mg/L	0.000225	0.022	0.20	0.207	0.203	0.194	0.17 to 0.23	104	70 to 130	1.95	20	
AW10331 Antimony, Total	mg/L	0.000176	0.00132	0.10	0.0929	0.0943	0.0898	0.085 to 0.115	92.9	70 to 130	1.44	20	
AW10331 Chromium, Total	mg/L	0.0000485	0.0044	0.10	0.100	0.101	0.0926	0.085 to 0.115	96.6	70 to 130	0.585	20	
AW10331 Arsenic, Total	mg/L	0.0000118	0.0022	0.10	0.118	0.120	0.0977	0.085 to 0.115	96.6	70 to 130	1.42	20	
AW10331 Cadmium, Total	mg/L	0.000000717	0.00044	0.10	0.0987	0.100	0.0965	0.085 to 0.115	98.7	70 to 130	1.30	20	
AW10331 Calcium, Total	mg/L	-0.00111	0.22	5.00	24.6	24.6	4.85	4.25 to 5.75	90.0	70 to 130	0.00	20	
AW10331 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00396	0.00395	0.00405	0.0034 to 0.0046	99.0	70 to 130	0.253	20	
AW10331 Selenium, Total	mg/L	0.0000491	0.0044	0.10	0.0984	0.0993	0.104	0.085 to 0.115	98.4	70 to 130	0.933	20	
AW10331 Boron, Total	mg/L	0.00421	0.044	1.00	1.06	1.04	0.984	0.85 to 1.15	99.3	70 to 130	1.90	20	
AW10331 Thallium, Total	mg/L	-0.0000321	0.00044	0.10	0.0959	0.0965	0.0939	0.085 to 0.115	95.9	70 to 130	0.670	20	
AW10331 Beryllium, Total	mg/L	0.0000204	0.00132	0.10	0.0989	0.0983	0.103	0.085 to 0.115	98.9	70 to 130	0.605	20	
AW10331 Molybdenum, Total	mg/L	0.0000131	0.0044	0.10	0.0960	0.0963	0.0921	0.085 to 0.115	96.0	70 to 130	0.330	20	

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 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AW10327

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample		LFB Limit	Rec		Prec Limit	
							Duplicate	LFB		Rec	Limit		
AW10329	Solids, Dissolved	mg/L	2.0	25			249	41.0	40 to 60			1.97	5
AW10337	Chloride, Total	mg/L	0.00	0.25	10.0	10.2	0.00	10.1	9 to 11	102	80 to 120	0	20
AW10337	Sulfate, Total	mg/L	0.00	1.0	20.0	19.0	0.00	19.2	18 to 22	95.0	80 to 120	0	20
AW10337	Fluoride, Total	mg/L	0.00	0.3	2.0	2.09	0.00	2.12	1.8 to 2.2	104	80 to 120	0	20

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CC:

Reported: 7/27/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAPFB
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW10328

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/17/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/4/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/25/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	4/23/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	4/23/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	4/23/2016	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: WMWBARAPFB
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW10328

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW10331 Lead, Total	mg/L	-0.0000249	0.0022	0.10	0.0949	0.0956	0.0937	0.085 to 0.115	94.9	70 to 130	0.713	20	
AW10331 Cobalt, Total	mg/L	-0.0000263	0.0044	0.10	0.0954	0.0968	0.0921	0.085 to 0.115	93.3	70 to 130	1.49	20	
AW10331 Arsenic, Total	mg/L	0.0000118	0.0022	0.10	0.118	0.120	0.0977	0.085 to 0.115	96.6	70 to 130	1.42	20	
AW10331 Cadmium, Total	mg/L	0.000000717	0.00044	0.10	0.0987	0.100	0.0965	0.085 to 0.115	98.7	70 to 130	1.30	20	
AW10331 Boron, Total	mg/L	0.00421	0.044	1.00	1.06	1.04	0.984	0.85 to 1.15	99.3	70 to 130	1.90	20	
AW10331 Thallium, Total	mg/L	-0.0000321	0.00044	0.10	0.0959	0.0965	0.0939	0.085 to 0.115	95.9	70 to 130	0.670	20	
AW10331 Calcium, Total	mg/L	-0.00111	0.22	5.00	24.6	24.6	4.85	4.25 to 5.75	90.0	70 to 130	0.00	20	
AW10331 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00396	0.00395	0.00405	0.0034 to 0.0046	99.0	70 to 130	0.253	20	
AW10331 Selenium, Total	mg/L	0.0000491	0.0044	0.10	0.0984	0.0993	0.104	0.085 to 0.115	98.4	70 to 130	0.933	20	
AW10331 Barium, Total	mg/L	0.00000493	0.0044	0.10	0.161	0.162	0.0881	0.085 to 0.115	91.8	70 to 130	0.577	20	
AW10331 Lithium, Total	mg/L	0.000225	0.022	0.20	0.207	0.203	0.194	0.17 to 0.23	104	70 to 130	1.95	20	
AW10331 Antimony, Total	mg/L	0.000176	0.00132	0.10	0.0929	0.0943	0.0898	0.085 to 0.115	92.9	70 to 130	1.44	20	
AW10331 Chromium, Total	mg/L	0.0000485	0.0044	0.10	0.100	0.101	0.0926	0.085 to 0.115	96.6	70 to 130	0.585	20	
AW10331 Beryllium, Total	mg/L	0.0000204	0.00132	0.10	0.0989	0.0983	0.103	0.085 to 0.115	98.9	70 to 130	0.605	20	
AW10331 Molybdenum, Total	mg/L	0.0000131	0.0044	0.10	0.0960	0.0963	0.0921	0.085 to 0.115	96.0	70 to 130	0.330	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: WMWBARAPFB
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW10328

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW10328	Chloride, Total	mg/L	0.00	0.25	10.0	10.4	0.00	10.1	9 to 11	104	80 to 120	0	20
AW10328	Sulfate, Total	mg/L	0.00	1.0	20.0	19.8	0.00	19.2	18 to 22	99.0	80 to 120	0	20
AW10328	Fluoride, Total	mg/L	0.00	0.3	2.0	2.22	0.00	2.11	1.8 to 2.2	111	80 to 120	0	20
AW10329	Solids, Dissolved	mg/L	2.0	25			249	41.0	40 to 60			1.97	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: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AW10329

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	0.0103	mg/L
* Barium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	0.0775	mg/L
* Beryllium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/17/2016	EPA 200.7		1.015	0.02	0.1	1.53	mg/L
* Calcium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.1	0.5	13.3	mg/L
* Cadmium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	0.0180	mg/L
* Chromium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/4/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/25/2016	SM 2540C		1		25	259	mg/L
* Chloride, Total	SES	4/23/2016	EPA 300.0		1	0.04	0.25	15.7	mg/L
* Fluoride, Total	SES	4/23/2016	EPA 300.0		1	0.01	0.3	J 0.050	mg/L
* Sulfate, Total	SES	4/23/2016	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: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AW10329

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW10331 Lead, Total	mg/L	-0.0000249	0.0022	0.10	0.0949	0.0956	0.0937	0.085 to 0.115	94.9	70 to 130	0.713	20	
AW10331 Cobalt, Total	mg/L	-0.0000263	0.0044	0.10	0.0954	0.0968	0.0921	0.085 to 0.115	93.3	70 to 130	1.49	20	
AW10331 Beryllium, Total	mg/L	0.0000204	0.00132	0.10	0.0989	0.0983	0.103	0.085 to 0.115	98.9	70 to 130	0.605	20	
AW10331 Molybdenum, Total	mg/L	0.0000131	0.0044	0.10	0.0960	0.0963	0.0921	0.085 to 0.115	96.0	70 to 130	0.330	20	
AW10331 Boron, Total	mg/L	0.00421	0.044	1.00	1.06	1.04	0.984	0.85 to 1.15	99.3	70 to 130	1.90	20	
AW10331 Thallium, Total	mg/L	-0.0000321	0.00044	0.10	0.0959	0.0965	0.0939	0.085 to 0.115	95.9	70 to 130	0.670	20	
AW10331 Antimony, Total	mg/L	0.000176	0.00132	0.10	0.0929	0.0943	0.0898	0.085 to 0.115	92.9	70 to 130	1.44	20	
AW10331 Chromium, Total	mg/L	0.0000485	0.0044	0.10	0.100	0.101	0.0926	0.085 to 0.115	96.6	70 to 130	0.585	20	
AW10331 Arsenic, Total	mg/L	0.0000118	0.0022	0.10	0.118	0.120	0.0977	0.085 to 0.115	96.6	70 to 130	1.42	20	
AW10331 Cadmium, Total	mg/L	0.000000717	0.00044	0.10	0.0987	0.100	0.0965	0.085 to 0.115	98.7	70 to 130	1.30	20	
AW10331 Calcium, Total	mg/L	-0.00111	0.22	5.00	24.6	24.6	4.85	4.25 to 5.75	90.0	70 to 130	0.00	20	
AW10331 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00396	0.00395	0.00405	0.0034 to 0.0046	99.0	70 to 130	0.253	20	
AW10331 Selenium, Total	mg/L	0.0000491	0.0044	0.10	0.0984	0.0993	0.104	0.085 to 0.115	98.4	70 to 130	0.933	20	
AW10331 Barium, Total	mg/L	0.00000493	0.0044	0.10	0.161	0.162	0.0881	0.085 to 0.115	91.8	70 to 130	0.577	20	
AW10331 Lithium, Total	mg/L	0.000225	0.022	0.20	0.207	0.203	0.194	0.17 to 0.23	104	70 to 130	1.95	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: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AW10329

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample		LFB Limit	Rec			Prec Limit
							Duplicate	LFB		Rec	Limit	Prec	
AW10329	Solids, Dissolved	mg/L	2.0	25			249	41.0	40 to 60			1.97	5
AW10337	Chloride, Total	mg/L	0.00	0.25	10.0	10.2	0.00	10.1	9 to 11	102	80 to 120	0	20
AW10337	Sulfate, Total	mg/L	0.00	1.0	20.0	19.0	0.00	19.2	18 to 22	95.0	80 to 120	0	20
AW10337	Fluoride, Total	mg/L	0.00	0.3	2.0	2.09	0.00	2.12	1.8 to 2.2	104	80 to 120	0	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: 7/27/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AW10330

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	0.0119	mg/L
* Barium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	0.0490	mg/L
* Beryllium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/17/2016	EPA 200.7		1.015	0.02	0.1	J 0.0549	mg/L
* Calcium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.1	0.5	9.55	mg/L
* Cadmium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	J 0.00572	mg/L
* Mercury, Total by CVAA	MCW	5/4/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/26/2016	SM 2540C		1		25	311	mg/L
* Chloride, Total	SES	4/23/2016	EPA 300.0		1	0.04	0.25	35.5	mg/L
* Fluoride, Total	SES	4/23/2016	EPA 300.0		1	0.01	0.3	J 0.076	mg/L
* Sulfate, Total	SES	4/23/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AW10330

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW10331 Cobalt, Total	mg/L	-0.0000263	0.0044	0.10	0.0954	0.0968	0.0921	0.085 to 0.115	93.3	70 to 130	1.49	20	
AW10331 Lead, Total	mg/L	-0.0000249	0.0022	0.10	0.0949	0.0956	0.0937	0.085 to 0.115	94.9	70 to 130	0.713	20	
AW10331 Arsenic, Total	mg/L	0.0000118	0.0022	0.10	0.118	0.120	0.0977	0.085 to 0.115	96.6	70 to 130	1.42	20	
AW10331 Cadmium, Total	mg/L	0.000000717	0.00044	0.10	0.0987	0.100	0.0965	0.085 to 0.115	98.7	70 to 130	1.30	20	
AW10331 Antimony, Total	mg/L	0.000176	0.00132	0.10	0.0929	0.0943	0.0898	0.085 to 0.115	92.9	70 to 130	1.44	20	
AW10331 Chromium, Total	mg/L	0.0000485	0.0044	0.10	0.100	0.101	0.0926	0.085 to 0.115	96.6	70 to 130	0.585	20	
AW10331 Boron, Total	mg/L	0.00421	0.044	1.00	1.06	1.04	0.984	0.85 to 1.15	99.3	70 to 130	1.90	20	
AW10331 Thallium, Total	mg/L	-0.0000321	0.00044	0.10	0.0959	0.0965	0.0939	0.085 to 0.115	95.9	70 to 130	0.670	20	
AW10331 Barium, Total	mg/L	0.00000493	0.0044	0.10	0.161	0.162	0.0881	0.085 to 0.115	91.8	70 to 130	0.577	20	
AW10331 Lithium, Total	mg/L	0.000225	0.022	0.20	0.207	0.203	0.194	0.17 to 0.23	104	70 to 130	1.95	20	
AW10331 Beryllium, Total	mg/L	0.0000204	0.00132	0.10	0.0989	0.0983	0.103	0.085 to 0.115	98.9	70 to 130	0.605	20	
AW10331 Molybdenum, Total	mg/L	0.0000131	0.0044	0.10	0.0960	0.0963	0.0921	0.085 to 0.115	96.0	70 to 130	0.330	20	
AW10331 Calcium, Total	mg/L	-0.00111	0.22	5.00	24.6	24.6	4.85	4.25 to 5.75	90.0	70 to 130	0.00	20	
AW10331 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00396	0.00395	0.00405	0.0034 to 0.0046	99.0	70 to 130	0.253	20	
AW10331 Selenium, Total	mg/L	0.0000491	0.0044	0.10	0.0984	0.0993	0.104	0.085 to 0.115	98.4	70 to 130	0.933	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: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AW10330

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW10337	Fluoride, Total	mg/L	0.00	0.3	2.0	2.09	0.00	2.12	1.8 to 2.2	104	80 to 120	0	20
AW10337	Sulfate, Total	mg/L	0.00	1.0	20.0	19.0	0.00	19.2	18 to 22	95.0	80 to 120	0	20
AW10337	Chloride, Total	mg/L	0.00	0.25	10.0	10.2	0.00	10.1	9 to 11	102	80 to 120	0	20
AW10330	Solids, Dissolved	mg/L	-2.0	25			311	55	40 to 60				0.00 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: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AW10331

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	0.0214	mg/L
* Barium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	0.0692	mg/L
* Beryllium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/17/2016	EPA 200.7		1.015	0.02	0.1	J 0.0672	mg/L
* Calcium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.1	0.5	20.1	mg/L
* Cadmium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	J 0.00212	mg/L
* Chromium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	J 0.00340	mg/L
* Mercury, Total by CVAA	MCW	5/4/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/26/2016	SM 2540C		1		25	353	mg/L
* Chloride, Total	SES	4/23/2016	EPA 300.0		1	0.04	0.25	21.7	mg/L
* Fluoride, Total	SES	4/23/2016	EPA 300.0		1	0.01	0.3	J 0.059	mg/L
* Sulfate, Total	SES	4/23/2016	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

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AW10331

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW10331 Lead, Total	mg/L	-0.0000249	0.0022	0.10	0.0949	0.0956	0.0937	0.085 to 0.115	94.9	70 to 130	0.713	20	
AW10331 Cobalt, Total	mg/L	-0.0000263	0.0044	0.10	0.0954	0.0968	0.0921	0.085 to 0.115	93.3	70 to 130	1.49	20	
AW10331 Beryllium, Total	mg/L	0.0000204	0.00132	0.10	0.0989	0.0983	0.103	0.085 to 0.115	98.9	70 to 130	0.605	20	
AW10331 Molybdenum, Total	mg/L	0.0000131	0.0044	0.10	0.0960	0.0963	0.0921	0.085 to 0.115	96.0	70 to 130	0.330	20	
AW10331 Arsenic, Total	mg/L	0.0000118	0.0022	0.10	0.118	0.120	0.0977	0.085 to 0.115	96.6	70 to 130	1.42	20	
AW10331 Cadmium, Total	mg/L	0.000000717	0.00044	0.10	0.0987	0.100	0.0965	0.085 to 0.115	98.7	70 to 130	1.30	20	
AW10331 Antimony, Total	mg/L	0.000176	0.00132	0.10	0.0929	0.0943	0.0898	0.085 to 0.115	92.9	70 to 130	1.44	20	
AW10331 Chromium, Total	mg/L	0.0000485	0.0044	0.10	0.100	0.101	0.0926	0.085 to 0.115	96.6	70 to 130	0.585	20	
AW10331 Boron, Total	mg/L	0.00421	0.044	1.00	1.06	1.04	0.984	0.85 to 1.15	99.3	70 to 130	1.90	20	
AW10331 Thallium, Total	mg/L	-0.0000321	0.00044	0.10	0.0959	0.0965	0.0939	0.085 to 0.115	95.9	70 to 130	0.670	20	
AW10331 Calcium, Total	mg/L	-0.00111	0.22	5.00	24.6	24.6	4.85	4.25 to 5.75	90.0	70 to 130	0.00	20	
AW10331 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00396	0.00395	0.00405	0.0034 to 0.0046	99.0	70 to 130	0.253	20	
AW10331 Selenium, Total	mg/L	0.0000491	0.0044	0.10	0.0984	0.0993	0.104	0.085 to 0.115	98.4	70 to 130	0.933	20	
AW10331 Barium, Total	mg/L	0.00000493	0.0044	0.10	0.161	0.162	0.0881	0.085 to 0.115	91.8	70 to 130	0.577	20	
AW10331 Lithium, Total	mg/L	0.000225	0.022	0.20	0.207	0.203	0.194	0.17 to 0.23	104	70 to 130	1.95	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: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AW10331

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW10330	Solids, Dissolved	mg/L	-2.0	25				311	55	40 to 60			0.00	5
AW10337	Chloride, Total	mg/L	0.00	0.25	10.0	10.2		0.00	10.1	9 to 11	102	80 to 120	0	20
AW10337	Fluoride, Total	mg/L	0.00	0.3	2.0	2.09		0.00	2.12	1.8 to 2.2	104	80 to 120	0	20
AW10337	Sulfate, Total	mg/L	0.00	1.0	20.0	19.0		0.00	19.2	18 to 22	95.0	80 to 120	0	20

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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AW10332

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	0.0303	mg/L
* Barium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	0.0622	mg/L
* Beryllium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/17/2016	EPA 200.7		1.015	0.02	0.1	1.51	mg/L
* Calcium, Total	HRG	5/18/2016	EPA 200.7		10.15	1.0	5.0	49.1	mg/L
* Cadmium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/4/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/26/2016	SM 2540C		1		25	366	mg/L
* Chloride, Total	SES	4/23/2016	EPA 300.0		1	0.04	0.25	18.8	mg/L
* Fluoride, Total	SES	4/23/2016	EPA 300.0		1	0.01	0.3	J 0.034	mg/L
* Sulfate, Total	SES	4/23/2016	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: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AW10332

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	MB					Limit	Rec	Limit	Prec		
AW10341	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.112	0.111	0.0954	0.085 to 0.115		96.3	70 to 130	0.991	20
AW10341	Cadmium, Total	mg/L	-0.00000842	0.00044	0.10	0.0973	0.0984	0.0972	0.085 to 0.115		97.3	70 to 130	1.09	20
AW10341	Calcium, Total	mg/L	-0.000737	0.22	5.00	10.7	10.7	4.87	4.25 to 5.75		94.6	70 to 130	0.00	20
AW10341	Lead, Total	mg/L	-0.0000303	0.0022	0.10	0.0923	0.0920	0.0939	0.085 to 0.115		92.3	70 to 130	0.315	20
AW10341	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00403	0.00401	0.00393	0.0034 to 0.0046		101	70 to 130	0.498	20
AW10341	Barium, Total	mg/L	0.00000601	0.0044	0.10	0.133	0.131	0.0895	0.085 to 0.115		90.0	70 to 130	1.43	20
AW10341	Beryllium, Total	mg/L	0.0000174	0.00132	0.10	0.0965	0.104	0.0985	0.085 to 0.115		96.5	70 to 130	7.54	20
AW10341	Molybdenum, Total	mg/L	0.0000128	0.0044	0.10	0.0945	0.0942	0.0929	0.085 to 0.115		92.5	70 to 130	0.316	20
AW10341	Antimony, Total	mg/L	0.000201	0.00132	0.10	0.0914	0.0901	0.0893	0.085 to 0.115		91.4	70 to 130	1.41	20
AW10341	Selenium, Total	mg/L	0.0000489	0.0044	0.10	0.102	0.110	0.105	0.085 to 0.115		102	70 to 130	7.23	20
AW10341	Thallium, Total	mg/L	-0.0000329	0.00044	0.10	0.0933	0.0929	0.0955	0.085 to 0.115		93.3	70 to 130	0.405	20
AW10341	Boron, Total	mg/L	0.00414	0.044	1.00	1.03	1.03	0.989	0.85 to 1.15		96.6	70 to 130	0.00	20
AW10341	Chromium, Total	mg/L	0.0000157	0.0044	0.10	0.0957	0.0948	0.0947	0.085 to 0.115		95.7	70 to 130	0.874	20
AW10341	Cobalt, Total	mg/L	-0.0000287	0.0044	0.10	0.120	0.120	0.0923	0.085 to 0.115		93.1	70 to 130	0.0196	20
AW10341	Lithium, Total	mg/L	0.000236	0.022	0.20	0.200	0.200	0.196	0.17 to 0.23		100	70 to 130	0.00	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: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AW10332

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW10337	Fluoride, Total	mg/L	0.00	0.3	2.0	2.09	0.00	2.12	1.8 to 2.2	104	80 to 120	0	20
AW10337	Sulfate, Total	mg/L	0.00	1.0	20.0	19.0	0.00	19.2	18 to 22	95.0	80 to 120	0	20
AW10330	Solids, Dissolved	mg/L	-2.0	25			311	55	40 to 60			0.00	5
AW10337	Chloride, Total	mg/L	0.00	0.25	10.0	10.2	0.00	10.1	9 to 11	102	80 to 120	0	20

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CC:

Reported: 7/27/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AW10333

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	0.0354	mg/L
* Barium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	0.114	mg/L
* Beryllium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/17/2016	EPA 200.7		1.015	0.02	0.1	2.01	mg/L
* Calcium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.1	0.5	38.2	mg/L
* Cadmium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/4/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/26/2016	SM 2540C		1		25	338	mg/L
* Chloride, Total	SES	4/23/2016	EPA 300.0		1	0.04	0.25	22.7	mg/L
* Fluoride, Total	SES	4/23/2016	EPA 300.0		1	0.01	0.3	J 0.052	mg/L
* Sulfate, Total	SES	4/23/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AW10333

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AW10341	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.112	0.111	0.0954	0.085 to 0.115	96.3	70 to 130	0.991	20
AW10341	Barium, Total	mg/L	0.00000601	0.0044	0.10	0.133	0.131	0.0895	0.085 to 0.115	90.0	70 to 130	1.43	20
AW10341	Beryllium, Total	mg/L	0.0000174	0.00132	0.10	0.0965	0.104	0.0985	0.085 to 0.115	96.5	70 to 130	7.54	20
AW10341	Molybdenum, Total	mg/L	0.0000128	0.0044	0.10	0.0945	0.0942	0.0929	0.085 to 0.115	92.5	70 to 130	0.316	20
AW10341	Boron, Total	mg/L	0.00414	0.044	1.00	1.03	1.03	0.989	0.85 to 1.15	96.6	70 to 130	0.00	20
AW10341	Chromium, Total	mg/L	0.0000157	0.0044	0.10	0.0957	0.0948	0.0947	0.085 to 0.115	95.7	70 to 130	0.874	20
AW10341	Cobalt, Total	mg/L	-0.0000287	0.0044	0.10	0.120	0.120	0.0923	0.085 to 0.115	93.1	70 to 130	0.0196	20
AW10341	Lithium, Total	mg/L	0.000236	0.022	0.20	0.200	0.200	0.196	0.17 to 0.23	100	70 to 130	0.00	20
AW10341	Antimony, Total	mg/L	0.000201	0.00132	0.10	0.0914	0.0901	0.0893	0.085 to 0.115	91.4	70 to 130	1.41	20
AW10341	Selenium, Total	mg/L	0.0000489	0.0044	0.10	0.102	0.110	0.105	0.085 to 0.115	102	70 to 130	7.23	20
AW10341	Thallium, Total	mg/L	-0.0000329	0.00044	0.10	0.0933	0.0929	0.0955	0.085 to 0.115	93.3	70 to 130	0.405	20
AW10341	Cadmium, Total	mg/L	-0.000000842	0.00044	0.10	0.0973	0.0984	0.0972	0.085 to 0.115	97.3	70 to 130	1.09	20
AW10341	Calcium, Total	mg/L	-0.000737	0.22	5.00	10.7	10.7	4.87	4.25 to 5.75	94.6	70 to 130	0.00	20
AW10341	Lead, Total	mg/L	-0.0000303	0.0022	0.10	0.0923	0.0920	0.0939	0.085 to 0.115	92.3	70 to 130	0.315	20
AW10341	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00403	0.00401	0.00393	0.0034 to 0.0046	101	70 to 130	0.498	20

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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AW10333

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec			
			Limit	Limit			Duplicate	LFB	Limit	Limit			
AW10330	Solids, Dissolved	mg/L	-2.0	25			311	55	40 to 60		0.00	5	
AW10337	Sulfate, Total	mg/L	0.00	1.0	20.0	19.0	0.00	19.2	18 to 22	95.0	80 to 120	0	20
AW10337	Fluoride, Total	mg/L	0.00	0.3	2.0	2.09	0.00	2.12	1.8 to 2.2	104	80 to 120	0	20
AW10337	Chloride, Total	mg/L	0.00	0.25	10.0	10.2	0.00	10.1	9 to 11	102	80 to 120	0	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

CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AW10334

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	0.0973	mg/L
* Barium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	0.201	mg/L
* Beryllium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/17/2016	EPA 200.7		1.015	0.02	0.1	2.20	mg/L
* Calcium, Total	HRG	5/18/2016	EPA 200.7		10.15	1.0	5.0	49.0	mg/L
* Cadmium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	J 0.00770	mg/L
* Mercury, Total by CVAA	MCW	5/4/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/26/2016	SM 2540C		1		50	442	mg/L
* Chloride, Total	SES	4/23/2016	EPA 300.0		1	0.04	0.25	9.01	mg/L
* Fluoride, Total	SES	4/23/2016	EPA 300.0		1	0.01	0.3	J 0.052	mg/L
* Sulfate, Total	SES	4/23/2016	EPA 300.0		1	0.3	1	J 0.335	mg/L

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Corrected Copy

To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AW10334

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	MB					Limit	Rec	Limit	Prec		
AW10341	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.112	0.111	0.0954	0.085 to 0.115		96.3	70 to 130	0.991	20
AW10341	Lead, Total	mg/L	-0.0000303	0.0022	0.10	0.0923	0.0920	0.0939	0.085 to 0.115		92.3	70 to 130	0.315	20
AW10341	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00403	0.00401	0.00393	0.0034 to 0.0046		101	70 to 130	0.498	20
AW10341	Barium, Total	mg/L	0.00000601	0.0044	0.10	0.133	0.131	0.0895	0.085 to 0.115		90.0	70 to 130	1.43	20
AW10341	Beryllium, Total	mg/L	0.0000174	0.00132	0.10	0.0965	0.104	0.0985	0.085 to 0.115		96.5	70 to 130	7.54	20
AW10341	Molybdenum, Total	mg/L	0.0000128	0.0044	0.10	0.0945	0.0942	0.0929	0.085 to 0.115		92.5	70 to 130	0.316	20
AW10341	Antimony, Total	mg/L	0.000201	0.00132	0.10	0.0914	0.0901	0.0893	0.085 to 0.115		91.4	70 to 130	1.41	20
AW10341	Selenium, Total	mg/L	0.0000489	0.0044	0.10	0.102	0.110	0.105	0.085 to 0.115		102	70 to 130	7.23	20
AW10341	Thallium, Total	mg/L	-0.0000329	0.00044	0.10	0.0933	0.0929	0.0955	0.085 to 0.115		93.3	70 to 130	0.405	20
AW10341	Cadmium, Total	mg/L	-0.00000842	0.00044	0.10	0.0973	0.0984	0.0972	0.085 to 0.115		97.3	70 to 130	1.09	20
AW10341	Calcium, Total	mg/L	-0.000737	0.22	5.00	10.7	10.7	4.87	4.25 to 5.75		94.6	70 to 130	0.00	20
AW10341	Boron, Total	mg/L	0.00414	0.044	1.00	1.03	1.03	0.989	0.85 to 1.15		96.6	70 to 130	0.00	20
AW10341	Chromium, Total	mg/L	0.0000157	0.0044	0.10	0.0957	0.0948	0.0947	0.085 to 0.115		95.7	70 to 130	0.874	20
AW10341	Cobalt, Total	mg/L	-0.0000287	0.0044	0.10	0.120	0.120	0.0923	0.085 to 0.115		93.1	70 to 130	0.0196	20
AW10341	Lithium, Total	mg/L	0.000236	0.022	0.20	0.200	0.200	0.196	0.17 to 0.23		100	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

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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: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AW10334

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW10337	Sulfate, Total	mg/L	0.00	1.0	20.0	19.0	0.00	19.2	18 to 22	95.0	80 to 120	0	20
AW10330	Solids, Dissolved	mg/L	-2.0	25			311	55	40 to 60			0.00	5
AW10337	Fluoride, Total	mg/L	0.00	0.3	2.0	2.09	0.00	2.12	1.8 to 2.2	104	80 to 120	0	20
AW10337	Chloride, Total	mg/L	0.00	0.25	10.0	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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CC:

Reported: 7/27/2017
 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: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-1 Dup

Laboratory ID Number: AW10335

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	0.0951	mg/L
* Barium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	0.196	mg/L
* Beryllium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/17/2016	EPA 200.7		1.015	0.02	0.1	2.19	mg/L
* Calcium, Total	HRG	5/18/2016	EPA 200.7		10.15	1.0	5.0	48.5	mg/L
* Cadmium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	J 0.00757	mg/L
* Mercury, Total by CVAA	MCW	5/4/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/26/2016	SM 2540C		1		50	428	mg/L
* Chloride, Total	SES	4/23/2016	EPA 300.0		1	0.04	0.25	23.5	mg/L
* Fluoride, Total	SES	4/23/2016	EPA 300.0		1	0.01	0.3	J 0.051	mg/L
* Sulfate, Total	SES	4/23/2016	EPA 300.0		1	0.3	1	J 0.342	mg/L

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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-1 Dup

Laboratory ID Number: AW10335

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AW10341	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.112	0.111	0.0954	0.085 to 0.115	96.3	70 to 130	0.991	20
AW10341	Barium, Total	mg/L	0.00000601	0.0044	0.10	0.133	0.131	0.0895	0.085 to 0.115	90.0	70 to 130	1.43	20
AW10341	Beryllium, Total	mg/L	0.0000174	0.00132	0.10	0.0965	0.104	0.0985	0.085 to 0.115	96.5	70 to 130	7.54	20
AW10341	Molybdenum, Total	mg/L	0.0000128	0.0044	0.10	0.0945	0.0942	0.0929	0.085 to 0.115	92.5	70 to 130	0.316	20
AW10341	Antimony, Total	mg/L	0.000201	0.00132	0.10	0.0914	0.0901	0.0893	0.085 to 0.115	91.4	70 to 130	1.41	20
AW10341	Selenium, Total	mg/L	0.0000489	0.0044	0.10	0.102	0.110	0.105	0.085 to 0.115	102	70 to 130	7.23	20
AW10341	Thallium, Total	mg/L	-0.0000329	0.00044	0.10	0.0933	0.0929	0.0955	0.085 to 0.115	93.3	70 to 130	0.405	20
AW10341	Lead, Total	mg/L	-0.0000303	0.0022	0.10	0.0923	0.0920	0.0939	0.085 to 0.115	92.3	70 to 130	0.315	20
AW10341	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00403	0.00401	0.00393	0.0034 to 0.0046	101	70 to 130	0.498	20
AW10341	Cadmium, Total	mg/L	-0.000000842	0.00044	0.10	0.0973	0.0984	0.0972	0.085 to 0.115	97.3	70 to 130	1.09	20
AW10341	Calcium, Total	mg/L	-0.000737	0.22	5.00	10.7	10.7	4.87	4.25 to 5.75	94.6	70 to 130	0.00	20
AW10341	Boron, Total	mg/L	0.00414	0.044	1.00	1.03	1.03	0.989	0.85 to 1.15	96.6	70 to 130	0.00	20
AW10341	Chromium, Total	mg/L	0.0000157	0.0044	0.10	0.0957	0.0948	0.0947	0.085 to 0.115	95.7	70 to 130	0.874	20
AW10341	Cobalt, Total	mg/L	-0.0000287	0.0044	0.10	0.120	0.120	0.0923	0.085 to 0.115	93.1	70 to 130	0.0196	20
AW10341	Lithium, Total	mg/L	0.000236	0.022	0.20	0.200	0.200	0.196	0.17 to 0.23	100	70 to 130	0.00	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: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-1 Dup

Laboratory ID Number: AW10335

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW10337	Fluoride, Total	mg/L	0.00	0.3	2.0	2.09	0.00	2.12	1.8 to 2.2	104	80 to 120	0	20
AW10337	Chloride, Total	mg/L	0.00	0.25	10.0	10.2	0.00	10.1	9 to 11	102	80 to 120	0	20
AW10337	Sulfate, Total	mg/L	0.00	1.0	20.0	19.0	0.00	19.2	18 to 22	95.0	80 to 120	0	20
AW10330	Solids, Dissolved	mg/L	-2.0	25			311	55	40 to 60				0.00 5

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CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AW10336

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	0.0307	mg/L
* Barium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	0.132	mg/L
* Beryllium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/17/2016	EPA 200.7		1.015	0.02	0.1	J 0.0719	mg/L
* Calcium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.1	0.5	14.3	mg/L
* Cadmium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/4/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/26/2016	SM 2540C		1		25	269	mg/L
* Chloride, Total	SES	4/23/2016	EPA 300.0		1	0.04	0.25	18.9	mg/L
* Fluoride, Total	SES	4/23/2016	EPA 300.0		1	0.01	0.3	J 0.043	mg/L
* Sulfate, Total	SES	4/23/2016	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

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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: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AW10336

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	MB					Limit	Rec	Limit	Prec		
AW10341	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.112	0.111	0.0954	0.085 to 0.115		96.3	70 to 130	0.991	20
AW10341	Barium, Total	mg/L	0.00000601	0.0044	0.10	0.133	0.131	0.0895	0.085 to 0.115		90.0	70 to 130	1.43	20
AW10341	Beryllium, Total	mg/L	0.0000174	0.00132	0.10	0.0965	0.104	0.0985	0.085 to 0.115		96.5	70 to 130	7.54	20
AW10341	Molybdenum, Total	mg/L	0.0000128	0.0044	0.10	0.0945	0.0942	0.0929	0.085 to 0.115		92.5	70 to 130	0.316	20
AW10341	Antimony, Total	mg/L	0.000201	0.00132	0.10	0.0914	0.0901	0.0893	0.085 to 0.115		91.4	70 to 130	1.41	20
AW10341	Selenium, Total	mg/L	0.0000489	0.0044	0.10	0.102	0.110	0.105	0.085 to 0.115		102	70 to 130	7.23	20
AW10341	Thallium, Total	mg/L	-0.0000329	0.00044	0.10	0.0933	0.0929	0.0955	0.085 to 0.115		93.3	70 to 130	0.405	20
AW10341	Cadmium, Total	mg/L	-0.000000842	0.00044	0.10	0.0973	0.0984	0.0972	0.085 to 0.115		97.3	70 to 130	1.09	20
AW10341	Calcium, Total	mg/L	-0.000737	0.22	5.00	10.7	10.7	4.87	4.25 to 5.75		94.6	70 to 130	0.00	20
AW10341	Lead, Total	mg/L	-0.0000303	0.0022	0.10	0.0923	0.0920	0.0939	0.085 to 0.115		92.3	70 to 130	0.315	20
AW10341	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00403	0.00401	0.00393	0.0034 to 0.0046		101	70 to 130	0.498	20
AW10341	Boron, Total	mg/L	0.00414	0.044	1.00	1.03	1.03	0.989	0.85 to 1.15		96.6	70 to 130	0.00	20
AW10341	Chromium, Total	mg/L	0.0000157	0.0044	0.10	0.0957	0.0948	0.0947	0.085 to 0.115		95.7	70 to 130	0.874	20
AW10341	Cobalt, Total	mg/L	-0.0000287	0.0044	0.10	0.120	0.120	0.0923	0.085 to 0.115		93.1	70 to 130	0.0196	20
AW10341	Lithium, Total	mg/L	0.000236	0.022	0.20	0.200	0.200	0.196	0.17 to 0.23		100	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: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AW10336

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec			
			Limit	Limit			Duplicate	LFB	Limit	Limit			
AW10330	Solids, Dissolved	mg/L	-2.0	25			311	55	40 to 60		0.00	5	
AW10337	Sulfate, Total	mg/L	0.00	1.0	20.0	19.0	0.00	19.2	18 to 22	95.0	80 to 120	0	20
AW10337	Fluoride, Total	mg/L	0.00	0.3	2.0	2.09	0.00	2.12	1.8 to 2.2	104	80 to 120	0	20
AW10337	Chloride, Total	mg/L	0.00	0.25	10.0	10.2	0.00	10.1	9 to 11	102	80 to 120	0	20

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CC:

Reported: 7/27/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAPFB
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW10337

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/17/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/4/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/26/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	4/23/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	4/23/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	4/23/2016	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: WMWBARAPFB
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW10337

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AW10341	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.112	0.111	0.0954	0.085 to 0.115	96.3	70 to 130	0.991	20
AW10341	Antimony, Total	mg/L	0.000201	0.00132	0.10	0.0914	0.0901	0.0893	0.085 to 0.115	91.4	70 to 130	1.41	20
AW10341	Selenium, Total	mg/L	0.0000489	0.0044	0.10	0.102	0.110	0.105	0.085 to 0.115	102	70 to 130	7.23	20
AW10341	Thallium, Total	mg/L	-0.0000329	0.00044	0.10	0.0933	0.0929	0.0955	0.085 to 0.115	93.3	70 to 130	0.405	20
AW10341	Cadmium, Total	mg/L	-0.000000842	0.00044	0.10	0.0973	0.0984	0.0972	0.085 to 0.115	97.3	70 to 130	1.09	20
AW10341	Calcium, Total	mg/L	-0.000737	0.22	5.00	10.7	10.7	4.87	4.25 to 5.75	94.6	70 to 130	0.00	20
AW10341	Barium, Total	mg/L	0.00000601	0.0044	0.10	0.133	0.131	0.0895	0.085 to 0.115	90.0	70 to 130	1.43	20
AW10341	Beryllium, Total	mg/L	0.0000174	0.00132	0.10	0.0965	0.104	0.0985	0.085 to 0.115	96.5	70 to 130	7.54	20
AW10341	Molybdenum, Total	mg/L	0.0000128	0.0044	0.10	0.0945	0.0942	0.0929	0.085 to 0.115	92.5	70 to 130	0.316	20
AW10341	Boron, Total	mg/L	0.00414	0.044	1.00	1.03	1.03	0.989	0.85 to 1.15	96.6	70 to 130	0.00	20
AW10341	Chromium, Total	mg/L	0.0000157	0.0044	0.10	0.0957	0.0948	0.0947	0.085 to 0.115	95.7	70 to 130	0.874	20
AW10341	Cobalt, Total	mg/L	-0.0000287	0.0044	0.10	0.120	0.120	0.0923	0.085 to 0.115	93.1	70 to 130	0.0196	20
AW10341	Lithium, Total	mg/L	0.000236	0.022	0.20	0.200	0.200	0.196	0.17 to 0.23	100	70 to 130	0.00	20
AW10341	Lead, Total	mg/L	-0.0000303	0.0022	0.10	0.0923	0.0920	0.0939	0.085 to 0.115	92.3	70 to 130	0.315	20
AW10341	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00403	0.00401	0.00393	0.0034 to 0.0046	101	70 to 130	0.498	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: WMWBARAPFB
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW10337

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec Rec	Rec Limit	Prec	Prec Limit
AW10330	Solids, Dissolved	mg/L	-2.0	25			311	55	40 to 60			0.00	5
AW10337	Fluoride, Total	mg/L	0.00	0.3	2.0	2.09	0.00	2.12	1.8 to 2.2	104	80 to 120	0	20
AW10337	Chloride, Total	mg/L	0.00	0.25	10.0	10.2	0.00	10.1	9 to 11	102	80 to 120	0	20
AW10337	Sulfate, Total	mg/L	0.00	1.0	20.0	19.0	0.00	19.2	18 to 22	95.0	80 to 120	0	20

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CC:

Reported: 7/27/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AW10338

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	0.0399	mg/L
* Barium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	0.143	mg/L
* Beryllium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/17/2016	EPA 200.7		1.015	0.02	0.1	1.70	mg/L
* Calcium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.1	0.5	34.5	mg/L
* Cadmium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/4/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/26/2016	SM 2540C		1		25	324	mg/L
* Chloride, Total	SES	4/23/2016	EPA 300.0		1	0.04	0.25	22.5	mg/L
* Fluoride, Total	SES	4/23/2016	EPA 300.0		1	0.01	0.3	J 0.043	mg/L
* Sulfate, Total	SES	4/23/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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 Calera, AL 35040
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 FAX (205) 257-1654

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AW10338

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW10341 Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.112	0.111	0.0954	0.085 to 0.115	96.3	70 to 130	0.991	20	
AW10341 Barium, Total	mg/L	0.00000601	0.0044	0.10	0.133	0.131	0.0895	0.085 to 0.115	90.0	70 to 130	1.43	20	
AW10341 Beryllium, Total	mg/L	0.0000174	0.00132	0.10	0.0965	0.104	0.0985	0.085 to 0.115	96.5	70 to 130	7.54	20	
AW10341 Molybdenum, Total	mg/L	0.0000128	0.0044	0.10	0.0945	0.0942	0.0929	0.085 to 0.115	92.5	70 to 130	0.316	20	
AW10341 Cadmium, Total	mg/L	-0.000000842	0.00044	0.10	0.0973	0.0984	0.0972	0.085 to 0.115	97.3	70 to 130	1.09	20	
AW10341 Calcium, Total	mg/L	-0.000737	0.22	5.00	10.7	10.7	4.87	4.25 to 5.75	94.6	70 to 130	0.00	20	
AW10341 Lead, Total	mg/L	-0.0000303	0.0022	0.10	0.0923	0.0920	0.0939	0.085 to 0.115	92.3	70 to 130	0.315	20	
AW10341 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00403	0.00401	0.00393	0.0034 to 0.0046	101	70 to 130	0.498	20	
AW10341 Boron, Total	mg/L	0.00414	0.044	1.00	1.03	1.03	0.989	0.85 to 1.15	96.6	70 to 130	0.00	20	
AW10341 Chromium, Total	mg/L	0.0000157	0.0044	0.10	0.0957	0.0948	0.0947	0.085 to 0.115	95.7	70 to 130	0.874	20	
AW10341 Cobalt, Total	mg/L	-0.0000287	0.0044	0.10	0.120	0.120	0.0923	0.085 to 0.115	93.1	70 to 130	0.0196	20	
AW10341 Lithium, Total	mg/L	0.000236	0.022	0.20	0.200	0.200	0.196	0.17 to 0.23	100	70 to 130	0.00	20	
AW10341 Antimony, Total	mg/L	0.000201	0.00132	0.10	0.0914	0.0901	0.0893	0.085 to 0.115	91.4	70 to 130	1.41	20	
AW10341 Selenium, Total	mg/L	0.0000489	0.0044	0.10	0.102	0.110	0.105	0.085 to 0.115	102	70 to 130	7.23	20	
AW10341 Thallium, Total	mg/L	-0.0000329	0.00044	0.10	0.0933	0.0929	0.0955	0.085 to 0.115	93.3	70 to 130	0.405	20	

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AW10338

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
			Limit	Limit			Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW10330	Solids, Dissolved	mg/L	-2.0	25			311	55	40 to 60			0.00	5
AW10345	Chloride, Total	mg/L	0.00	0.25	10.0	10.7	0.00	10.1	9 to 11	107	80 to 120	0	20
AW10345	Fluoride, Total	mg/L	0.00	0.3	2.0	2.15	0.00	2.10	1.8 to 2.2	108	80 to 120	0	20
AW10345	Sulfate, Total	mg/L	0.00	1.0	20.0	19.6	0.00	19.0	18 to 22	98.0	80 to 120	0	20

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CC:

Reported: 7/27/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AW10339

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	0.0200	mg/L
* Barium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	0.0517	mg/L
* Beryllium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/17/2016	EPA 200.7		1.015	0.02	0.1	J 0.0472	mg/L
* Calcium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.1	0.5	7.54	mg/L
* Cadmium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	0.0148	mg/L
* Chromium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/4/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/26/2016	SM 2540C		1		25	128	mg/L
* Chloride, Total	SES	4/23/2016	EPA 300.0		1	0.04	0.25	10.8	mg/L
* Fluoride, Total	SES	4/23/2016	EPA 300.0		1	0.01	0.3	J 0.078	mg/L
* Sulfate, Total	SES	4/23/2016	EPA 300.0		1	0.3	1	J 0.514	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: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AW10339

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW10341	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.112	0.111	0.0954	0.085 to 0.115	96.3	70 to 130	0.991	20
AW10341	Barium, Total	mg/L	0.00000601	0.0044	0.10	0.133	0.131	0.0895	0.085 to 0.115	90.0	70 to 130	1.43	20
AW10341	Beryllium, Total	mg/L	0.0000174	0.00132	0.10	0.0965	0.104	0.0985	0.085 to 0.115	96.5	70 to 130	7.54	20
AW10341	Molybdenum, Total	mg/L	0.0000128	0.0044	0.10	0.0945	0.0942	0.0929	0.085 to 0.115	92.5	70 to 130	0.316	20
AW10341	Boron, Total	mg/L	0.00414	0.044	1.00	1.03	1.03	0.989	0.85 to 1.15	96.6	70 to 130	0.00	20
AW10341	Chromium, Total	mg/L	0.0000157	0.0044	0.10	0.0957	0.0948	0.0947	0.085 to 0.115	95.7	70 to 130	0.874	20
AW10341	Cobalt, Total	mg/L	-0.0000287	0.0044	0.10	0.120	0.120	0.0923	0.085 to 0.115	93.1	70 to 130	0.0196	20
AW10341	Lithium, Total	mg/L	0.000236	0.022	0.20	0.200	0.200	0.196	0.17 to 0.23	100	70 to 130	0.00	20
AW10341	Antimony, Total	mg/L	0.000201	0.00132	0.10	0.0914	0.0901	0.0893	0.085 to 0.115	91.4	70 to 130	1.41	20
AW10341	Selenium, Total	mg/L	0.0000489	0.0044	0.10	0.102	0.110	0.105	0.085 to 0.115	102	70 to 130	7.23	20
AW10341	Thallium, Total	mg/L	-0.0000329	0.00044	0.10	0.0933	0.0929	0.0955	0.085 to 0.115	93.3	70 to 130	0.405	20
AW10341	Cadmium, Total	mg/L	-0.000000842	0.00044	0.10	0.0973	0.0984	0.0972	0.085 to 0.115	97.3	70 to 130	1.09	20
AW10341	Calcium, Total	mg/L	-0.000737	0.22	5.00	10.7	10.7	4.87	4.25 to 5.75	94.6	70 to 130	0.00	20
AW10341	Lead, Total	mg/L	-0.0000303	0.0022	0.10	0.0923	0.0920	0.0939	0.085 to 0.115	92.3	70 to 130	0.315	20
AW10341	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00403	0.00401	0.00393	0.0034 to 0.0046	101	70 to 130	0.498	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: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AW10339

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
			Limit	Limit			Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW10330	Solids, Dissolved	mg/L	-2.0	25			311	55	40 to 60			0.00	5
AW10345	Fluoride, Total	mg/L	0.00	0.3	2.0	2.15	0.00	2.10	1.8 to 2.2	108	80 to 120	0	20
AW10345	Sulfate, Total	mg/L	0.00	1.0	20.0	19.6	0.00	19.0	18 to 22	98.0	80 to 120	0	20
AW10345	Chloride, Total	mg/L	0.00	0.25	10.0	10.7	0.00	10.1	9 to 11	107	80 to 120	0	20

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Expiration: June 30, 2018

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CC:

Reported: 7/27/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AW10340

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	J 0.00138	mg/L
* Barium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	0.0242	mg/L
* Beryllium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/17/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.1	0.5	1.69	mg/L
* Cadmium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/4/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/26/2016	SM 2540C		1		25	46.0	mg/L
* Chloride, Total	SES	4/23/2016	EPA 300.0		1	0.04	0.25	5.57	mg/L
* Fluoride, Total	SES	4/23/2016	EPA 300.0		1	0.01	0.3	J 0.016	mg/L
* Sulfate, Total	SES	4/23/2016	EPA 300.0		1	0.3	1	J 0.435	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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AW10340

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AW10341	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.112	0.111	0.0954	0.085 to 0.115	96.3	70 to 130	0.991	20
AW10341	Lead, Total	mg/L	-0.0000303	0.0022	0.10	0.0923	0.0920	0.0939	0.085 to 0.115	92.3	70 to 130	0.315	20
AW10341	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00403	0.00401	0.00393	0.0034 to 0.0046	101	70 to 130	0.498	20
AW10341	Boron, Total	mg/L	0.00414	0.044	1.00	1.03	1.03	0.989	0.85 to 1.15	96.6	70 to 130	0.00	20
AW10341	Chromium, Total	mg/L	0.0000157	0.0044	0.10	0.0957	0.0948	0.0947	0.085 to 0.115	95.7	70 to 130	0.874	20
AW10341	Cobalt, Total	mg/L	-0.0000287	0.0044	0.10	0.120	0.120	0.0923	0.085 to 0.115	93.1	70 to 130	0.0196	20
AW10341	Lithium, Total	mg/L	0.000236	0.022	0.20	0.200	0.200	0.196	0.17 to 0.23	100	70 to 130	0.00	20
AW10341	Barium, Total	mg/L	0.00000601	0.0044	0.10	0.133	0.131	0.0895	0.085 to 0.115	90.0	70 to 130	1.43	20
AW10341	Beryllium, Total	mg/L	0.0000174	0.00132	0.10	0.0965	0.104	0.0985	0.085 to 0.115	96.5	70 to 130	7.54	20
AW10341	Molybdenum, Total	mg/L	0.0000128	0.0044	0.10	0.0945	0.0942	0.0929	0.085 to 0.115	92.5	70 to 130	0.316	20
AW10341	Cadmium, Total	mg/L	-0.000000842	0.00044	0.10	0.0973	0.0984	0.0972	0.085 to 0.115	97.3	70 to 130	1.09	20
AW10341	Calcium, Total	mg/L	-0.000737	0.22	5.00	10.7	10.7	4.87	4.25 to 5.75	94.6	70 to 130	0.00	20
AW10341	Antimony, Total	mg/L	0.000201	0.00132	0.10	0.0914	0.0901	0.0893	0.085 to 0.115	91.4	70 to 130	1.41	20
AW10341	Selenium, Total	mg/L	0.0000489	0.0044	0.10	0.102	0.110	0.105	0.085 to 0.115	102	70 to 130	7.23	20
AW10341	Thallium, Total	mg/L	-0.0000329	0.00044	0.10	0.0933	0.0929	0.0955	0.085 to 0.115	93.3	70 to 130	0.405	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: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AW10340

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
			Limit	Limit			Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW10345	Chloride, Total	mg/L	0.00	0.25	10.0	10.7	0.00	10.1	9 to 11	107	80 to 120	0	20
AW10345	Sulfate, Total	mg/L	0.00	1.0	20.0	19.6	0.00	19.0	18 to 22	98.0	80 to 120	0	20
AW10330	Solids, Dissolved	mg/L	-2.0	25			311	55	40 to 60			0.00	5
AW10345	Fluoride, Total	mg/L	0.00	0.3	2.0	2.15	0.00	2.10	1.8 to 2.2	108	80 to 120	0	20

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CC:

Reported: 7/27/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AW10341

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	0.0157	mg/L
* Barium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	0.0430	mg/L
* Beryllium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/17/2016	EPA 200.7		1.015	0.02	0.1	J 0.0645	mg/L
* Calcium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.1	0.5	5.97	mg/L
* Cadmium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	0.0269	mg/L
* Chromium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/4/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/17/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	J 0.00203	mg/L
* Lead, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/26/2016	SM 2540C		1		25	151	mg/L
* Chloride, Total	SES	4/23/2016	EPA 300.0		1	0.04	0.25	19.8	mg/L
* Fluoride, Total	SES	4/23/2016	EPA 300.0		1	0.01	0.3	J 0.210	mg/L
* Sulfate, Total	SES	4/23/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AW10341

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AW10341	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.112	0.111	0.0954	0.085 to 0.115	96.3	70 to 130	0.991	20
AW10341	Barium, Total	mg/L	0.00000601	0.0044	0.10	0.133	0.131	0.0895	0.085 to 0.115	90.0	70 to 130	1.43	20
AW10341	Beryllium, Total	mg/L	0.0000174	0.00132	0.10	0.0965	0.104	0.0985	0.085 to 0.115	96.5	70 to 130	7.54	20
AW10341	Molybdenum, Total	mg/L	0.0000128	0.0044	0.10	0.0945	0.0942	0.0929	0.085 to 0.115	92.5	70 to 130	0.316	20
AW10341	Antimony, Total	mg/L	0.000201	0.00132	0.10	0.0914	0.0901	0.0893	0.085 to 0.115	91.4	70 to 130	1.41	20
AW10341	Selenium, Total	mg/L	0.0000489	0.0044	0.10	0.102	0.110	0.105	0.085 to 0.115	102	70 to 130	7.23	20
AW10341	Thallium, Total	mg/L	-0.0000329	0.00044	0.10	0.0933	0.0929	0.0955	0.085 to 0.115	93.3	70 to 130	0.405	20
AW10341	Cadmium, Total	mg/L	-0.000000842	0.00044	0.10	0.0973	0.0984	0.0972	0.085 to 0.115	97.3	70 to 130	1.09	20
AW10341	Calcium, Total	mg/L	-0.000737	0.22	5.00	10.7	10.7	4.87	4.25 to 5.75	94.6	70 to 130	0.00	20
AW10341	Boron, Total	mg/L	0.00414	0.044	1.00	1.03	1.03	0.989	0.85 to 1.15	96.6	70 to 130	0.00	20
AW10341	Chromium, Total	mg/L	0.0000157	0.0044	0.10	0.0957	0.0948	0.0947	0.085 to 0.115	95.7	70 to 130	0.874	20
AW10341	Cobalt, Total	mg/L	-0.0000287	0.0044	0.10	0.120	0.120	0.0923	0.085 to 0.115	93.1	70 to 130	0.0196	20
AW10341	Lithium, Total	mg/L	0.000236	0.022	0.20	0.200	0.200	0.196	0.17 to 0.23	100	70 to 130	0.00	20
AW10341	Lead, Total	mg/L	-0.0000303	0.0022	0.10	0.0923	0.0920	0.0939	0.085 to 0.115	92.3	70 to 130	0.315	20
AW10341	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00403	0.00401	0.00393	0.0034 to 0.0046	101	70 to 130	0.498	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
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 FAX (205) 257-1654

Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AW10341

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
			Limit	Limit			Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW10330	Solids, Dissolved	mg/L	-2.0	25			311	55	40 to 60			0.00	5
AW10345	Fluoride, Total	mg/L	0.00	0.3	2.0	2.15	0.00	2.10	1.8 to 2.2	108	80 to 120	0	20
AW10345	Chloride, Total	mg/L	0.00	0.25	10.0	10.7	0.00	10.1	9 to 11	107	80 to 120	0	20
AW10345	Sulfate, Total	mg/L	0.00	1.0	20.0	19.6	0.00	19.0	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: 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: 7/27/2017
 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: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AW10342

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	0.0123	mg/L
* Barium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	0.0758	mg/L
* Beryllium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2016	EPA 200.7		1.015	0.02	0.1	J 0.0434	mg/L
* Calcium, Total	HRG	5/18/2016	EPA 200.7		1.015	0.1	0.5	13.1	mg/L
* Cadmium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	J 0.00661	mg/L
* Mercury, Total by CVAA	MCW	5/6/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/26/2016	SM 2540C		1		25	305	mg/L
* Chloride, Total	SES	4/23/2016	EPA 300.0		1	0.04	0.25	40.5	mg/L
* Fluoride, Total	SES	4/23/2016	EPA 300.0		1	0.01	0.3	J 0.064	mg/L
* Sulfate, Total	SES	4/23/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AW10342

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW10927 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.00400	0.00396	0.00392	0.00385	0.0034 to 0.0046	99.0	70 to 130	1.02	20	
AW10345 Selenium, Total	mg/L	0.0000489	0.0044	0.10	0.103	0.106	0.105	0.085 to 0.115	103	70 to 130	2.96	20	
AW10345 Antimony, Total	mg/L	0.000201	0.00132	0.10	0.0895	0.0932	0.0893	0.085 to 0.115	89.5	70 to 130	3.98	20	
AW10345 Thallium, Total	mg/L	-0.0000329	0.00044	0.10	0.0926	0.0983	0.0955	0.085 to 0.115	92.6	70 to 130	6.02	20	
AW10345 Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0965	0.101	0.0954	0.085 to 0.115	96.5	70 to 130	4.75	20	
AW10345 Beryllium, Total	mg/L	0.0000174	0.00132	0.10	0.0943	0.108	0.0985	0.085 to 0.115	94.3	70 to 130	13.4	20	
AW10345 Lead, Total	mg/L	-0.0000303	0.0022	0.10	0.0916	0.0970	0.0939	0.085 to 0.115	91.6	70 to 130	5.74	20	
AW10345 Molybdenum, Total	mg/L	0.0000128	0.0044	0.10	0.0916	0.0959	0.0929	0.085 to 0.115	91.6	70 to 130	4.54	20	
AW10345 Cadmium, Total	mg/L	-0.000000842	0.00044	0.10	0.0978	0.102	0.0972	0.085 to 0.115	97.8	70 to 130	4.13	20	
AW10927 Lithium, Total	mg/L	0.000402	0.022	0.20	0.351	0.349	0.194	0.17 to 0.23	117	70 to 130	0.496	20	
AW10345 Chromium, Total	mg/L	0.0000157	0.0044	0.10	0.0947	0.0998	0.0947	0.085 to 0.115	94.7	70 to 130	5.22	20	
AW10927 Boron, Total	mg/L	0.00102	0.044	1.00	1.08	1.09	0.969	0.85 to 1.15	102	70 to 130	0.276	20	
AW10927 Calcium, Total	mg/L	-0.00464	0.22	5.00	310	317	4.83	4.25 to 5.75	60.0	70 to 130	2.23	20	
AW10345 Barium, Total	mg/L	0.00000601	0.0044	0.10	0.0904	0.0926	0.0895	0.085 to 0.115	90.4	70 to 130	2.43	20	
AW10345 Cobalt, Total	mg/L	-0.0000287	0.0044	0.10	0.0913	0.0972	0.0923	0.085 to 0.115	91.3	70 to 130	6.27	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: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AW10342

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW10345	Sulfate, Total	mg/L	0.00	1.0	20.0	19.6	0.00	19.0	18 to 22	98.0	80 to 120	0	20
AW10345	Chloride, Total	mg/L	0.00	0.25	10.0	10.7	0.00	10.1	9 to 11	107	80 to 120	0	20
AW10330	Solids, Dissolved	mg/L	-2.0	25			311	55	40 to 60			0.00	5
AW10345	Fluoride, Total	mg/L	0.00	0.3	2.0	2.15	0.00	2.10	1.8 to 2.2	108	80 to 120	0	20

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CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AW10343

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	0.0127	mg/L
* Barium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	0.110	mg/L
* Beryllium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2016	EPA 200.7		1.015	0.02	0.1	J 0.0590	mg/L
* Calcium, Total	HRG	5/18/2016	EPA 200.7		1.015	0.1	0.5	28.9	mg/L
* Cadmium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	J 0.00214	mg/L
* Mercury, Total by CVAA	MCW	5/6/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/26/2016	SM 2540C		1		25	376	mg/L
* Chloride, Total	SES	4/23/2016	EPA 300.0		1	0.04	0.25	20.7	mg/L
* Fluoride, Total	SES	4/23/2016	EPA 300.0		1	0.01	0.3	J 0.073	mg/L
* Sulfate, Total	SES	4/23/2016	EPA 300.0		1	0.3	1	1.10	mg/L

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 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AW10343

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW10927 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.00400	0.00396	0.00392	0.00385	0.0034 to 0.0046		99.0	70 to 130	1.02	20
AW10345 Selenium, Total	mg/L	0.0000489	0.0044	0.10	0.103	0.106	0.105	0.085 to 0.115		103	70 to 130	2.96	20
AW10345 Cadmium, Total	mg/L	-0.000000842	0.00044	0.10	0.0978	0.102	0.0972	0.085 to 0.115		97.8	70 to 130	4.13	20
AW10927 Lithium, Total	mg/L	0.000402	0.022	0.20	0.351	0.349	0.194	0.17 to 0.23		117	70 to 130	0.496	20
AW10345 Antimony, Total	mg/L	0.000201	0.00132	0.10	0.0895	0.0932	0.0893	0.085 to 0.115		89.5	70 to 130	3.98	20
AW10345 Thallium, Total	mg/L	-0.0000329	0.00044	0.10	0.0926	0.0983	0.0955	0.085 to 0.115		92.6	70 to 130	6.02	20
AW10345 Chromium, Total	mg/L	0.0000157	0.0044	0.10	0.0947	0.0998	0.0947	0.085 to 0.115		94.7	70 to 130	5.22	20
AW10927 Boron, Total	mg/L	0.00102	0.044	1.00	1.08	1.09	0.969	0.85 to 1.15		102	70 to 130	0.276	20
AW10927 Calcium, Total	mg/L	-0.00464	0.22	5.00	310	317	4.83	4.25 to 5.75		60.0	70 to 130	2.23	20
AW10345 Barium, Total	mg/L	0.00000601	0.0044	0.10	0.0904	0.0926	0.0895	0.085 to 0.115		90.4	70 to 130	2.43	20
AW10345 Cobalt, Total	mg/L	-0.0000287	0.0044	0.10	0.0913	0.0972	0.0923	0.085 to 0.115		91.3	70 to 130	6.27	20
AW10345 Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0965	0.101	0.0954	0.085 to 0.115		96.5	70 to 130	4.75	20
AW10345 Beryllium, Total	mg/L	0.0000174	0.00132	0.10	0.0943	0.108	0.0985	0.085 to 0.115		94.3	70 to 130	13.4	20
AW10345 Lead, Total	mg/L	-0.0000303	0.0022	0.10	0.0916	0.0970	0.0939	0.085 to 0.115		91.6	70 to 130	5.74	20
AW10345 Molybdenum, Total	mg/L	0.0000128	0.0044	0.10	0.0916	0.0959	0.0929	0.085 to 0.115		91.6	70 to 130	4.54	20

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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AW10343

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW10330	Solids, Dissolved	mg/L	-2.0	25				311	55	40 to 60			0.00	5
AW10345	Fluoride, Total	mg/L	0.00	0.3	2.0	2.15		0.00	2.10	1.8 to 2.2	108	80 to 120	0	20
AW10345	Sulfate, Total	mg/L	0.00	1.0	20.0	19.6		0.00	19.0	18 to 22	98.0	80 to 120	0	20
AW10345	Chloride, Total	mg/L	0.00	0.25	10.0	10.7		0.00	10.1	9 to 11	107	80 to 120	0	20

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CC:

Reported: 7/27/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-11 Dup

Laboratory ID Number: AW10344

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	0.0130	mg/L
* Barium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	0.110	mg/L
* Beryllium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2016	EPA 200.7		1.015	0.02	0.1	J 0.0583	mg/L
* Calcium, Total	HRG	5/18/2016	EPA 200.7		1.015	0.1	0.5	28.9	mg/L
* Cadmium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	J 0.00213	mg/L
* Mercury, Total by CVAA	MCW	5/6/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/26/2016	SM 2540C		1		25	373	mg/L
* Chloride, Total	SES	4/23/2016	EPA 300.0		1	0.04	0.25	20.7	mg/L
* Fluoride, Total	SES	4/23/2016	EPA 300.0		1	0.01	0.3	J 0.060	mg/L
* Sulfate, Total	SES	4/23/2016	EPA 300.0		1	0.3	1	1.04	mg/L

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 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-11 Dup

Laboratory ID Number: AW10344

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AW10345	Selenium, Total	mg/L	0.0000489	0.0044	0.10	0.103	0.106	0.105	0.085 to 0.115		103	70 to 130		2.96	20
AW10927	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.00400	0.00396	0.00392	0.00385	0.0034 to 0.0046		99.0	70 to 130		1.02	20
AW10345	Cadmium, Total	mg/L	-0.000000842	0.00044	0.10	0.0978	0.102	0.0972	0.085 to 0.115		97.8	70 to 130		4.13	20
AW10927	Lithium, Total	mg/L	0.000402	0.022	0.20	0.351	0.349	0.194	0.17 to 0.23		117	70 to 130		0.496	20
AW10345	Barium, Total	mg/L	0.0000601	0.0044	0.10	0.0904	0.0926	0.0895	0.085 to 0.115		90.4	70 to 130		2.43	20
AW10345	Cobalt, Total	mg/L	-0.0000287	0.0044	0.10	0.0913	0.0972	0.0923	0.085 to 0.115		91.3	70 to 130		6.27	20
AW10345	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0965	0.101	0.0954	0.085 to 0.115		96.5	70 to 130		4.75	20
AW10345	Beryllium, Total	mg/L	0.0000174	0.00132	0.10	0.0943	0.108	0.0985	0.085 to 0.115		94.3	70 to 130		13.4	20
AW10345	Lead, Total	mg/L	-0.0000303	0.0022	0.10	0.0916	0.0970	0.0939	0.085 to 0.115		91.6	70 to 130		5.74	20
AW10345	Molybdenum, Total	mg/L	0.0000128	0.0044	0.10	0.0916	0.0959	0.0929	0.085 to 0.115		91.6	70 to 130		4.54	20
AW10345	Chromium, Total	mg/L	0.0000157	0.0044	0.10	0.0947	0.0998	0.0947	0.085 to 0.115		94.7	70 to 130		5.22	20
AW10927	Boron, Total	mg/L	0.00102	0.044	1.00	1.08	1.09	0.969	0.85 to 1.15		102	70 to 130		0.276	20
AW10927	Calcium, Total	mg/L	-0.00464	0.22	5.00	310	317	4.83	4.25 to 5.75		60.0	70 to 130		2.23	20
AW10345	Antimony, Total	mg/L	0.000201	0.00132	0.10	0.0895	0.0932	0.0893	0.085 to 0.115		89.5	70 to 130		3.98	20
AW10345	Thallium, Total	mg/L	-0.0000329	0.00044	0.10	0.0926	0.0983	0.0955	0.085 to 0.115		92.6	70 to 130		6.02	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

Alabama Power 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: WMWBARAP
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond - MW-11 Dup

Laboratory ID Number: AW10344

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW10330	Solids, Dissolved	mg/L	-2.0	25				311	55	40 to 60			0.00	5
AW10345	Fluoride, Total	mg/L	0.00	0.3	2.0	2.15		0.00	2.10	1.8 to 2.2	108	80 to 120	0	20
AW10345	Sulfate, Total	mg/L	0.00	1.0	20.0	19.6		0.00	19.0	18 to 22	98.0	80 to 120	0	20
AW10345	Chloride, Total	mg/L	0.00	0.25	10.0	10.7		0.00	10.1	9 to 11	107	80 to 120	0	20

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CC:

Reported: 7/27/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAPEB
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AW10345

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/18/2016	EPA 200.7		1.015	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Antimony, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Cobalt, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	5/6/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	5/2/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	5/2/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	4/26/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	4/23/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	4/23/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	4/23/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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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: WMWBARAPEB
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AW10345

Sample Analysis	Units	MB	MB				LFB			Rec		Prec
			Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AW10927 Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.00400	0.00396	0.00392	0.00385	0.0034 to 0.0046	99.0	70 to 130	1.02	20
AW10345 Selenium, Total	mg/L	0.0000489	0.0044	0.10	0.103	0.106	0.105	0.085 to 0.115	103	70 to 130	2.96	20
AW10345 Antimony, Total	mg/L	0.000201	0.00132	0.10	0.0895	0.0932	0.0893	0.085 to 0.115	89.5	70 to 130	3.98	20
AW10345 Thallium, Total	mg/L	-0.0000329	0.00044	0.10	0.0926	0.0983	0.0955	0.085 to 0.115	92.6	70 to 130	6.02	20
AW10345 Barium, Total	mg/L	0.00000601	0.0044	0.10	0.0904	0.0926	0.0895	0.085 to 0.115	90.4	70 to 130	2.43	20
AW10345 Cobalt, Total	mg/L	-0.0000287	0.0044	0.10	0.0913	0.0972	0.0923	0.085 to 0.115	91.3	70 to 130	6.27	20
AW10345 Cadmium, Total	mg/L	-0.000000842	0.00044	0.10	0.0978	0.102	0.0972	0.085 to 0.115	97.8	70 to 130	4.13	20
AW10927 Lithium, Total	mg/L	0.000402	0.022	0.20	0.351	0.349	0.194	0.17 to 0.23	117	70 to 130	0.496	20
AW10345 Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0965	0.101	0.0954	0.085 to 0.115	96.5	70 to 130	4.75	20
AW10345 Beryllium, Total	mg/L	0.0000174	0.00132	0.10	0.0943	0.108	0.0985	0.085 to 0.115	94.3	70 to 130	13.4	20
AW10345 Lead, Total	mg/L	-0.0000303	0.0022	0.10	0.0916	0.0970	0.0939	0.085 to 0.115	91.6	70 to 130	5.74	20
AW10345 Molybdenum, Total	mg/L	0.0000128	0.0044	0.10	0.0916	0.0959	0.0929	0.085 to 0.115	91.6	70 to 130	4.54	20
AW10345 Chromium, Total	mg/L	0.0000157	0.0044	0.10	0.0947	0.0998	0.0947	0.085 to 0.115	94.7	70 to 130	5.22	20
AW10927 Boron, Total	mg/L	0.00102	0.044	1.00	1.08	1.09	0.969	0.85 to 1.15	102	70 to 130	0.276	20
AW10927 Calcium, Total	mg/L	-0.00464	0.22	5.00	310	317	4.83	4.25 to 5.75	60.0	70 to 130	2.23	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: WMWBARAPEB
 Sample Date: 20-Apr-16
 Customer ID:
 Delivery Date: 21-Apr-16

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AW10345

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec Rec	Rec Limit	Prec	Prec Limit
AW10330	Solids, Dissolved	mg/L	-2.0	25			311	55	40 to 60			0.00	5
AW10345	Chloride, Total	mg/L	0.00	0.25	10.0	10.7	0.00	10.1	9 to 11	107	80 to 120	0	20
AW10345	Sulfate, Total	mg/L	0.00	1.0	20.0	19.6	0.00	19.0	18 to 22	98.0	80 to 120	0	20
AW10345	Fluoride, Total	mg/L	0.00	0.3	2.0	2.15	0.00	2.10	1.8 to 2.2	108	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: 7/27/2017
 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 04/21/2016 12:00

Requested Complete Date	Routine
Site Representative	Angie Jimmerson
Collector	Nick Pitts

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

Analysis Requested	Bottle 1: Metals and Hg (1) 500 mL bottle, Bottle 2: TDS and Anions (1) 500 mL bottle
Comments	3 different packs of pH strips were used: 4831-24377-20-4; 4826-24363-2-1; 4831-24379-20-6

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-4	04/19/2016	10:45	2	Groundwater		4950-25069-10-9	1.5	AW10325
MW-3	04/19/2016	13:00	2	Groundwater		4950-25069-10-9	1.5	AW10326
MW-2	04/19/2016	14:20	2	Groundwater		4950-25069-10-9	1.5	AW10327
FB-1	04/19/2016	15:25	2	Field Blank		4950-25063-10-3	0.5	AW10328
MW-16	04/19/2016	15:40	2	Groundwater		4950-25063-10-3	0.5	AW10329
MW-14	04/20/2016	09:55	2	Groundwater		4950-25067-10-7	2.6	AW10330
MW-12	04/20/2016	11:10	2	Groundwater		4950-25067-10-7	2.6	AW10331
MW-10	04/20/2016	12:10	2	Groundwater		4950-25067-10-7	2.6	AW10332
MW-9	04/20/2016	13:05	2	Groundwater		4950-25067-10-7	2.6	AW10333

Relinquished By	Received By	Date/Time
		04/21/2016 08:09

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	see comments	



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

Field Complete
 Lab Complete

Lab ETA 04/21/2016 08:00

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Angie Jimmerson	Requested By	Greg Dyer
Collector	Jason Rouss	Location	Barry Ash Pond

Analysis Requested	Bottle 1: Metals and Hg (1) 500 mL bottle, Bottle 2: TDS and Anions (1) 500 mL bottle
Comments	3 different packs of pH strips were used: 4831-24377-20-4; 4826-24363-2-1; 4831-24379-20-6. Cooler 4950-25065-10-5 was above 4.0 degrees Celsius. SGC 4/21/16

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-1	04/19/2016	15:35	2	Groundwater		4950-25063-10-3	0.5	AW10334
MW-1Dup	04/19/2016	15:35	2	Sample Duplicate		4950-25063-10-3	0.5	AW10335
MW-5	04/20/2016	09:55	2	Groundwater		4950-25065-10-5	4.3	AW10336
FB-2	04/20/2016	10:15	2	Field Blank		4950-25065-10-5	4.3	AW10337
MW-8	04/20/2016	11:40	2	Groundwater		4950-25065-10-5	4.3	AW10338
MW-7	04/20/2016	13:05	2	Groundwater		4950-25065-10-5	4.3	AW10339

Relinquished By	Received By	Date/Time
		04/21/2016 08:04

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



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

Field Complete
 Lab Complete

Lab ETA 04/20/2016 16:58

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Angie Jimmerson	Requested By	Greg Dyer
Collector	Clarence Specht	Location	Barry Ash Pond
Analysis Requested	Bottle 1: Metals and Hg (1) 500 mL bottle, Bottle 2: TDS and Anions (1) 500 mL bottle		
Comments	3 different packs of pH strips were used: 4831-24377-20-4; 4826-24363-2-1; 4831-24379-20-6		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-6	04/19/2016	14:23	2	Groundwater		4950-25066-10-6	1.0	AW10340
MW-15	04/19/2016	16:14	2	Groundwater		4950-25066-10-6	1.0	AW10341
MW-13	04/20/2016	10:30	2	Groundwater		4950-25064-10-4	1.5	AW10342
MW-11	04/20/2016	11:54	2	Groundwater		4950-25064-10-4	1.5	AW10343
MW-11-Du	04/20/2016	11:54	2	Groundwater		4950-25064-10-4	1.5	AW10344
EB-1	04/20/2016	13:31	2	Equipment Blank		4950-25069-10-9	1.5	AW10345

Relinquished By	Received By	Date/Time
<i>C. Specht</i>	<i>Specht</i>	04/21/2016 08:17

SmarTroll ID 5141-26150-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID 4950-25070-10-10	Thermometer ID 1506-3968-4-4
	pH Strip ID see comments

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: 400-123613-1

TestAmerica Sample Delivery Group: Barry Ash Pond (2)

Client Project/Site: CCR Plant Barry

For:

Alabama Power General Test Laboratory

744 County Rd 87

GSC #8

Calera, Alabama 35040

Attn: Sarah Copeland



Authorized for release by:

7/29/2016 5:40:14 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

LINKS

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results through
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Visit us at:
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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Method Summary

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

TestAmerica Job ID: 400-123613-1
SDG: Barry 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 Barry

TestAmerica Job ID: 400-123613-1
SDG: Barry Ash Pond (2)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-123613-1	AW10378 MW-13	Water	04/20/16 10:28	06/28/16 15:40
400-123613-2	AW10379 MW-11	Water	04/20/16 11:52	06/28/16 15:40
400-123613-3	AW10380 MW-11 DUP	Water	04/20/16 11:52	06/28/16 15:40
400-123613-4	AW10381 EB-1	Water	04/20/16 13:28	06/28/16 15:40

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Client Sample Results

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

TestAmerica Job ID: 400-123613-1
 SDG: Barry Ash Pond (2)

Client Sample ID: AW10378 MW-13

Lab Sample ID: 400-123613-1

Date Collected: 04/20/16 10:28

Matrix: Water

Date Received: 06/28/16 15:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.301		0.0901	0.0941	1.00	0.0960	pCi/L	07/01/16 13:26	07/27/16 12:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		40 - 110					07/01/16 13:26	07/27/16 12:24	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0969	U	0.230	0.230	1.00	0.395	pCi/L	07/01/16 13:51	07/21/16 13:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		40 - 110					07/01/16 13:51	07/21/16 13:01	1
Y Carrier	88.2		40 - 110					07/01/16 13:51	07/21/16 13:01	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	0.398		0.247	0.249	5.00	0.395	pCi/L		07/28/16 15:38	1

Client Sample Results

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

TestAmerica Job ID: 400-123613-1
 SDG: Barry Ash Pond (2)

Client Sample ID: AW10379 MW-11

Lab Sample ID: 400-123613-2

Date Collected: 04/20/16 11:52

Matrix: Water

Date Received: 06/28/16 15:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.344		0.0907	0.0958	1.00	0.0789	pCi/L	07/01/16 13:26	07/27/16 12:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.9		40 - 110					07/01/16 13:26	07/27/16 12:24	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.324	U	0.220	0.222	1.00	0.336	pCi/L	07/01/16 13:51	07/21/16 13:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.7		40 - 110					07/01/16 13:51	07/21/16 13:01	1
Y Carrier	86.7		40 - 110					07/01/16 13:51	07/21/16 13:01	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	0.667		0.238	0.241	5.00	0.336	pCi/L		07/28/16 15:38	1

Client Sample Results

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

TestAmerica Job ID: 400-123613-1
 SDG: Barry Ash Pond (2)

Client Sample ID: AW10380 MW-11 DUP

Lab Sample ID: 400-123613-3

Date Collected: 04/20/16 11:52

Matrix: Water

Date Received: 06/28/16 15:40

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		0.0882	0.0936	1.00	0.0782	pCi/L	07/01/16 13:26	07/27/16 12:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.4		40 - 110					07/01/16 13:26	07/27/16 12:24	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.254	U	0.210	0.212	1.00	0.334	pCi/L	07/01/16 13:51	07/21/16 13:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.4		40 - 110					07/01/16 13:51	07/21/16 13:01	1
Y Carrier	90.5		40 - 110					07/01/16 13:51	07/21/16 13:01	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	0.605		0.228	0.231	5.00	0.334	pCi/L		07/28/16 15:38	1

Client Sample Results

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

TestAmerica Job ID: 400-123613-1
 SDG: Barry Ash Pond (2)

Client Sample ID: AW10381 EB-1

Lab Sample ID: 400-123613-4

Date Collected: 04/20/16 13:28

Matrix: Water

Date Received: 06/28/16 15:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0117	U	0.0377	0.0377	1.00	0.0707	pCi/L	07/01/16 13:26	07/27/16 12:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.6		40 - 110					07/01/16 13:26	07/27/16 12:24	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0141	U	0.184	0.184	1.00	0.331	pCi/L	07/01/16 13:51	07/21/16 13:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.6		40 - 110					07/01/16 13:51	07/21/16 13:01	1
Y Carrier	88.6		40 - 110					07/01/16 13:51	07/21/16 13:01	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	0.0258	U	0.188	0.188	5.00	0.331	pCi/L		07/28/16 15:38	1

Definitions/Glossary

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

TestAmerica Job ID: 400-123613-1
SDG: Barry 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 Barry

TestAmerica Job ID: 400-123613-1
SDG: Barry Ash Pond (2)

Client Sample ID: AW10378 MW-13

Date Collected: 04/20/16 10:28

Date Received: 06/28/16 15:40

Lab Sample ID: 400-123613-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			258920	07/01/16 13:26	MCJ	TAL SL
Total/NA	Analysis	9315		1	262336	07/27/16 12:24	RTM	TAL SL
Total/NA	Prep	PrecSep_0			258924	07/01/16 13:51	MCJ	TAL SL
Total/NA	Analysis	9320		1	261534	07/21/16 13:01	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262566	07/28/16 15:38	CAH	TAL SL

Client Sample ID: AW10379 MW-11

Date Collected: 04/20/16 11:52

Date Received: 06/28/16 15:40

Lab Sample ID: 400-123613-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			258920	07/01/16 13:26	MCJ	TAL SL
Total/NA	Analysis	9315		1	262336	07/27/16 12:24	RTM	TAL SL
Total/NA	Prep	PrecSep_0			258924	07/01/16 13:51	MCJ	TAL SL
Total/NA	Analysis	9320		1	261534	07/21/16 13:01	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262566	07/28/16 15:38	CAH	TAL SL

Client Sample ID: AW10380 MW-11 DUP

Date Collected: 04/20/16 11:52

Date Received: 06/28/16 15:40

Lab Sample ID: 400-123613-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			258920	07/01/16 13:26	MCJ	TAL SL
Total/NA	Analysis	9315		1	262336	07/27/16 12:24	RTM	TAL SL
Total/NA	Prep	PrecSep_0			258924	07/01/16 13:51	MCJ	TAL SL
Total/NA	Analysis	9320		1	261534	07/21/16 13:01	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262566	07/28/16 15:38	CAH	TAL SL

Client Sample ID: AW10381 EB-1

Date Collected: 04/20/16 13:28

Date Received: 06/28/16 15:40

Lab Sample ID: 400-123613-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			258920	07/01/16 13:26	MCJ	TAL SL
Total/NA	Analysis	9315		1	262336	07/27/16 12:24	RTM	TAL SL
Total/NA	Prep	PrecSep_0			258924	07/01/16 13:51	MCJ	TAL SL
Total/NA	Analysis	9320		1	261534	07/21/16 13:01	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262566	07/28/16 15:38	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 Barry

TestAmerica Job ID: 400-123613-1
SDG: Barry Ash Pond (2)

Rad

Prep Batch: 258920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123613-1	AW10378 MW-13	Total/NA	Water	PrecSep-21	
400-123613-2	AW10379 MW-11	Total/NA	Water	PrecSep-21	
400-123613-3	AW10380 MW-11 DUP	Total/NA	Water	PrecSep-21	
400-123613-4	AW10381 EB-1	Total/NA	Water	PrecSep-21	
MB 160-258920/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-258920/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-123619-C-24-A DU	Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 258924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123613-1	AW10378 MW-13	Total/NA	Water	PrecSep_0	
400-123613-2	AW10379 MW-11	Total/NA	Water	PrecSep_0	
400-123613-3	AW10380 MW-11 DUP	Total/NA	Water	PrecSep_0	
400-123613-4	AW10381 EB-1	Total/NA	Water	PrecSep_0	
MB 160-258924/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-258924/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-123619-C-24-B DU	Duplicate	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-123613-1
 SDG: Barry Ash Pond (2)

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-258920/1-A
Matrix: Water
Analysis Batch: 262071

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 258920

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.008703	U	0.0446	0.0446	1.00	0.0846	pCi/L	07/01/16 13:26	07/26/16 17:32	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					07/01/16 13:26	07/26/16 17:32	1

Lab Sample ID: LCS 160-258920/2-A
Matrix: Water
Analysis Batch: 262071

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 258920

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	11.2	14.36		1.39	1.00	0.0686	pCi/L	129	68 - 137
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	96.0		40 - 110						

Lab Sample ID: 400-123619-C-24-A DU
Matrix: Water
Analysis Batch: 262071

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 258920

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.677		0.7601		0.146	1.00	0.0796	pCi/L	0.30	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	98.0		40 - 110							

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-258924/1-A
Matrix: Water
Analysis Batch: 261534

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 258924

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1735	U	0.217	0.218	1.00	0.360	pCi/L	07/01/16 13:51	07/21/16 12:56	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					07/01/16 13:51	07/21/16 12:56	1
Y Carrier	86.7		40 - 110					07/01/16 13:51	07/21/16 12:56	1

QC Sample Results

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

TestAmerica Job ID: 400-123613-1
 SDG: Barry Ash Pond (2)

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

Lab Sample ID: LCS 160-258924/2-A
Matrix: Water
Analysis Batch: 261534

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 258924

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	14.8	18.03		1.89	1.00	0.363	pCi/L	122	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	96.0		40 - 110
Y Carrier	84.5		40 - 110

Lab Sample ID: 400-123619-C-24-B DU
Matrix: Water
Analysis Batch: 261534

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 258924

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.872		0.4269		0.257	1.00	0.385	pCi/L	0.81	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	98.0		40 - 110
Y Carrier	81.9		40 - 110

Client Information		Sampler: Lab PM: Whitmire, Cheyenne R.		Carrier Tracking No(s):						
Client Contact: Sarah Copeland		Phone: N.P./J.R./C.S. 205-664-6121		COC No: 400-56525-24637.1						
Company: Alabama Power General Test Laboratory		E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 1 of 1						
Address: 744 County Rd 87 GSC #8		Due Date Requested:		Job #: 400-123613						
City: Calera		TAT Requested (days): Routine		Preservation Codes:						
State/Zip: AL, 35040		PO #:		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 Other:						
Phone: 205-664-6121(Tel)		WO #:		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 Z - other (specify)						
Email: sgcoppelia@southernco.com		Project #:		Special Instructions/Note:						
CCR: 40007143		SSOW#:								
Site: Barry Ash Pond (2)										
Sample Identification			Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, As=Asp)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of Containers	Special Instructions/Note
AW10378		4/20/16	1028	G	Water		X	X	2	MW-13
AW10379		4/20/16	1152	G	Water		X	X	2	MW-11
AW10380		4/20/16	1152	G	Water		X	X	2	MW-11 Dup (Sample Duplicate)
AW10381		4/20/16	1328	G	Water		X	X	2	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: _____ Date: _____
 Relinquished by: Sarah Copeland Date/Time: 6/27/16; 1100 Company: APC
 Relinquished by: *Sarah Copeland* Date/Time: 6/28/16 1540 Company: APC
 Relinquished by: _____ Date/Time: _____ Company: _____
 Custody Seals Intact: Yes No Custody Seal No.: _____
 Cooler Temperature(s) °C and Other Remarks: _____

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-123613-1
SDG Number: Barry Ash Pond (2)

Login Number: 123613

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 Barry

TestAmerica Job ID: 400-123613-1
 SDG: Barry 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	09-01-16
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	06-30-16 *
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 Barry

TestAmerica Job ID: 400-123613-1
SDG: Barry 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	08-31-16 *
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.

Report To Sarah Copeland
APC GSC Building 8

Sample #	Location	Sample Description	Customer Sample ID	Date Collected	Test Method
103084001	Barry Ash Pond	MW-4	AW10360, Water	4/19/2016 10:46:00 AM	Ga Tech
103084002	Barry Ash Pond	MW-3	AW10361, Water	4/19/2016 1:01:00 PM	Ga Tech
103084003	Barry Ash Pond	MW-2	AW10362, Water	4/19/2016 2:21:00 PM	Ga Tech
103084004	Barry Ash Pond	FB-1 Field Blank	AW10363, Water	4/19/2016 3:26:00 PM	Ga Tech
103084005	Barry Ash Pond	MW-16	AW10364, Water	4/19/2016 3:41:00 PM	Ga Tech
103084006	Barry Ash Pond	MW-14	AW10365, Water	4/20/2016 9:56:00 AM	Ga Tech
103084007	Barry Ash Pond	MW-12	AW10366, Water	4/20/2016 11:11:00 AM	Ga Tech
103084008	Barry Ash Pond	MW-10	AW10367, Water	4/20/2016 12:11:00 PM	Ga Tech
103084009	Barry Ash Pond	MW-9	AW10368, Water	4/20/2016 1:06:00 PM	Ga Tech
103084010	Barry Ash Pond	MW-1	AW10369, Water	4/19/2016 3:36:00 PM	Ga Tech
103084011	Barry Ash Pond	MW-1 DUP	AW10370, Water	4/19/2016 3:36:00 PM	Ga Tech
103084012	Barry Ash Pond	MW-5	AW10371, Water	4/20/2016 9:56:00 AM	Ga Tech
103084013	Barry Ash Pond	FB-2 Field Blank	AW10372, Water	4/20/2016 10:16:00 AM	Ga Tech
103084014	Barry Ash Pond	MW-8	AW10373, Water	4/20/2016 11:41:00 AM	Ga Tech
103084015	Barry Ash Pond	MW-7	AW10374, Water	4/20/2016 1:06:00 PM	Ga Tech
103084016	Barry Ash Pond	MW-6	AW10375, Water	4/19/2016 2:21:00 PM	Ga Tech
103084017	Barry Ash Pond	MW-15	AW10376, Water	4/19/2016 4:12:00 PM	Ga Tech

Sample Comments

103084019 Returned to Alabama Power Company
 103084020 Returned to Alabama Power Company
 103084021 Returned to Alabama Power Company

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

Sample #	Location	Sample Description	Customer Sample ID	Date Collected	Test Method
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Sample Comments

103084022 Returned to Alabama Power Company

Certification

Data approved by Gary Smith
Georgia Power Company

Report To Sarah Copeland
APC GSC Building 8

Location APC Lab
Sample Number 103084001
Collection Date 4/19/2016 10:46:00 AM
Sampling Media Water
Station AW10360
Sample ID MW-4 Barry Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.60E-01
Ra-228	Ga Tech	pCi/L			5.80E-01

Report To Sarah Copeland
APC GSC Building 8

Location APC Lab
Sample Number 103084002
Collection Date 4/19/2016 1:01:00 PM
Sampling Media Water
Station AW10361
Sample ID MW-3 Barry Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.18E-01
Ra-228	Ga Tech	pCi/L			6.71E-01

Report To Sarah Copeland
APC GSC Building 8

Location APC Lab
Sample Number 103084003
Collection Date 4/19/2016 2:21:00 PM
Sampling Media Water
Station AW10362
Sample ID MW-2 Barry Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.21E-01
Ra-228	Ga Tech	pCi/L			5.43E-01

Report To Sarah Copeland
APC GSC Building 8

Location APC Lab
Sample Number 103084004
Collection Date 4/19/2016 3:26:00 PM
Sampling Media Water
Station AW10363
Sample ID FB-1 Field Blank Barry Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			3.73E-01
Ra-228	Ga Tech	pCi/L			6.61E-01

Report To Sarah Copeland
APC GSC Building 8

Location APC Lab
Sample Number 103084005
Collection Date 4/19/2016 3:41:00 PM
Sampling Media Water
Station AW10364
Sample ID MW-16 Barry Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.16E-01
Ra-228	Ga Tech	pCi/L			5.62E-01

Report To Sarah Copeland
APC GSC Building 8

Location APC Lab
Sample Number 103084006
Collection Date 4/20/2016 9:56:00 AM
Sampling Media Water
Station AW10365
Sample ID MW-14 Barry Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.41E-01
Ra-228	Ga Tech	pCi/L			6.78E-01

Report To Sarah Copeland
APC GSC Building 8

Location APC Lab
Sample Number 103084007
Collection Date 4/20/2016 11:11:00 AM
Sampling Media Water
Station AW10366
Sample ID MW-12 Barry Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.29E-01
Ra-228	Ga Tech	pCi/L			6.66E-01

Report To Sarah Copeland
APC GSC Building 8

Location APC Lab
Sample Number 103084008
Collection Date 4/20/2016 12:11:00 PM
Sampling Media Water
Station AW10367
Sample ID MW-10 Barry Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.81E-01
Ra-228	Ga Tech	pCi/L			6.26E-01

Report To Sarah Copeland
APC GSC Building 8

Location APC Lab
Sample Number 103084009
Collection Date 4/20/2016 1:06:00 PM
Sampling Media Water
Station AW10368
Sample ID MW-9 Barry Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.54E-01
Ra-228	Ga Tech	pCi/L			7.15E-01

Report To Sarah Copeland
APC GSC Building 8

Location APC Lab
Sample Number 103084010
Collection Date 4/19/2016 3:36:00 PM
Sampling Media Water
Station AW10369
Sample ID MW-1 Barry Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L	1.14E+00	+/- 6.14E-01	
Ra-228	Ga Tech	pCi/L	1.88E+00	+/- 1.31E+00	

Report To Sarah Copeland
APC GSC Building 8

Location APC Lab
Sample Number 103084011
Collection Date 4/19/2016 3:36:00 PM
Sampling Media Water
Station AW10370
Sample ID MW-1 DUP Barry Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.96E-01
Ra-228	Ga Tech	pCi/L	1.67E+00	+/- 1.43E+00	

Report To Sarah Copeland
APC GSC Building 8

Location APC Lab
Sample Number 103084012
Collection Date 4/20/2016 9:56:00 AM
Sampling Media Water
Station AW10371
Sample ID MW-5 Barry Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L	1.01E+00	+/- 7.85E-01	
Ra-228	Ga Tech	pCi/L	2.07E+00	+/- 1.71E+00	

Report To Sarah Copeland
APC GSC Building 8

Location APC Lab
Sample Number 103084013
Collection Date 4/20/2016 10:16:00 AM
Sampling Media Water
Station AW10372
Sample ID FB-2 Field Blank Barry Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.46E-01
Ra-228	Ga Tech	pCi/L			6.23E-01

Report To Sarah Copeland
APC GSC Building 8

Location APC Lab
Sample Number 103084014
Collection Date 4/20/2016 11:41:00 AM
Sampling Media Water
Station AW10373
Sample ID MW-8 Barry Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.15E-01
Ra-228	Ga Tech	pCi/L	2.01E+00	+/- 1.10E+00	

Report To Sarah Copeland
APC GSC Building 8

Location APC Lab
Sample Number 103084015
Collection Date 4/20/2016 1:06:00 PM
Sampling Media Water
Station AW10374
Sample ID MW-7 Barry Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.99E-01
Ra-228	Ga Tech	pCi/L			6.92E-01

Report To Sarah Copeland
 APC GSC Building 8

Location APC Lab
 Sample Number 103084016
 Collection Date 4/19/2016 2:21:00 PM
 Sampling Media Water
 Station AW10375
 Sample ID MW-6 Barry 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			7.33E-01

Report To Sarah Copeland
APC GSC Building 8

Location APC Lab
Sample Number 103084017
Collection Date 4/19/2016 4:12:00 PM
Sampling Media Water
Station AW10376
Sample ID MW-15 Barry 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			6.95E-01

Georgia Power Environmental Laboratory
 2480 Maner Road, Bin 39110
 Atlanta, Georgia 30339
 Phone: (404) 799-2100
 Company: 8-530-2180

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY

Work Order No. 103084

Reviewed By: AL 4-28-16

12 Page 1 of 3

13 Standard Turnaround Time

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

Standard Turnaround Time
 # of Business Days (Rush)

Sample Shipment Date: 4/25/16
 Sampled By: N.P./J.P./C.S.
Print Name

Company: Alabama Power Company
 Report To: sgopela@southernco.com
 Address:

Signature
 Sample Received Date: 4/26/16 10:30
 Sample Received By: [Signature]
 Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise

Phone/Fax: 205-464-1424
 Contact: Sarah Copeland
 Project Location: Barny Ash Pond
 Account Number: 6
 Special Instructions: 7

PRESERVATIVE 21		Sample Type Key 22	
N	ANALYSIS REQUESTED 21	Sample Type Key 22	
		21	22
		6-Gap	1-Composite
		7-Dip	2-Composite
		8-Substrate Water	3-Substrate Water
		9-Substrate Water	4-Substrate Water
		10-Substrate Water	5-Substrate Water
		11-Substrate Water	6-Substrate Water
		12-Substrate Water	7-Substrate Water
		13-Substrate Water	8-Substrate Water
		14-Substrate Water	9-Substrate Water
		15-Substrate Water	10-Substrate Water
		16-Substrate Water	11-Substrate Water
		17-Substrate Water	12-Substrate Water
		18-Substrate Water	13-Substrate Water
		19-Substrate Water	14-Substrate Water
		20-Substrate Water	15-Substrate Water
		21-Substrate Water	16-Substrate Water
		22-Substrate Water	17-Substrate Water
		23-Substrate Water	18-Substrate Water
		24-Substrate Water	19-Substrate Water
		25-Substrate Water	20-Substrate Water
		26-Substrate Water	21-Substrate Water
		27-Substrate Water	22-Substrate Water
		28-Substrate Water	23-Substrate Water
		29-Substrate Water	24-Substrate Water
		30-Substrate Water	25-Substrate Water
		31-Substrate Water	26-Substrate Water
		32-Substrate Water	27-Substrate Water
		33-Substrate Water	28-Substrate Water
		34-Substrate Water	29-Substrate Water
		35-Substrate Water	30-Substrate Water
		36-Substrate Water	31-Substrate Water
		37-Substrate Water	32-Substrate Water
		38-Substrate Water	33-Substrate Water
		39-Substrate Water	34-Substrate Water
		40-Substrate Water	35-Substrate Water
		41-Substrate Water	36-Substrate Water
		42-Substrate Water	37-Substrate Water
		43-Substrate Water	38-Substrate Water
		44-Substrate Water	39-Substrate Water
		45-Substrate Water	40-Substrate Water
		46-Substrate Water	41-Substrate Water
		47-Substrate Water	42-Substrate Water
		48-Substrate Water	43-Substrate Water
		49-Substrate Water	44-Substrate Water
		50-Substrate Water	45-Substrate Water
		51-Substrate Water	46-Substrate Water
		52-Substrate Water	47-Substrate Water
		53-Substrate Water	48-Substrate Water
		54-Substrate Water	49-Substrate Water
		55-Substrate Water	50-Substrate Water
		56-Substrate Water	51-Substrate Water
		57-Substrate Water	52-Substrate Water
		58-Substrate Water	53-Substrate Water
		59-Substrate Water	54-Substrate Water
		60-Substrate Water	55-Substrate Water
		61-Substrate Water	56-Substrate Water
		62-Substrate Water	57-Substrate Water
		63-Substrate Water	58-Substrate Water
		64-Substrate Water	59-Substrate Water
		65-Substrate Water	60-Substrate Water
		66-Substrate Water	61-Substrate Water
		67-Substrate Water	62-Substrate Water
		68-Substrate Water	63-Substrate Water
		69-Substrate Water	64-Substrate Water
		70-Substrate Water	65-Substrate Water
		71-Substrate Water	66-Substrate Water
		72-Substrate Water	67-Substrate Water
		73-Substrate Water	68-Substrate Water
		74-Substrate Water	69-Substrate Water
		75-Substrate Water	70-Substrate Water
		76-Substrate Water	71-Substrate Water
		77-Substrate Water	72-Substrate Water
		78-Substrate Water	73-Substrate Water
		79-Substrate Water	74-Substrate Water
		80-Substrate Water	75-Substrate Water
		81-Substrate Water	76-Substrate Water
		82-Substrate Water	77-Substrate Water
		83-Substrate Water	78-Substrate Water
		84-Substrate Water	79-Substrate Water
		85-Substrate Water	80-Substrate Water
		86-Substrate Water	81-Substrate Water
		87-Substrate Water	82-Substrate Water
		88-Substrate Water	83-Substrate Water
		89-Substrate Water	84-Substrate Water
		90-Substrate Water	85-Substrate Water
		91-Substrate Water	86-Substrate Water
		92-Substrate Water	87-Substrate Water
		93-Substrate Water	88-Substrate Water
		94-Substrate Water	89-Substrate Water
		95-Substrate Water	90-Substrate Water
		96-Substrate Water	91-Substrate Water
		97-Substrate Water	92-Substrate Water
		98-Substrate Water	93-Substrate Water
		99-Substrate Water	94-Substrate Water
		100-Substrate Water	95-Substrate Water

LAB USE ONLY 14 LAB ID	Sample Number 15	Collection 16		Sample Description 17	Matrix 19	No. of Containers 20	Sample Type 18	LAB USE ONLY 24 Comments
		Date	Time					
	AW103100	4/19	1040	MW-4		2		
	AW103101	4/19	1301	MW-3		2		
	AW103102	4/19	1421	MW-2		2		
	AW103103	4/19	1520	FB-1 Field Blank		2		
	AW103104	4/19	1541	MW-10		2		
	AW103105	4/20	0950	MW-14		2		
	AW103106	4/20	1111	MW-12		2		
	AW103107	4/20	1211	MW-10		2		
	AW103108	4/20	1300	MW-9		2		
	AW103109	4/19	1530	MW-1		2		

FOR CHAIN OF CUSTODY USE ONLY 2
 Relinquished by: [Signature] Date/Time 4/20/16 0920
 Received by: [Signature] Date/Time 4/20/16 0920
 Relinquished by: [Signature] Date/Time
 Received by: [Signature] Date/Time

LAB USE ONLY: Sample Receipt Information 23
 22.00 (GATE-12-348), no ice, cooler in good condition, no seal
 PH2 by Cooper

Georgia Power Environmental Laboratory
 2480 Maner Road, Bin 39110
 Atlanta, Georgia 30338
 Phone: (404) 799-2100
 Company: 8-530-2100

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY

Work Order No. 103084
 Reviewed By: [Signature] 4-18-16

12 Page 2 of 3
 13 Standard Turnaround Time
 # of Business Days (Rush)
 (Must be cleared through Env. Lab. prior to shipment)

Sample Shipment Date: 4/25/16
 Sampled By: N.P. / T.P. / C.S.
 Print Name

Signature
 Sample Received Date: 4/25/16
 Sample Received By: [Signature]
 Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

Phone/Fax: 205-1014-1212-1
 Contact: Sarah Copeland
 Project Location: Barny Ash Pond
 Account Number: 6
 Special Instructions: 7

LAB USE ONLY LAB ID	Sample Number 15	Collection 16		Sample Description 17	Matrix	No. of Containers	Sample Type	18	19	20	PRESERVATIVE 21	ANALYSIS REQUESTED 22		Sample Type Ref: 23 E-Compant	LAB USE ONLY 24 Comments
		Date	Time									25	26		
	AW10370	4/19	1530	MW-1 DUP		1						X	X		103084011
	AW10371	4/20	0950	MW-5		2						X	X		
	AW10372	4/20	1010	FB-2 Field Blank		2						X	X		
	AW10373	4/20	1141	MW-8		2						X	X		
	AW10374	4/20	1300	MW-7		2						X	X		
	AW10375	4/19	1421	MW-10		2						X	X		
	AW10376	4/19	1612	MW-15		2						X	X		
	AW10377	4/19	1612	FD-1 Radiological DUP		2						X	X		
	AW10378	4/20	1028	MW-13		2						X	X		
	AW10379	4/20	1152	MW-11		2						X	X		

Relinquished by: [Signature] Date/Time: 4/26/16 0910
 Received by: [Signature] Date/Time: 4/25/16
 Relinquished by: AWT Date/Time: 4/25/16
 Received by: [Signature] Date/Time: 4/25/16

FOR CHAIN OF CUSTODY USE ONLY 27

LAB USE ONLY: Sample Receipt Information 30

LAB USE ONLY 25: 103084011

LAB USE ONLY 26: 103084011

LAB USE ONLY 27: 23.0°C (67°F) - 12-4P, no ice, cooling in good condition

LAB USE ONLY 28: no seal, PH 2.3, Carcin

Georgia Power Environmental Laboratory
 2480 Maner Road, Bin 38110
 Atlanta, Georgia 30339
 Phone: (404) 798-2100
 Company: 8-530-2100

**ANALYSIS REQUEST AND
 CHAIN OF CUSTODY RECORD**



Work Order No. 103054

Reviewed By: [Signature]

Page 3 of 3

Company: APC
 Report To: scapelo@sonnemo.com
 Address: 2

Sample Shipment Date: 4/25/16
 Sampled By: NP/SP/CS
Print Name

Phone/Fax: 205-16124-16121
 Contact: Swan Copeland
 Project Location: Barny Ash Pond
 Account Number: 6
 Special Instructions: 7

Signature [Signature]
 Sample Received Date: 4/26/16 @ 10:30
 Sample Received By: [Signature]
Authorization to subcontract analyses will be assumed acceptable by customer unless stated otherwise.

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

LAB USE ONLY LAB ID	Sample Number	Collection		Sample Description	Sample Type	Matrix	No. of Containers	PRESERVATIVE		LAB USE ONLY LAB USE ONLY 24 Comments
		Date	Time					21	22	
	AN10380	4/20	1152	MW-11 DWP			2	X	X	10305404
	AN10391	4/20	1320	EB-1 Equipment Blank			2	X	X	

Sample Type: N
 Matrix: 2
 No. of Containers: 2

FOR CHAIN OF CUSTODY USE ONLY 27
 Relinquished by: [Signature] Date/Time: 4/26/16 0920
 Received by: AB Date/Time: 4/25/16
 Relinquished by: [Signature] Date/Time: 4/25/16
 Received by: [Signature] Date/Time: 4/25/16

Sample Receipt Checklist



Client: APC Lab
 Workorder No.: 103084
 Carrier: COURIER

of Samples: 10
 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	8/19/16
Cooler temperature is acceptable	True	False
Cooler temperature is recorded	True	22
COC is present	True	
COC is filled out in ink and is legible	False	Missing matrix field and sample type.
COC is filled out with pertinent information	True	
The field sampler's name is on the COC	False	Only collector initials were provided on COC and sample container labels, samples were logged in based on contact information provided on COC.
Sample containers have legible labels	True	
Information on the sample label agrees with information on the COC	False	All samples are logged in based on the information provided on COC per customer request.
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	
Multiphase samples are not present	True	
Samples do not require splitting or compositing	True	

Receiving Narrative:



Jassim, Ayssar

Horizon #103084

From: Copeland, Sarah Garst
Sent: Tuesday, April 26, 2016 10:40 AM
To: Locke, Jolynn K.; Paxton, Cindy K.; Philpotts, Don K.; Jassim, Ayssar
Subject: Radiological Samples
Attachments: Barry Gypsum_Barry Ash Pond (2).pdf

Good morning,

I sent our next set of Radiological samples with the courier yesterday. Please find attached the COCs for these samples. You will notice on one of the COCs that there is only one bottle for MW-1 DUP, one of our bottles spilled during log-in.

Thanks and have a great day!

Sarah Copeland

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

Jassim, Ayssar

From: Davis, Dwight A.
Sent: Thursday, April 28, 2016 8:16 AM
To: Jassim, Ayssar; Sutton, Nick A.; Locke, Jolynn K.
Cc: Philpotts, Don K.; Dickerson, Robert S.
Subject: FW: Radium samples

FYI

From: Copeland, Sarah Garst
Sent: Wednesday, April 27, 2016 2:56 PM
To: Davis, Dwight A.
Subject: Radium samples

Hey Dwight,

I just spoke with Anne regarding confusion with the Radium samples we send you. We would like for you to use the sample ID (AWXXXXX) as your ID. It should be listed on all COCs. I can see where that would be confusing, but we use the AW as the ID and the bottom label as the sample description. Also, the discrepancy with the times is due to an issue we had with our electronic COCs. We had to adjust sample times on the Radium samples for two sets because it was overwriting the original samples. Don't worry about the difference, I put the time we have on our COC on the COCs I sent you all so everything would match. Just use the times listed on the COCs.

Please let me know if you have any further questions.

Thank you!

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

Workorder: 103083, 103084

QC Batch: 17014

Analysis Method: Ga Tech

QC Batch Method: Ga Tech

Associated Lab Samples: 103083013-014, 103084001-018

METHOD BLANK:

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Radium-226	pCi/l	<4.147E-01	1.0	
Radium-228	pCi/l	<6.809E-01	1.0	

Laboratory Control Sample:

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Radium-226	pCi/l	4.785	5.093	106	70-130	
Radium-228	pCi/l	4.961	5.473	110	70-130	

Laboratory Control Sample Duplicate:

Parameter	Units	RPD	Max RPD	Qualifiers
Radium-226	pCi/l	0.94	20	
Radium-228	pCi/l	7.9	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	



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

Field Complete
 Lab Complete

Lab ETA **04/21/2016 08:00**

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Angie Jimmerson	Requested By	Greg Dyer
Collector	Jason Rouss	Location	Barry Ash Pond
Analysis Requested	Radiological: RA-226, RA-228 (2) 2 L bottles		
Comments	Added one minute to collection times for all samples on 4/21/2016 1102 so that bottle labels differ from COC by that amount. Was done to allow for entry of sample information into LIMS and EDAS databases alongside samples from same location and well collected for metals, TDS, and anions analysis. JR. pH strips:4831-24377-20-4; 4826-24363-2-1; 4831-24379-20-6		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-1R	04/19/2016	15:36	2	Groundwater		4950-25063-10-3	0.5	AW10369
MW-1RDup	04/19/2016	15:36	2	Sample Duplicate		4950-25063-10-3	0.5	AW10370
MW-5R	04/20/2016	09:56	2	Groundwater		4950-25065-10-5	4.3	AW10371
FB-2R	04/20/2016	10:16	2	Groundwater		4950-25065-10-5	4.3	AW10372
MW-8R	04/20/2016	11:41	2	Groundwater		4950-25065-10-5	4.3	AW10373
MW-7R	04/20/2016	13:06	2	Groundwater		4950-25065-10-5	4.3	AW10374

Relinquished By	Received By	Date/Time
		04/21/2016 08:04

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



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

Field Complete
 Lab Complete

Lab ETA 04/20/2016 16:59

Requested Complete Date Routine
 Site Representative Angie Jimmerson
 Collector Clarence Specht

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

Analysis Requested Radiological: RA-226, RA-228 (2) 2 L bottles
 Comments RD1 Dup for MW-15R. AW10377 deleted-Ra QC only. AW10378-81 outsourced to Test America for analysis.
 Time is set to 2 minutes prior then time on label due to software issue
 3 different packs of pH strips were used: 4831-24377-20-4; 4826-24363-2-1; 4831-24379-20-6

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-6R	04/19/2016	14:21	2	Groundwater		4950-25066-10-6	1.0	AW10375
MW-15R	04/19/2016	16:12	2	Groundwater		4950-25066-10-6	1.0	AW10376
MW-13R	04/20/2016	10:28	2	Groundwater		4950-25064-10-4	1.5	AW10378
MW-11R	04/20/2016	11:52	2	Groundwater		4950-25064-10-4	1.5	AW10379
MW-11R-D	04/20/2016	11:52	2	Sample Duplicate		4950-25064-10-4	1.5	AW10380
EB-1R	04/20/2016	13:28	2	Equipment Blank		4950-25069-10-9	1.5	AW10381

Relinquished By	Received By	Date/Time
<i>C. Specht</i>	<i>Greg Dyer</i>	04/21/2016 08:14

SmarTroll ID 5141-26150-1-1	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID 4950-25070-10-10	
Thermometer ID 1506-3968-4-4	
	pH Strip ID see comments



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

Field Complete
 Lab Complete

Lab ETA 04/21/2016 12:00

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Angie Jimmerson	Requested By	Greg Dyer
Collector	Nick Pitts	Location	Barry Ash Pond

Analysis Requested	Radiological: RA-226, RA-228 (2) 2 L bottles
Comments	Added 1 minute to sample time on 4-21-16. 3 different packs of pH strips were used: 4831-24377-20-4; 4826-24363-2-1; 4831-24379-20-6

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-4 R	04/19/2016	10:46	2	Groundwater		4950-25069-10-9	1.5	AW10360
MW-3 R	04/19/2016	13:01	2	Groundwater		4950-25069-10-9	1.5	AW10361
MW-2 R	04/19/2016	14:21	2	Groundwater		4950-25069-10-9	1.5	AW10362
FB-1 R	04/19/2016	15:26	2	Field Blank		4950-25063-10-3	0.5	AW10363
MW-16 R	04/19/2016	15:41	2	Groundwater		4950-25063-10-3	0.5	AW10364
MW-14 R	04/20/2016	09:56	2	Groundwater		4950-25067-10-7	2.6	AW10365
MW-12 R	04/20/2016	11:11	2	Groundwater		4950-25067-10-7	2.6	AW10366
MW-10 R	04/20/2016	12:11	2	Groundwater		4950-25067-10-7	2.6	AW10367
MW-9 R	04/20/2016	13:06	2	Groundwater		4950-25067-10-7	2.6	AW10368

Relinquished By	Received By	Date/Time
<i>ASB</i>	<i>SDGA</i>	04/21/2016 08:08

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 see comments
Turbidity ID	4677-23343-4-2	

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 : WMWBARAP_28

Project/Site : Barry Ash Pond
Bucks, AL 36512

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

Barry Ash Pond

WMWBARG_28

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>
AW14650	567146	567149	567152	WMWBARAP_28
AW14651	567146	567149	567152	WMWBARAP_28
AW14652	567146	567149	567152	WMWBARAP_28
AW14653	567146	567149	567152	WMWBARAP_28
AW14654	567146	567149	567152	WMWBARAP_28
AW14655	567146	567149	567152	WMWBARAP_28
AW14656	567147	567150	567153	WMWBARAP_28
AW14657	567147	567150	567153	WMWBARAP_28
AW14658	567147	567150	567153	WMWBARAP_28
AW14659	567147	567150	567153	WMWBARAP_28
AW14660	567147	567150	567153	WMWBARAP_28
AW14661	567147	567150	567153	WMWBARAP_28
AW14662	567147	567150	567153	WMWBARAP_28
AW14663	567147	567150	567153	WMWBARAP_28
AW14664	567147	567150	567153	WMWBARAP_28
AW14665	567147	567150	567153	WMWBARAP_28
AW14666	567148	567151	567154	WMWBARAP_28
AW14667	567148	567151	567154	WMWBARAP_28
AW14668	567148	567151	567154	WMWBARAP_28
AW14669	567148	567151	567154	WMWBARAP_28
AW14670	567148	567151	567154	WMWBARAP_28

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 567152 presented a concentration above the MDL of 0.3 mg/L, at 0.483 mg/L. Batch samples AW14650 - AW14655, inclusive, presented sulfate concentrations above the MDL value but below 10x the blank result, and are qualified as quantitatively estimated with indication of potential high bias on the reported results.
 2. The blank for anion sulfate in batch 567153 presented a concentration above the MDL of 0.3 mg/L, at 0.482 mg/L. Batch samples AW14656 and AW14657, and samples AW14659 - AW14664, inclusive, presented sulfate concentrations above the MDL value but below 10x the blank result, and are qualified as quantitatively estimated with indication of potential high bias on the reported results.
 3. The blank for anion sulfate in batch 567154 presented a concentration above the MDL of 0.3 mg/L, at 0.483 mg/L. Batch sample AW14666, and samples AW14668- AW14670, inclusive, presented sulfate concentrations above the MDL value but below 10x the blank result, and are qualified as quantitatively estimated with indication of potential high bias on the reported results.
- 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 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 AW14656 and AW14670 were re-analyzed for chloride at a 10x dilution, due to the undiluted results exceeding the calibrated range of the detector. The dilution results for chloride 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>
AW14656		Chloride		10X
AW14670		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.



Metals ICP

Barry Ash Pond

WMWBARAP_28

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>
AW14650	20160628A	WMWBARAP_28
AW14651	20160628A	WMWBARAP_28
AW14652	20160628A	WMWBARAP_28
AW14653	20160628A	WMWBARAP_28
AW14654	20160628A	WMWBARAP_28
AW14655	20160628A	WMWBARAP_28
AW14656	20160628A	WMWBARAP_28
AW14657	20160628A	WMWBARAP_28
AW14658	20160628A	WMWBARAP_28
AW14659	20160628A	WMWBARAP_28
AW14660	20160628B_20160706	WMWBARAP_28
AW14661	20160628B_20160706	WMWBARAP_28
AW14662	20160628B_20160706	WMWBARAP_28
AW14663	20160628B_20160706	WMWBARAP_28
AW14664	20160628B_20160706	WMWBARAP_28
AW14665	20160628B_20160706	WMWBARAP_28
AW14666	20160628B_20160706	WMWBARAP_28
AW14667	20160628B_20160706	WMWBARAP_28
AW14668	20160628B_20160706	WMWBARAP_28
AW14669	20160628B_20160706	WMWBARAP_28
AW14670	20160628C	WMWBARAP_28

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 Calcium in batch 20160628B. All batch samples for Calcium were re-prepared, re-analyzed and reported from batch 20160706 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, with the exception of Calcium in batch 20160628B. All batch samples for Calcium were re-prepared, re-analyzed and reported in batch 20160706 with passing criteria.
- 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 sample was diluted due to sample concentration from the undiluted analysis were over the high standard of the calibration curve.

Sample ID	Analyte	Dilution Factor
Aw14666	Calcium	10.15x

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



Metals ICPMS

Barry Ash Pond

WMWBARG_28

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>
AW14650	567579	WMWBARAP_28
AW14651	567579	WMWBARAP_28
AW14652	567579	WMWBARAP_28
AW14653	567579	WMWBARAP_28
AW14654	567579	WMWBARAP_28
AW14655	567579	WMWBARAP_28
AW14656	567579	WMWBARAP_28
AW14657	567579	WMWBARAP_28
AW14658	567579	WMWBARAP_28
AW14659	567579	WMWBARAP_28
AW14660	567580	WMWBARAP_28
AW14661	567580	WMWBARAP_28
AW14662	567580	WMWBARAP_28
AW14663	567580	WMWBARAP_28
AW14664	567580	WMWBARAP_28
AW14665	567580	WMWBARAP_28
AW14666	567580	WMWBARAP_28
AW14667	567580	WMWBARAP_28
AW14668	567580	WMWBARAP_28
AW14669	567580	WMWBARAP_28
AW14670	567581	WMWBARAP_28

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. Sample AW14650 is now reported as Not Detected.

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

Barry Ash Pond

WMWBARAP_28

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>
AW14650	567764	WMWBARAP_28
AW14651	567764	WMWBARAP_28
AW14652	568141	WMWBARAP_28
AW14653	568141	WMWBARAP_28
AW14654	568141	WMWBARAP_28
AW14655	568141	WMWBARAP_28
AW14656	568141	WMWBARAP_28
AW14657	568141	WMWBARAP_28
AW14658	568141	WMWBARAP_28
AW14659	568141	WMWBARAP_28
AW14660	568141	WMWBARAP_28
AW14661	568141	WMWBARAP_28
AW14662	568232	WMWBARAP_28
AW14663	568232	WMWBARAP_28
AW14664	568232	WMWBARAP_28
AW14665	568232	WMWBARAP_28
AW14666	568232	WMWBARAP_28
AW14667	568232	WMWBARAP_28
AW14668	568232	WMWBARAP_28
AW14669	568232	WMWBARAP_28
AW14670	568232	WMWBARAP_28

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

Barry Ash Pond

WMWBARAP_28

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>
AW14650	567322	WMWBARAP_28
AW14651	567322	WMWBARAP_28
AW14652	567322	WMWBARAP_28
AW14653	567320	WMWBARAP_28
AW14654	567322	WMWBARAP_28
AW14655	567320	WMWBARAP_28
AW14656	567320	WMWBARAP_28
AW14657	567320	WMWBARAP_28
AW14658	567320	WMWBARAP_28
AW14659	567320	WMWBARAP_28
AW14660	567320	WMWBARAP_28
AW14661	567320	WMWBARAP_28
AW14662	567320	WMWBARAP_28
AW14663	567320	WMWBARAP_28
AW14664	567464	WMWBARAP_28
AW14665	567464	WMWBARAP_28
AW14666	567464	WMWBARAP_28
AW14667	567464	WMWBARAP_28
AW14668	567464	WMWBARAP_28
AW14669	567464	WMWBARAP_28
AW14670	567464	WMWBARAP_28

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. This has 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, with the exception of:

<u>Sample ID</u>	<u>Milligram Difference</u>
AW14654	1.2

Samples with a milligram difference of 1.0mg and above will be qualified. Samples with a milligram difference of less than 1.0mg 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 AW14658, AW14665 and AW14667 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: WMWBARAP
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AW14650

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/31/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	J 0.000869	mg/L
* Arsenic, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	0.0271	mg/L
* Beryllium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/28/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/28/2016	EPA 200.7		1.015	0.1	0.5	1.08	mg/L
* Cadmium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	J 0.00424	mg/L
* Chromium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	6/17/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/28/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	6/13/2016	SM 2540C		1		25	48.7	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		1	0.04	0.25	11.3	mg/L
* Fluoride, Total	SES	6/9/2016	EPA 300.0		1	0.01	0.3	J 0.047	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		1	0.3	1	2.58	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. SGC 1/26/17
 Cadmium MDL was increased from 0.0001 to 0.0002. The result for Cd has been correctly changed to Not Detected. SGC 3/17/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AW14650

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	Spike				Limit	Rec	Limit	Prec			
AW14659 Beryllium, Total	mg/L	0.0000504	0.00132	0.10	0.119	0.118	0.103	0.085 to 0.115		119	70 to 130		1.25	20
AW14659 Thallium, Total	mg/L	0.00000564	0.00044	0.10	0.0986	0.102	0.0978	0.085 to 0.115		98.6	70 to 130		3.07	20
AW14659 Antimony, Total	mg/L	0.000276	0.00132	0.10	0.0911	0.0939	0.0890	0.085 to 0.115		91.1	70 to 130		3.06	20
AW14659 Arsenic, Total	mg/L	0.0000114	0.0022	0.10	0.128	0.131	0.0966	0.085 to 0.115		97.2	70 to 130		2.46	20
AW14659 Barium, Total	mg/L	0.00000389	0.0044	0.10	0.239	0.248	0.0942	0.085 to 0.115		98.0	70 to 130		3.79	20
AW14659 Lead, Total	mg/L	0.00000171	0.0022	0.10	0.0992	0.102	0.0977	0.085 to 0.115		99.2	70 to 130		2.64	20
AW14659 Cadmium, Total	mg/L	0.00000304	0.00044	0.10	0.0991	0.101	0.0970	0.085 to 0.115		99.1	70 to 130		2.19	20
AW14659 Molybdenum, Total	mg/L	0.0000395	0.0044	0.10	0.0984	0.101	0.0940	0.085 to 0.115		98.4	70 to 130		2.50	20
AW14659 Boron, Total	mg/L	0.00444	0.044	1.00	1.06	1.10	1.02	0.85 to 1.15		100	70 to 130		3.70	20
AW14659 Cobalt, Total	mg/L	0.00000182	0.0044	0.10	0.102	0.103	0.0962	0.085 to 0.115		102	70 to 130		1.18	20
AW14659 Lithium, Total	mg/L	0.000295	0.022	0.20	0.209	0.212	0.190	0.17 to 0.23		104	70 to 130		1.43	20
AW14659 Selenium, Total	mg/L	0.0000768	0.0044	0.10	0.101	0.102	0.0991	0.085 to 0.115		101	70 to 130		0.579	20
AW14651 Mercury, Total by CVAA	mg/L	0.00006	0.0005	0.004	0.00398	0.00402	0.00395	0.0034 to 0.0046		99.5	70 to 130		1.00	20
AW14659 Calcium, Total	mg/L	0.0259	0.22	5.00	19.5	19.5	4.79	4.25 to 5.75		94.0	70 to 130		0.00	20
AW14659 Chromium, Total	mg/L	0.0000174	0.0044	0.10	0.0981	0.101	0.0960	0.085 to 0.115		98.1	70 to 130		2.94	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. The result for Cd has been correctly changed 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: WMWBARAP
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AW14650

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW14655	Chloride, Total	mg/L	0.000	0.25	10.00	25.2		15.1	9.87	9 to 11	101	80 to 120	0.00	20
AW14654	Solids, Dissolved	mg/L	5.0	25				465	56	40 to 60			0.432	5
AW14655	Sulfate, Total	mg/L	0.483	1.0	20.00	20.3		0.513	19.8	18 to 22	98.9	80 to 120	0.195	20
AW14655	Fluoride, Total	mg/L	0.000	0.3	2.00	2.05		0.073	2.00	1.8 to 2.2	98.8	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: 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 correctly changed to Not Detected. SGC 3/17/17

CC:

Reported: 7/27/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AW14651

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/31/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	J 0.000606	mg/L
* Arsenic, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	0.0318	mg/L
* Beryllium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/28/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/28/2016	EPA 200.7		1.015	0.1	0.5	1.06	mg/L
* Cadmium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	6/17/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/28/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	6/13/2016	SM 2540C		1		25	44.0	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		1	0.04	0.25	7.70	mg/L
* Fluoride, Total	SES	6/9/2016	EPA 300.0		1	0.01	0.3	J 0.049	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		1	0.3	1	1.00	mg/L

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Laboratory certification ID: E571114

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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: WMWBARAP
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AW14651

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	Spike				Limit	Rec	Limit	Prec			
AW14659 Beryllium, Total	mg/L	0.0000504	0.00132	0.10	0.119	0.118	0.103	0.085 to 0.115		119	70 to 130		1.25	20
AW14659 Thallium, Total	mg/L	0.00000564	0.00044	0.10	0.0986	0.102	0.0978	0.085 to 0.115		98.6	70 to 130		3.07	20
AW14659 Antimony, Total	mg/L	0.000276	0.00132	0.10	0.0911	0.0939	0.0890	0.085 to 0.115		91.1	70 to 130		3.06	20
AW14659 Arsenic, Total	mg/L	0.0000114	0.0022	0.10	0.128	0.131	0.0966	0.085 to 0.115		97.2	70 to 130		2.46	20
AW14659 Barium, Total	mg/L	0.00000389	0.0044	0.10	0.239	0.248	0.0942	0.085 to 0.115		98.0	70 to 130		3.79	20
AW14659 Lead, Total	mg/L	0.00000171	0.0022	0.10	0.0992	0.102	0.0977	0.085 to 0.115		99.2	70 to 130		2.64	20
AW14659 Cadmium, Total	mg/L	0.00000304	0.00044	0.10	0.0991	0.101	0.0970	0.085 to 0.115		99.1	70 to 130		2.19	20
AW14659 Molybdenum, Total	mg/L	0.0000395	0.0044	0.10	0.0984	0.101	0.0940	0.085 to 0.115		98.4	70 to 130		2.50	20
AW14659 Boron, Total	mg/L	0.00444	0.044	1.00	1.06	1.10	1.02	0.85 to 1.15		100	70 to 130		3.70	20
AW14659 Cobalt, Total	mg/L	0.00000182	0.0044	0.10	0.102	0.103	0.0962	0.085 to 0.115		102	70 to 130		1.18	20
AW14659 Lithium, Total	mg/L	0.000295	0.022	0.20	0.209	0.212	0.190	0.17 to 0.23		104	70 to 130		1.43	20
AW14659 Selenium, Total	mg/L	0.0000768	0.0044	0.10	0.101	0.102	0.0991	0.085 to 0.115		101	70 to 130		0.579	20
AW14651 Mercury, Total by CVAA	mg/L	0.00006	0.0005	0.004	0.00398	0.00402	0.00395	0.0034 to 0.0046		99.5	70 to 130		1.00	20
AW14659 Calcium, Total	mg/L	0.0259	0.22	5.00	19.5	19.5	4.79	4.25 to 5.75		94.0	70 to 130		0.00	20
AW14659 Chromium, Total	mg/L	0.0000174	0.0044	0.10	0.0981	0.101	0.0960	0.085 to 0.115		98.1	70 to 130		2.94	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: WMWBARAP
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AW14651

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW14655	Fluoride, Total	mg/L	0.000	0.3	2.00	2.05	0.073	2.00	1.8 to 2.2	98.8	80 to 120	0.00	20
AW14655	Sulfate, Total	mg/L	0.483	1.0	20.00	20.3	0.513	19.8	18 to 22	98.9	80 to 120	0.195	20
AW14655	Chloride, Total	mg/L	0.000	0.25	10.00	25.2	15.1	9.87	9 to 11	101	80 to 120	0.00	20
AW14654	Solids, Dissolved	mg/L	5.0	25			465	56	40 to 60			0.432	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: 7/27/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AW14652

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/31/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	J 0.00230	mg/L
* Barium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	0.0248	mg/L
* Beryllium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/28/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/28/2016	EPA 200.7		1.015	0.1	0.5	3.17	mg/L
* Cadmium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	J 0.00796	mg/L
* Chromium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	6/23/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/28/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	6/13/2016	SM 2540C		1		25	46.7	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		1	0.04	0.25	6.20	mg/L
* Fluoride, Total	SES	6/9/2016	EPA 300.0		1	0.01	0.3	J 0.067	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		1	0.3	1	1.10	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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AW14652

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW14659 Beryllium, Total	mg/L	0.0000504	0.00132	0.10	0.119	0.118	0.103	0.085 to 0.115	119	70 to 130	1.25	20	
AW14659 Thallium, Total	mg/L	0.00000564	0.00044	0.10	0.0986	0.102	0.0978	0.085 to 0.115	98.6	70 to 130	3.07	20	
AW14659 Cadmium, Total	mg/L	0.00000304	0.00044	0.10	0.0991	0.101	0.0970	0.085 to 0.115	99.1	70 to 130	2.19	20	
AW14659 Molybdenum, Total	mg/L	0.0000395	0.0044	0.10	0.0984	0.101	0.0940	0.085 to 0.115	98.4	70 to 130	2.50	20	
AW14659 Calcium, Total	mg/L	0.0259	0.22	5.00	19.5	19.5	4.79	4.25 to 5.75	94.0	70 to 130	0.00	20	
AW14659 Chromium, Total	mg/L	0.0000174	0.0044	0.10	0.0981	0.101	0.0960	0.085 to 0.115	98.1	70 to 130	2.94	20	
AW14659 Boron, Total	mg/L	0.00444	0.044	1.00	1.06	1.10	1.02	0.85 to 1.15	100	70 to 130	3.70	20	
AW14659 Cobalt, Total	mg/L	0.00000182	0.0044	0.10	0.102	0.103	0.0962	0.085 to 0.115	102	70 to 130	1.18	20	
AW14659 Lithium, Total	mg/L	0.000295	0.022	0.20	0.209	0.212	0.190	0.17 to 0.23	104	70 to 130	1.43	20	
AW14659 Selenium, Total	mg/L	0.0000768	0.0044	0.10	0.101	0.102	0.0991	0.085 to 0.115	101	70 to 130	0.579	20	
AW14661 Mercury, Total by CVAA	mg/L	0.0000686	0.0005	0.004	0.00406	0.00395	0.00400	0.0034 to 0.0046	102	70 to 130	2.75	20	
AW14659 Antimony, Total	mg/L	0.000276	0.00132	0.10	0.0911	0.0939	0.0890	0.085 to 0.115	91.1	70 to 130	3.06	20	
AW14659 Arsenic, Total	mg/L	0.0000114	0.0022	0.10	0.128	0.131	0.0966	0.085 to 0.115	97.2	70 to 130	2.46	20	
AW14659 Barium, Total	mg/L	0.00000389	0.0044	0.10	0.239	0.248	0.0942	0.085 to 0.115	98.0	70 to 130	3.79	20	
AW14659 Lead, Total	mg/L	0.00000171	0.0022	0.10	0.0992	0.102	0.0977	0.085 to 0.115	99.2	70 to 130	2.64	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: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AW14652

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample		LFB Limit	Rec		Prec Limit	
							Duplicate	LFB		Rec	Limit		
AW14655	Fluoride, Total	mg/L	0.000	0.3	2.00	2.05	0.073	2.00	1.8 to 2.2	98.8	80 to 120	0.00	20
AW14655	Chloride, Total	mg/L	0.000	0.25	10.00	25.2	15.1	9.87	9 to 11	101	80 to 120	0.00	20
AW14654	Solids, Dissolved	mg/L	5.0	25			465	56	40 to 60			0.432	5
AW14655	Sulfate, Total	mg/L	0.483	1.0	20.00	20.3	0.513	19.8	18 to 22	98.9	80 to 120	0.195	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: 7/27/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-2 Dup

Laboratory ID Number: AW14653

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/31/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	J 0.00221	mg/L
* Barium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	0.0258	mg/L
* Beryllium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/28/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/28/2016	EPA 200.7		1.015	0.1	0.5	3.15	mg/L
* Cadmium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	J 0.00821	mg/L
* Chromium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	6/23/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/28/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	6/13/2016	SM 2540C		1		25	48.0	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		1	0.04	0.25	6.17	mg/L
* Fluoride, Total	SES	6/9/2016	EPA 300.0		1	0.01	0.3	J 0.067	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		1	0.3	1	1.14	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: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-2 Dup

Laboratory ID Number: AW14653

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW14659 Thallium, Total	mg/L	0.00000564	0.00044	0.10	0.0986	0.102	0.0978	0.085 to 0.115	98.6	70 to 130	3.07	20	
AW14659 Beryllium, Total	mg/L	0.0000504	0.00132	0.10	0.119	0.118	0.103	0.085 to 0.115	119	70 to 130	1.25	20	
AW14659 Calcium, Total	mg/L	0.0259	0.22	5.00	19.5	19.5	4.79	4.25 to 5.75	94.0	70 to 130	0.00	20	
AW14659 Chromium, Total	mg/L	0.0000174	0.0044	0.10	0.0981	0.101	0.0960	0.085 to 0.115	98.1	70 to 130	2.94	20	
AW14659 Boron, Total	mg/L	0.00444	0.044	1.00	1.06	1.10	1.02	0.85 to 1.15	100	70 to 130	3.70	20	
AW14659 Cobalt, Total	mg/L	0.00000182	0.0044	0.10	0.102	0.103	0.0962	0.085 to 0.115	102	70 to 130	1.18	20	
AW14659 Lithium, Total	mg/L	0.000295	0.022	0.20	0.209	0.212	0.190	0.17 to 0.23	104	70 to 130	1.43	20	
AW14659 Selenium, Total	mg/L	0.0000768	0.0044	0.10	0.101	0.102	0.0991	0.085 to 0.115	101	70 to 130	0.579	20	
AW14661 Mercury, Total by CVAA	mg/L	0.0000686	0.0005	0.004	0.00406	0.00395	0.00400	0.0034 to 0.0046	102	70 to 130	2.75	20	
AW14659 Cadmium, Total	mg/L	0.00000304	0.00044	0.10	0.0991	0.101	0.0970	0.085 to 0.115	99.1	70 to 130	2.19	20	
AW14659 Molybdenum, Total	mg/L	0.0000395	0.0044	0.10	0.0984	0.101	0.0940	0.085 to 0.115	98.4	70 to 130	2.50	20	
AW14659 Antimony, Total	mg/L	0.000276	0.00132	0.10	0.0911	0.0939	0.0890	0.085 to 0.115	91.1	70 to 130	3.06	20	
AW14659 Arsenic, Total	mg/L	0.0000114	0.0022	0.10	0.128	0.131	0.0966	0.085 to 0.115	97.2	70 to 130	2.46	20	
AW14659 Barium, Total	mg/L	0.00000389	0.0044	0.10	0.239	0.248	0.0942	0.085 to 0.115	98.0	70 to 130	3.79	20	
AW14659 Lead, Total	mg/L	0.00000171	0.0022	0.10	0.0992	0.102	0.0977	0.085 to 0.115	99.2	70 to 130	2.64	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: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-2 Dup

Laboratory ID Number: AW14653

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW14655	Fluoride, Total	mg/L	0.000	0.3	2.00	2.05	0.073	2.00	1.8 to 2.2	98.8	80 to 120	0.00	20
AW14655	Sulfate, Total	mg/L	0.483	1.0	20.00	20.3	0.513	19.8	18 to 22	98.9	80 to 120	0.195	20
AW14655	Chloride, Total	mg/L	0.000	0.25	10.00	25.2	15.1	9.87	9 to 11	101	80 to 120	0.00	20
AW14659	Solids, Dissolved	mg/L	2.0	25			277	58	40 to 60			0.911	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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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/27/2017
 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: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AW14654

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/31/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	0.0605	mg/L
* Barium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	0.274	mg/L
* Beryllium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/28/2016	EPA 200.7		1.015	0.02	0.1	1.61	mg/L
* Calcium, Total	HRG	6/28/2016	EPA 200.7		1.015	0.1	0.5	33.5	mg/L
* Cadmium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	J 0.00264	mg/L
* Mercury, Total by CVAA	MCW	6/23/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/28/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	6/13/2016	SM 2540C		1		25	461	mg/L
* Chloride, Total	SES	6/15/2016	EPA 300.0		10	0.40	2.50	21.0	mg/L
* Fluoride, Total	SES	6/9/2016	EPA 300.0		1	0.01	0.3	J 0.069	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		1	0.3	1	J 0.556	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
 The difference between the last two consecutive final weights for TDS resulted in 1.2mg, which is above the required 0.5mg limit.

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AW14654

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	Spike				Limit	Rec	Limit	Prec			
AW14659 Beryllium, Total	mg/L	0.0000504	0.00132	0.10	0.119	0.118	0.103	0.085 to 0.115		119	70 to 130		1.25	20
AW14659 Thallium, Total	mg/L	0.00000564	0.00044	0.10	0.0986	0.102	0.0978	0.085 to 0.115		98.6	70 to 130		3.07	20
AW14659 Antimony, Total	mg/L	0.000276	0.00132	0.10	0.0911	0.0939	0.0890	0.085 to 0.115		91.1	70 to 130		3.06	20
AW14659 Arsenic, Total	mg/L	0.0000114	0.0022	0.10	0.128	0.131	0.0966	0.085 to 0.115		97.2	70 to 130		2.46	20
AW14659 Barium, Total	mg/L	0.00000389	0.0044	0.10	0.239	0.248	0.0942	0.085 to 0.115		98.0	70 to 130		3.79	20
AW14659 Lead, Total	mg/L	0.00000171	0.0022	0.10	0.0992	0.102	0.0977	0.085 to 0.115		99.2	70 to 130		2.64	20
AW14659 Cadmium, Total	mg/L	0.00000304	0.00044	0.10	0.0991	0.101	0.0970	0.085 to 0.115		99.1	70 to 130		2.19	20
AW14659 Molybdenum, Total	mg/L	0.0000395	0.0044	0.10	0.0984	0.101	0.0940	0.085 to 0.115		98.4	70 to 130		2.50	20
AW14659 Calcium, Total	mg/L	0.0259	0.22	5.00	19.5	19.5	4.79	4.25 to 5.75		94.0	70 to 130		0.00	20
AW14659 Chromium, Total	mg/L	0.0000174	0.0044	0.10	0.0981	0.101	0.0960	0.085 to 0.115		98.1	70 to 130		2.94	20
AW14659 Boron, Total	mg/L	0.00444	0.044	1.00	1.06	1.10	1.02	0.85 to 1.15		100	70 to 130		3.70	20
AW14659 Cobalt, Total	mg/L	0.00000182	0.0044	0.10	0.102	0.103	0.0962	0.085 to 0.115		102	70 to 130		1.18	20
AW14659 Lithium, Total	mg/L	0.000295	0.022	0.20	0.209	0.212	0.190	0.17 to 0.23		104	70 to 130		1.43	20
AW14659 Selenium, Total	mg/L	0.0000768	0.0044	0.10	0.101	0.102	0.0991	0.085 to 0.115		101	70 to 130		0.579	20
AW14661 Mercury, Total by CVAA	mg/L	0.0000686	0.0005	0.004	0.00406	0.00395	0.00400	0.0034 to 0.0046		102	70 to 130		2.75	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
 The difference between the last two consecutive final weights for TDS resulted in 1.2mg, 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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AW14654

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW14655	Chloride, Total	mg/L	0.000	0.25	10.00	25.2	15.1	9.87	9 to 11	101	80 to 120	0.00	20
AW14654	Solids, Dissolved	mg/L	5.0	25			465	56	40 to 60			0.432	5
AW14655	Sulfate, Total	mg/L	0.483	1.0	20.00	20.3	0.513	19.8	18 to 22	98.9	80 to 120	0.195	20
AW14655	Fluoride, Total	mg/L	0.000	0.3	2.00	2.05	0.073	2.00	1.8 to 2.2	98.8	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

Certificate Of Analysis  **Alabama Power**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AW14655

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/31/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	0.0105	mg/L
* Barium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	0.0798	mg/L
* Beryllium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/28/2016	EPA 200.7		1.015	0.02	0.1	1.70	mg/L
* Calcium, Total	HRG	6/28/2016	EPA 200.7		1.015	0.1	0.5	13.2	mg/L
* Cadmium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	0.0176	mg/L
* Chromium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	6/23/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/28/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	6/13/2016	SM 2540C		1		25	285	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		1	0.04	0.25	15.1	mg/L
* Fluoride, Total	SES	6/9/2016	EPA 300.0		1	0.01	0.3	J 0.073	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		1	0.3	1	J 0.514	mg/L

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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: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AW14655

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	Spike				Limit	Rec	Limit	Prec			
AW14659 Beryllium, Total	mg/L	0.0000504	0.00132	0.10	0.119	0.118	0.103	0.085 to 0.115		119	70 to 130		1.25	20
AW14659 Thallium, Total	mg/L	0.00000564	0.00044	0.10	0.0986	0.102	0.0978	0.085 to 0.115		98.6	70 to 130		3.07	20
AW14659 Antimony, Total	mg/L	0.000276	0.00132	0.10	0.0911	0.0939	0.0890	0.085 to 0.115		91.1	70 to 130		3.06	20
AW14659 Arsenic, Total	mg/L	0.0000114	0.0022	0.10	0.128	0.131	0.0966	0.085 to 0.115		97.2	70 to 130		2.46	20
AW14659 Barium, Total	mg/L	0.00000389	0.0044	0.10	0.239	0.248	0.0942	0.085 to 0.115		98.0	70 to 130		3.79	20
AW14659 Lead, Total	mg/L	0.00000171	0.0022	0.10	0.0992	0.102	0.0977	0.085 to 0.115		99.2	70 to 130		2.64	20
AW14659 Calcium, Total	mg/L	0.0259	0.22	5.00	19.5	19.5	4.79	4.25 to 5.75		94.0	70 to 130		0.00	20
AW14659 Chromium, Total	mg/L	0.0000174	0.0044	0.10	0.0981	0.101	0.0960	0.085 to 0.115		98.1	70 to 130		2.94	20
AW14659 Boron, Total	mg/L	0.00444	0.044	1.00	1.06	1.10	1.02	0.85 to 1.15		100	70 to 130		3.70	20
AW14659 Cobalt, Total	mg/L	0.00000182	0.0044	0.10	0.102	0.103	0.0962	0.085 to 0.115		102	70 to 130		1.18	20
AW14659 Lithium, Total	mg/L	0.000295	0.022	0.20	0.209	0.212	0.190	0.17 to 0.23		104	70 to 130		1.43	20
AW14659 Selenium, Total	mg/L	0.0000768	0.0044	0.10	0.101	0.102	0.0991	0.085 to 0.115		101	70 to 130		0.579	20
AW14661 Mercury, Total by CVAA	mg/L	0.0000686	0.0005	0.004	0.00406	0.00395	0.00400	0.0034 to 0.0046		102	70 to 130		2.75	20
AW14659 Cadmium, Total	mg/L	0.00000304	0.00044	0.10	0.0991	0.101	0.0970	0.085 to 0.115		99.1	70 to 130		2.19	20
AW14659 Molybdenum, Total	mg/L	0.0000395	0.0044	0.10	0.0984	0.101	0.0940	0.085 to 0.115		98.4	70 to 130		2.50	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: 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: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AW14655

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
			Limit	Limit			Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW14655	Fluoride, Total	mg/L	0.000	0.3	2.00	2.05	0.073	2.00	1.8 to 2.2	98.8	80 to 120	0.00	20
AW14655	Sulfate, Total	mg/L	0.483	1.0	20.00	20.3	0.513	19.8	18 to 22	98.9	80 to 120	0.195	20
AW14655	Chloride, Total	mg/L	0.000	0.25	10.00	25.2	15.1	9.87	9 to 11	101	80 to 120	0.00	20
AW14659	Solids, Dissolved	mg/L	2.0	25			277	58	40 to 60			0.911	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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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: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AW14656

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/31/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	0.0119	mg/L
* Barium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	0.0627	mg/L
* Beryllium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/28/2016	EPA 200.7		1.015	0.02	0.1	J 0.0593	mg/L
* Calcium, Total	HRG	6/28/2016	EPA 200.7		1.015	0.1	0.5	13.1	mg/L
* Cadmium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	J 0.00492	mg/L
* Mercury, Total by CVAA	MCW	6/23/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/28/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	6/13/2016	SM 2540C		1		25	353	mg/L
* Chloride, Total	SES	6/10/2016	EPA 300.0		10	0.40	2.50	43.8	mg/L
* Fluoride, Total	SES	6/9/2016	EPA 300.0		1	0.01	0.3	J 0.105	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		1	0.3	1	J 0.514	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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AW14656

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW14659 Beryllium, Total	mg/L	0.0000504	0.00132	0.10	0.119	0.118	0.103	0.085 to 0.115	119	70 to 130	1.25	20	
AW14659 Thallium, Total	mg/L	0.00000564	0.00044	0.10	0.0986	0.102	0.0978	0.085 to 0.115	98.6	70 to 130	3.07	20	
AW14659 Cadmium, Total	mg/L	0.00000304	0.00044	0.10	0.0991	0.101	0.0970	0.085 to 0.115	99.1	70 to 130	2.19	20	
AW14659 Molybdenum, Total	mg/L	0.0000395	0.0044	0.10	0.0984	0.101	0.0940	0.085 to 0.115	98.4	70 to 130	2.50	20	
AW14659 Calcium, Total	mg/L	0.0259	0.22	5.00	19.5	19.5	4.79	4.25 to 5.75	94.0	70 to 130	0.00	20	
AW14659 Chromium, Total	mg/L	0.0000174	0.0044	0.10	0.0981	0.101	0.0960	0.085 to 0.115	98.1	70 to 130	2.94	20	
AW14659 Boron, Total	mg/L	0.00444	0.044	1.00	1.06	1.10	1.02	0.85 to 1.15	100	70 to 130	3.70	20	
AW14659 Cobalt, Total	mg/L	0.00000182	0.0044	0.10	0.102	0.103	0.0962	0.085 to 0.115	102	70 to 130	1.18	20	
AW14659 Lithium, Total	mg/L	0.000295	0.022	0.20	0.209	0.212	0.190	0.17 to 0.23	104	70 to 130	1.43	20	
AW14659 Selenium, Total	mg/L	0.0000768	0.0044	0.10	0.101	0.102	0.0991	0.085 to 0.115	101	70 to 130	0.579	20	
AW14661 Mercury, Total by CVAA	mg/L	0.0000686	0.0005	0.004	0.00406	0.00395	0.00400	0.0034 to 0.0046	102	70 to 130	2.75	20	
AW14659 Antimony, Total	mg/L	0.000276	0.00132	0.10	0.0911	0.0939	0.0890	0.085 to 0.115	91.1	70 to 130	3.06	20	
AW14659 Arsenic, Total	mg/L	0.0000114	0.0022	0.10	0.128	0.131	0.0966	0.085 to 0.115	97.2	70 to 130	2.46	20	
AW14659 Barium, Total	mg/L	0.00000389	0.0044	0.10	0.239	0.248	0.0942	0.085 to 0.115	98.0	70 to 130	3.79	20	
AW14659 Lead, Total	mg/L	0.00000171	0.0022	0.10	0.0992	0.102	0.0977	0.085 to 0.115	99.2	70 to 130	2.64	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
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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: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AW14656

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec			
			Limit	Limit			Duplicate	LFB	Limit	Limit			
AW14665	Chloride, Total	mg/L	0.000	0.25	10.00	9.97	0.000	9.88	9 to 11	99.7	80 to 120	0	20
AW14659	Solids, Dissolved	mg/L	2.0	25			277	58	40 to 60			0.911	5
AW14665	Fluoride, Total	mg/L	0.000	0.3	2.00	2.03	0.000	2.02	1.8 to 2.2	102	80 to 120	0	20
AW14665	Sulfate, Total	mg/L	0.482	1.0	20.00	20.3	0.000	20.0	18 to 22	102	80 to 120	0	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: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AW14657

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/31/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	0.0168	mg/L
* Barium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	0.0465	mg/L
* Beryllium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/28/2016	EPA 200.7		1.015	0.02	0.1	J 0.0592	mg/L
* Calcium, Total	HRG	6/28/2016	EPA 200.7		1.015	0.1	0.5	6.36	mg/L
* Cadmium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	0.0293	mg/L
* Chromium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	6/23/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/28/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	6/13/2016	SM 2540C		1		25	168	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		1	0.04	0.25	24.0	mg/L
* Fluoride, Total	SES	6/9/2016	EPA 300.0		1	0.01	0.3	J 0.223	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		1	0.3	1	J 0.489	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: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AW14657

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW14659 Thallium, Total	mg/L	0.00000564	0.00044	0.10	0.0986	0.102	0.0978	0.085 to 0.115	98.6	70 to 130	3.07	20	
AW14659 Beryllium, Total	mg/L	0.0000504	0.00132	0.10	0.119	0.118	0.103	0.085 to 0.115	119	70 to 130	1.25	20	
AW14659 Cadmium, Total	mg/L	0.00000304	0.00044	0.10	0.0991	0.101	0.0970	0.085 to 0.115	99.1	70 to 130	2.19	20	
AW14659 Molybdenum, Total	mg/L	0.0000395	0.0044	0.10	0.0984	0.101	0.0940	0.085 to 0.115	98.4	70 to 130	2.50	20	
AW14659 Calcium, Total	mg/L	0.0259	0.22	5.00	19.5	19.5	4.79	4.25 to 5.75	94.0	70 to 130	0.00	20	
AW14659 Chromium, Total	mg/L	0.0000174	0.0044	0.10	0.0981	0.101	0.0960	0.085 to 0.115	98.1	70 to 130	2.94	20	
AW14659 Antimony, Total	mg/L	0.000276	0.00132	0.10	0.0911	0.0939	0.0890	0.085 to 0.115	91.1	70 to 130	3.06	20	
AW14659 Arsenic, Total	mg/L	0.0000114	0.0022	0.10	0.128	0.131	0.0966	0.085 to 0.115	97.2	70 to 130	2.46	20	
AW14659 Barium, Total	mg/L	0.00000389	0.0044	0.10	0.239	0.248	0.0942	0.085 to 0.115	98.0	70 to 130	3.79	20	
AW14659 Lead, Total	mg/L	0.00000171	0.0022	0.10	0.0992	0.102	0.0977	0.085 to 0.115	99.2	70 to 130	2.64	20	
AW14659 Boron, Total	mg/L	0.00444	0.044	1.00	1.06	1.10	1.02	0.85 to 1.15	100	70 to 130	3.70	20	
AW14659 Cobalt, Total	mg/L	0.00000182	0.0044	0.10	0.102	0.103	0.0962	0.085 to 0.115	102	70 to 130	1.18	20	
AW14659 Lithium, Total	mg/L	0.000295	0.022	0.20	0.209	0.212	0.190	0.17 to 0.23	104	70 to 130	1.43	20	
AW14659 Selenium, Total	mg/L	0.0000768	0.0044	0.10	0.101	0.102	0.0991	0.085 to 0.115	101	70 to 130	0.579	20	
AW14661 Mercury, Total by CVAA	mg/L	0.0000686	0.0005	0.004	0.00406	0.00395	0.00400	0.0034 to 0.0046	102	70 to 130	2.75	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: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AW14657

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW14665	Chloride, Total	mg/L	0.000	0.25	10.00	9.97	0.000	9.88	9 to 11	99.7	80 to 120	0	20
AW14659	Solids, Dissolved	mg/L	2.0	25			277	58	40 to 60			0.911	5
AW14665	Fluoride, Total	mg/L	0.000	0.3	2.00	2.03	0.000	2.02	1.8 to 2.2	102	80 to 120	0	20
AW14665	Sulfate, Total	mg/L	0.482	1.0	20.00	20.3	0.000	20.0	18 to 22	102	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

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

CC:

Reported: 7/27/2017
 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: WMWBARAPFB
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW14658

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/31/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/28/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/28/2016	EPA 200.7		1.015	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	6/23/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/28/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	6/13/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	6/10/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	6/10/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	6/10/2016	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

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAPFB
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW14658

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW14659 Beryllium, Total	mg/L	0.0000504	0.00132	0.10	0.119	0.118	0.103	0.085 to 0.115	119	70 to 130	1.25	20	
AW14659 Thallium, Total	mg/L	0.00000564	0.00044	0.10	0.0986	0.102	0.0978	0.085 to 0.115	98.6	70 to 130	3.07	20	
AW14659 Cadmium, Total	mg/L	0.00000304	0.00044	0.10	0.0991	0.101	0.0970	0.085 to 0.115	99.1	70 to 130	2.19	20	
AW14659 Molybdenum, Total	mg/L	0.0000395	0.0044	0.10	0.0984	0.101	0.0940	0.085 to 0.115	98.4	70 to 130	2.50	20	
AW14659 Boron, Total	mg/L	0.00444	0.044	1.00	1.06	1.10	1.02	0.85 to 1.15	100	70 to 130	3.70	20	
AW14659 Cobalt, Total	mg/L	0.00000182	0.0044	0.10	0.102	0.103	0.0962	0.085 to 0.115	102	70 to 130	1.18	20	
AW14659 Lithium, Total	mg/L	0.000295	0.022	0.20	0.209	0.212	0.190	0.17 to 0.23	104	70 to 130	1.43	20	
AW14659 Selenium, Total	mg/L	0.0000768	0.0044	0.10	0.101	0.102	0.0991	0.085 to 0.115	101	70 to 130	0.579	20	
AW14661 Mercury, Total by CVAA	mg/L	0.0000686	0.0005	0.004	0.00406	0.00395	0.00400	0.0034 to 0.0046	102	70 to 130	2.75	20	
AW14659 Antimony, Total	mg/L	0.000276	0.00132	0.10	0.0911	0.0939	0.0890	0.085 to 0.115	91.1	70 to 130	3.06	20	
AW14659 Arsenic, Total	mg/L	0.0000114	0.0022	0.10	0.128	0.131	0.0966	0.085 to 0.115	97.2	70 to 130	2.46	20	
AW14659 Barium, Total	mg/L	0.00000389	0.0044	0.10	0.239	0.248	0.0942	0.085 to 0.115	98.0	70 to 130	3.79	20	
AW14659 Lead, Total	mg/L	0.00000171	0.0022	0.10	0.0992	0.102	0.0977	0.085 to 0.115	99.2	70 to 130	2.64	20	
AW14659 Calcium, Total	mg/L	0.0259	0.22	5.00	19.5	19.5	4.79	4.25 to 5.75	94.0	70 to 130	0.00	20	
AW14659 Chromium, Total	mg/L	0.0000174	0.0044	0.10	0.0981	0.101	0.0960	0.085 to 0.115	98.1	70 to 130	2.94	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: WMWBARAPFB
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW14658

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	LFB	Rec	Prec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Rec	Limit	Prec	
AW14665	Chloride, Total	mg/L	0.000	0.25	10.00	9.97	0.000	9.88	9 to 11	99.7	80 to 120	0	20
AW14659	Solids, Dissolved	mg/L	2.0	25			277	58	40 to 60			0.911	5
AW14665	Fluoride, Total	mg/L	0.000	0.3	2.00	2.03	0.000	2.02	1.8 to 2.2	102	80 to 120	0	20
AW14665	Sulfate, Total	mg/L	0.482	1.0	20.00	20.3	0.000	20.0	18 to 22	102	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

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

CC:

Reported: 7/27/2017
 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: WMWBARAP
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AW14659

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/31/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	0.0308	mg/L
* Barium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	0.141	mg/L
* Beryllium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/28/2016	EPA 200.7		1.015	0.02	0.1	J 0.0591	mg/L
* Calcium, Total	HRG	6/28/2016	EPA 200.7		1.015	0.1	0.5	14.8	mg/L
* Cadmium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	6/23/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/28/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	6/13/2016	SM 2540C		1		25	272	mg/L
* Chloride, Total	SES	6/10/2016	EPA 300.0		1	0.04	0.25	18.5	mg/L
* Fluoride, Total	SES	6/10/2016	EPA 300.0		1	0.01	0.3	J 0.075	mg/L
* Sulfate, Total	SES	6/10/2016	EPA 300.0		1	0.3	1	J 0.583	mg/L

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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: WMWBARAP
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AW14659

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW14659 Beryllium, Total	mg/L	0.0000504	0.00132	0.10	0.119	0.118	0.103	0.085 to 0.115	119	70 to 130	1.25	20	
AW14659 Thallium, Total	mg/L	0.00000564	0.00044	0.10	0.0986	0.102	0.0978	0.085 to 0.115	98.6	70 to 130	3.07	20	
AW14659 Boron, Total	mg/L	0.00444	0.044	1.00	1.06	1.10	1.02	0.85 to 1.15	100	70 to 130	3.70	20	
AW14659 Cobalt, Total	mg/L	0.00000182	0.0044	0.10	0.102	0.103	0.0962	0.085 to 0.115	102	70 to 130	1.18	20	
AW14659 Lithium, Total	mg/L	0.000295	0.022	0.20	0.209	0.212	0.190	0.17 to 0.23	104	70 to 130	1.43	20	
AW14659 Selenium, Total	mg/L	0.0000768	0.0044	0.10	0.101	0.102	0.0991	0.085 to 0.115	101	70 to 130	0.579	20	
AW14661 Mercury, Total by CVAA	mg/L	0.0000686	0.0005	0.004	0.00406	0.00395	0.00400	0.0034 to 0.0046	102	70 to 130	2.75	20	
AW14659 Calcium, Total	mg/L	0.0259	0.22	5.00	19.5	19.5	4.79	4.25 to 5.75	94.0	70 to 130	0.00	20	
AW14659 Chromium, Total	mg/L	0.0000174	0.0044	0.10	0.0981	0.101	0.0960	0.085 to 0.115	98.1	70 to 130	2.94	20	
AW14659 Cadmium, Total	mg/L	0.00000304	0.00044	0.10	0.0991	0.101	0.0970	0.085 to 0.115	99.1	70 to 130	2.19	20	
AW14659 Molybdenum, Total	mg/L	0.0000395	0.0044	0.10	0.0984	0.101	0.0940	0.085 to 0.115	98.4	70 to 130	2.50	20	
AW14659 Antimony, Total	mg/L	0.000276	0.00132	0.10	0.0911	0.0939	0.0890	0.085 to 0.115	91.1	70 to 130	3.06	20	
AW14659 Arsenic, Total	mg/L	0.0000114	0.0022	0.10	0.128	0.131	0.0966	0.085 to 0.115	97.2	70 to 130	2.46	20	
AW14659 Barium, Total	mg/L	0.00000389	0.0044	0.10	0.239	0.248	0.0942	0.085 to 0.115	98.0	70 to 130	3.79	20	
AW14659 Lead, Total	mg/L	0.00000171	0.0022	0.10	0.0992	0.102	0.0977	0.085 to 0.115	99.2	70 to 130	2.64	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: WMWBARAP
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AW14659

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW14659	Solids, Dissolved	mg/L	2.0	25				277	58	40 to 60			0.911	5
AW14665	Chloride, Total	mg/L	0.000	0.25	10.00	9.97		0.000	9.88	9 to 11	99.7	80 to 120	0	20
AW14665	Fluoride, Total	mg/L	0.000	0.3	2.00	2.03		0.000	2.02	1.8 to 2.2	102	80 to 120	0	20
AW14665	Sulfate, Total	mg/L	0.482	1.0	20.00	20.3		0.000	20.0	18 to 22	102	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: 7/27/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AW14660

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/31/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	0.0401	mg/L
* Barium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	0.145	mg/L
* Beryllium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	7/6/2016	EPA 200.7		1.015	0.02	0.1	1.57	mg/L
* Calcium, Total	HRG	7/6/2016	EPA 200.7		1.015	0.1	0.5	34.7	mg/L
* Cadmium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	6/23/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	7/6/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	6/13/2016	SM 2540C		1		25	314	mg/L
* Chloride, Total	SES	6/10/2016	EPA 300.0		1	0.04	0.25	21.6	mg/L
* Fluoride, Total	SES	6/10/2016	EPA 300.0		1	0.01	0.3	J 0.069	mg/L
* Sulfate, Total	SES	6/10/2016	EPA 300.0		1	0.3	1	J 0.504	mg/L

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Corrected Copy

To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AW14660

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW14669 Cadmium, Total	mg/L	0.00000304	0.00044	0.10	0.0953	0.0968	0.0970	0.085 to 0.115	95.3	70 to 130	1.52	20	
AW14669 Barium, Total	mg/L	0.00000389	0.0044	0.10	0.166	0.168	0.0942	0.085 to 0.115	89.7	70 to 130	1.22	20	
AW14669 Molybdenum, Total	mg/L	0.0000395	0.0044	0.10	0.0981	0.0983	0.0940	0.085 to 0.115	98.1	70 to 130	0.214	20	
AW14669 Arsenic, Total	mg/L	0.0000114	0.0022	0.10	0.118	0.118	0.0966	0.085 to 0.115	95.9	70 to 130	0.135	20	
AW14669 Thallium, Total	mg/L	0.00000564	0.00044	0.10	0.0975	0.0986	0.0978	0.085 to 0.115	97.5	70 to 130	1.11	20	
AW14669 Chromium, Total	mg/L	0.0000174	0.0044	0.10	0.0995	0.101	0.0960	0.085 to 0.115	96.4	70 to 130	1.29	20	
AW14669 Cobalt, Total	mg/L	0.00000182	0.0044	0.10	0.0998	0.0994	0.0962	0.085 to 0.115	97.0	70 to 130	0.403	20	
AW14669 Selenium, Total	mg/L	0.0000768	0.0044	0.10	0.0975	0.0958	0.0991	0.085 to 0.115	97.5	70 to 130	1.79	20	
AW14661 Mercury, Total by CVAA	mg/L	0.0000686	0.0005	0.004	0.00406	0.00395	0.00400	0.0034 to 0.0046	102	70 to 130	2.75	20	
AW14669 Calcium, Total	mg/L	-0.000614	0.22	5.00	24.9	24.8	4.55	4.25 to 5.75	94.0	70 to 130	0.402	20	
AW14669 Lead, Total	mg/L	0.00000171	0.0022	0.10	0.0982	0.0989	0.0977	0.085 to 0.115	98.2	70 to 130	0.686	20	
AW14669 Lithium, Total	mg/L	0.000269	0.022	0.20	0.211	0.207	0.194	0.17 to 0.23	106	70 to 130	3.90	20	
AW14669 Antimony, Total	mg/L	0.000276	0.00132	0.10	0.0900	0.0904	0.0890	0.085 to 0.115	90.0	70 to 130	0.488	20	
AW14669 Beryllium, Total	mg/L	0.0000504	0.00132	0.10	0.106	0.0954	0.103	0.085 to 0.115	106	70 to 130	10.4	20	
AW14669 Boron, Total	mg/L	0.00151	0.044	1.00	1.07	1.06	1.01	0.85 to 1.15	100	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

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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: WMWBARAP
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AW14660

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW14659	Solids, Dissolved	mg/L	2.0	25				277	58	40 to 60			0.911	5
AW14665	Chloride, Total	mg/L	0.000	0.25	10.00	9.97		0.000	9.88	9 to 11	99.7	80 to 120	0	20
AW14665	Fluoride, Total	mg/L	0.000	0.3	2.00	2.03		0.000	2.02	1.8 to 2.2	102	80 to 120	0	20
AW14665	Sulfate, Total	mg/L	0.482	1.0	20.00	20.3		0.000	20.0	18 to 22	102	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: 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: 7/27/2017
 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: WMWBARAP
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AW14661

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/31/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	0.0223	mg/L
* Barium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	0.0577	mg/L
* Beryllium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	7/6/2016	EPA 200.7		1.015	0.02	0.1	J 0.0417	mg/L
* Calcium, Total	HRG	7/6/2016	EPA 200.7		1.015	0.1	0.5	7.71	mg/L
* Cadmium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	0.0172	mg/L
* Chromium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	6/23/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	7/6/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	6/13/2016	SM 2540C		1		25	140	mg/L
* Chloride, Total	SES	6/10/2016	EPA 300.0		1	0.04	0.25	10.8	mg/L
* Fluoride, Total	SES	6/10/2016	EPA 300.0		1	0.01	0.3	J 0.101	mg/L
* Sulfate, Total	SES	6/10/2016	EPA 300.0		1	0.3	1	J 0.971	mg/L

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 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AW14661

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW14669 Barium, Total	mg/L	0.00000389	0.0044	0.10	0.166	0.168	0.0942	0.085 to 0.115	89.7	70 to 130	1.22	20	
AW14669 Cadmium, Total	mg/L	0.00000304	0.00044	0.10	0.0953	0.0968	0.0970	0.085 to 0.115	95.3	70 to 130	1.52	20	
AW14669 Molybdenum, Total	mg/L	0.0000395	0.0044	0.10	0.0981	0.0983	0.0940	0.085 to 0.115	98.1	70 to 130	0.214	20	
AW14669 Chromium, Total	mg/L	0.0000174	0.0044	0.10	0.0995	0.101	0.0960	0.085 to 0.115	96.4	70 to 130	1.29	20	
AW14669 Cobalt, Total	mg/L	0.00000182	0.0044	0.10	0.0998	0.0994	0.0962	0.085 to 0.115	97.0	70 to 130	0.403	20	
AW14669 Selenium, Total	mg/L	0.0000768	0.0044	0.10	0.0975	0.0958	0.0991	0.085 to 0.115	97.5	70 to 130	1.79	20	
AW14669 Antimony, Total	mg/L	0.000276	0.00132	0.10	0.0900	0.0904	0.0890	0.085 to 0.115	90.0	70 to 130	0.488	20	
AW14669 Beryllium, Total	mg/L	0.0000504	0.00132	0.10	0.106	0.0954	0.103	0.085 to 0.115	106	70 to 130	10.4	20	
AW14669 Boron, Total	mg/L	0.00151	0.044	1.00	1.07	1.06	1.01	0.85 to 1.15	100	70 to 130	1.90	20	
AW14661 Mercury, Total by CVAA	mg/L	0.0000686	0.0005	0.004	0.00406	0.00395	0.00400	0.0034 to 0.0046	102	70 to 130	2.75	20	
AW14669 Calcium, Total	mg/L	-0.000614	0.22	5.00	24.9	24.8	4.55	4.25 to 5.75	94.0	70 to 130	0.402	20	
AW14669 Lead, Total	mg/L	0.00000171	0.0022	0.10	0.0982	0.0989	0.0977	0.085 to 0.115	98.2	70 to 130	0.686	20	
AW14669 Lithium, Total	mg/L	0.000269	0.022	0.20	0.211	0.207	0.194	0.17 to 0.23	106	70 to 130	3.90	20	
AW14669 Arsenic, Total	mg/L	0.0000114	0.0022	0.10	0.118	0.118	0.0966	0.085 to 0.115	95.9	70 to 130	0.135	20	
AW14669 Thallium, Total	mg/L	0.00000564	0.00044	0.10	0.0975	0.0986	0.0978	0.085 to 0.115	97.5	70 to 130	1.11	20	

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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AW14661

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec			
			Limit	Limit			Duplicate	LFB	Limit	Limit			
AW14665	Chloride, Total	mg/L	0.000	0.25	10.00	9.97	0.000	9.88	9 to 11	99.7	80 to 120	0	20
AW14659	Solids, Dissolved	mg/L	2.0	25			277	58	40 to 60			0.911	5
AW14665	Fluoride, Total	mg/L	0.000	0.3	2.00	2.03	0.000	2.02	1.8 to 2.2	102	80 to 120	0	20
AW14665	Sulfate, Total	mg/L	0.482	1.0	20.00	20.3	0.000	20.0	18 to 22	102	80 to 120	0	20

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CC:

Reported: 7/27/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-7 Dup

Laboratory ID Number: AW14662

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/31/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	0.0223	mg/L
* Barium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	0.0557	mg/L
* Beryllium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	7/6/2016	EPA 200.7		1.015	0.02	0.1	J 0.0400	mg/L
* Calcium, Total	HRG	7/6/2016	EPA 200.7		1.015	0.1	0.5	7.73	mg/L
* Cadmium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	0.0169	mg/L
* Chromium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	6/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	7/6/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	6/13/2016	SM 2540C		1		25	133	mg/L
* Chloride, Total	SES	6/10/2016	EPA 300.0		1	0.04	0.25	10.8	mg/L
* Fluoride, Total	SES	6/10/2016	EPA 300.0		1	0.01	0.3	J 0.102	mg/L
* Sulfate, Total	SES	6/10/2016	EPA 300.0		1	0.3	1	J 0.970	mg/L

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 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-7 Dup

Laboratory ID Number: AW14662

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW14669 Molybdenum, Total	mg/L	0.0000395	0.0044	0.10	0.0981	0.0983	0.0940	0.085 to 0.115	98.1	70 to 130	0.214	20	
AW14669 Barium, Total	mg/L	0.00000389	0.0044	0.10	0.166	0.168	0.0942	0.085 to 0.115	89.7	70 to 130	1.22	20	
AW14669 Calcium, Total	mg/L	-0.000614	0.22	5.00	24.9	24.8	4.55	4.25 to 5.75	94.0	70 to 130	0.402	20	
AW14669 Lead, Total	mg/L	0.00000171	0.0022	0.10	0.0982	0.0989	0.0977	0.085 to 0.115	98.2	70 to 130	0.686	20	
AW14669 Lithium, Total	mg/L	0.000269	0.022	0.20	0.211	0.207	0.194	0.17 to 0.23	106	70 to 130	3.90	20	
AW14669 Cadmium, Total	mg/L	0.00000304	0.00044	0.10	0.0953	0.0968	0.0970	0.085 to 0.115	95.3	70 to 130	1.52	20	
AW14669 Chromium, Total	mg/L	0.0000174	0.0044	0.10	0.0995	0.101	0.0960	0.085 to 0.115	96.4	70 to 130	1.29	20	
AW14669 Cobalt, Total	mg/L	0.00000182	0.0044	0.10	0.0998	0.0994	0.0962	0.085 to 0.115	97.0	70 to 130	0.403	20	
AW14669 Selenium, Total	mg/L	0.0000768	0.0044	0.10	0.0975	0.0958	0.0991	0.085 to 0.115	97.5	70 to 130	1.79	20	
AW14671 Mercury, Total by CVAA	mg/L	0.00009	0.0005	0.004	0.00403	0.00401	0.00392	0.0034 to 0.0046	101	70 to 130	0.498	20	
AW14669 Arsenic, Total	mg/L	0.0000114	0.0022	0.10	0.118	0.118	0.0966	0.085 to 0.115	95.9	70 to 130	0.135	20	
AW14669 Thallium, Total	mg/L	0.00000564	0.00044	0.10	0.0975	0.0986	0.0978	0.085 to 0.115	97.5	70 to 130	1.11	20	
AW14669 Antimony, Total	mg/L	0.000276	0.00132	0.10	0.0900	0.0904	0.0890	0.085 to 0.115	90.0	70 to 130	0.488	20	
AW14669 Beryllium, Total	mg/L	0.0000504	0.00132	0.10	0.106	0.0954	0.103	0.085 to 0.115	106	70 to 130	10.4	20	
AW14669 Boron, Total	mg/L	0.00151	0.044	1.00	1.07	1.06	1.01	0.85 to 1.15	100	70 to 130	1.90	20	

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Batch QC Summary



Corrected Copy



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 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-7 Dup

Laboratory ID Number: AW14662

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW14659	Solids, Dissolved	mg/L	2.0	25				277	58	40 to 60			0.911	5
AW14665	Chloride, Total	mg/L	0.000	0.25	10.00	9.97		0.000	9.88	9 to 11	99.7	80 to 120	0	20
AW14665	Fluoride, Total	mg/L	0.000	0.3	2.00	2.03		0.000	2.02	1.8 to 2.2	102	80 to 120	0	20
AW14665	Sulfate, Total	mg/L	0.482	1.0	20.00	20.3		0.000	20.0	18 to 22	102	80 to 120	0	20

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AW14663

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/31/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	0.0223	mg/L
* Beryllium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	7/6/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	7/6/2016	EPA 200.7		1.015	0.1	0.5	1.75	mg/L
* Cadmium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	6/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	7/6/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	6/13/2016	SM 2540C		1		25	46.0	mg/L
* Chloride, Total	SES	6/10/2016	EPA 300.0		1	0.04	0.25	5.52	mg/L
* Fluoride, Total	SES	6/10/2016	EPA 300.0		1	0.01	0.3	J 0.048	mg/L
* Sulfate, Total	SES	6/10/2016	EPA 300.0		1	0.3	1	1.22	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AW14663

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW14669 Cadmium, Total	mg/L	0.00000304	0.00044	0.10	0.0953	0.0968	0.0970	0.085 to 0.115	95.3	70 to 130	1.52	20	
AW14669 Barium, Total	mg/L	0.00000389	0.0044	0.10	0.166	0.168	0.0942	0.085 to 0.115	89.7	70 to 130	1.22	20	
AW14669 Molybdenum, Total	mg/L	0.0000395	0.0044	0.10	0.0981	0.0983	0.0940	0.085 to 0.115	98.1	70 to 130	0.214	20	
AW14669 Calcium, Total	mg/L	-0.000614	0.22	5.00	24.9	24.8	4.55	4.25 to 5.75	94.0	70 to 130	0.402	20	
AW14669 Lead, Total	mg/L	0.00000171	0.0022	0.10	0.0982	0.0989	0.0977	0.085 to 0.115	98.2	70 to 130	0.686	20	
AW14669 Lithium, Total	mg/L	0.000269	0.022	0.20	0.211	0.207	0.194	0.17 to 0.23	106	70 to 130	3.90	20	
AW14669 Arsenic, Total	mg/L	0.0000114	0.0022	0.10	0.118	0.118	0.0966	0.085 to 0.115	95.9	70 to 130	0.135	20	
AW14669 Thallium, Total	mg/L	0.00000564	0.00044	0.10	0.0975	0.0986	0.0978	0.085 to 0.115	97.5	70 to 130	1.11	20	
AW14669 Antimony, Total	mg/L	0.000276	0.00132	0.10	0.0900	0.0904	0.0890	0.085 to 0.115	90.0	70 to 130	0.488	20	
AW14669 Beryllium, Total	mg/L	0.0000504	0.00132	0.10	0.106	0.0954	0.103	0.085 to 0.115	106	70 to 130	10.4	20	
AW14669 Boron, Total	mg/L	0.00151	0.044	1.00	1.07	1.06	1.01	0.85 to 1.15	100	70 to 130	1.90	20	
AW14669 Chromium, Total	mg/L	0.0000174	0.0044	0.10	0.0995	0.101	0.0960	0.085 to 0.115	96.4	70 to 130	1.29	20	
AW14669 Cobalt, Total	mg/L	0.00000182	0.0044	0.10	0.0998	0.0994	0.0962	0.085 to 0.115	97.0	70 to 130	0.403	20	
AW14669 Selenium, Total	mg/L	0.0000768	0.0044	0.10	0.0975	0.0958	0.0991	0.085 to 0.115	97.5	70 to 130	1.79	20	
AW14671 Mercury, Total by CVAA	mg/L	0.00009	0.0005	0.004	0.00403	0.00401	0.00392	0.0034 to 0.0046	101	70 to 130	0.498	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: WMWBARAP
 Sample Date: 07-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AW14663

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW14665	Chloride, Total	mg/L	0.000	0.25	10.00	9.97	0.000	9.88	9 to 11	99.7	80 to 120	0	20
AW14659	Solids, Dissolved	mg/L	2.0	25			277	58	40 to 60			0.911	5
AW14665	Fluoride, Total	mg/L	0.000	0.3	2.00	2.03	0.000	2.02	1.8 to 2.2	102	80 to 120	0	20
AW14665	Sulfate, Total	mg/L	0.482	1.0	20.00	20.3	0.000	20.0	18 to 22	102	80 to 120	0	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

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AW14664

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/31/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	0.0385	mg/L
* Barium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	0.128	mg/L
* Beryllium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	7/6/2016	EPA 200.7		1.015	0.02	0.1	2.23	mg/L
* Calcium, Total	HRG	7/6/2016	EPA 200.7		1.015	0.1	0.5	39.2	mg/L
* Cadmium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	6/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	7/6/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	6/15/2016	SM 2540C		1		25	288	mg/L
* Chloride, Total	SES	6/10/2016	EPA 300.0		1	0.04	0.25	25.3	mg/L
* Fluoride, Total	SES	6/10/2016	EPA 300.0		1	0.01	0.3	J 0.077	mg/L
* Sulfate, Total	SES	6/10/2016	EPA 300.0		1	0.3	1	J 0.510	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: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AW14664

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW14669 Cadmium, Total	mg/L	0.0000304	0.00044	0.10	0.0953	0.0968	0.0970	0.085 to 0.115	95.3	70 to 130	1.52	20	
AW14669 Molybdenum, Total	mg/L	0.0000395	0.0044	0.10	0.0981	0.0983	0.0940	0.085 to 0.115	98.1	70 to 130	0.214	20	
AW14669 Barium, Total	mg/L	0.0000389	0.0044	0.10	0.166	0.168	0.0942	0.085 to 0.115	89.7	70 to 130	1.22	20	
AW14669 Calcium, Total	mg/L	-0.000614	0.22	5.00	24.9	24.8	4.55	4.25 to 5.75	94.0	70 to 130	0.402	20	
AW14669 Lead, Total	mg/L	0.0000171	0.0022	0.10	0.0982	0.0989	0.0977	0.085 to 0.115	98.2	70 to 130	0.686	20	
AW14669 Lithium, Total	mg/L	0.000269	0.022	0.20	0.211	0.207	0.194	0.17 to 0.23	106	70 to 130	3.90	20	
AW14669 Antimony, Total	mg/L	0.000276	0.00132	0.10	0.0900	0.0904	0.0890	0.085 to 0.115	90.0	70 to 130	0.488	20	
AW14669 Beryllium, Total	mg/L	0.0000504	0.00132	0.10	0.106	0.0954	0.103	0.085 to 0.115	106	70 to 130	10.4	20	
AW14669 Boron, Total	mg/L	0.00151	0.044	1.00	1.07	1.06	1.01	0.85 to 1.15	100	70 to 130	1.90	20	
AW14669 Chromium, Total	mg/L	0.0000174	0.0044	0.10	0.0995	0.101	0.0960	0.085 to 0.115	96.4	70 to 130	1.29	20	
AW14669 Cobalt, Total	mg/L	0.0000182	0.0044	0.10	0.0998	0.0994	0.0962	0.085 to 0.115	97.0	70 to 130	0.403	20	
AW14669 Selenium, Total	mg/L	0.0000768	0.0044	0.10	0.0975	0.0958	0.0991	0.085 to 0.115	97.5	70 to 130	1.79	20	
AW14671 Mercury, Total by CVAA	mg/L	0.00009	0.0005	0.004	0.00403	0.00401	0.00392	0.0034 to 0.0046	101	70 to 130	0.498	20	
AW14669 Arsenic, Total	mg/L	0.0000114	0.0022	0.10	0.118	0.118	0.0966	0.085 to 0.115	95.9	70 to 130	0.135	20	
AW14669 Thallium, Total	mg/L	0.00000564	0.00044	0.10	0.0975	0.0986	0.0978	0.085 to 0.115	97.5	70 to 130	1.11	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: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AW14664

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
			Limit	Limit			Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW14665	Chloride, Total	mg/L	0.000	0.25	10.00	9.97	0.000	9.88	9 to 11	99.7	80 to 120	0	20
AW14670	Solids, Dissolved	mg/L	1.0	25			294	46	40 to 60			1.20	5
AW14665	Fluoride, Total	mg/L	0.000	0.3	2.00	2.03	0.000	2.02	1.8 to 2.2	102	80 to 120	0	20
AW14665	Sulfate, Total	mg/L	0.482	1.0	20.00	20.3	0.000	20.0	18 to 22	102	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

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

CC:

Reported: 7/27/2017
 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: WMWBARAPEB
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AW14665

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/31/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	7/6/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	7/6/2016	EPA 200.7		1.015	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	6/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	7/6/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	6/15/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	6/10/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	6/10/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	6/10/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Expiration: June 30, 2018

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Alabama Power 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: WMWBARAPEB
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AW14665

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW14669 Molybdenum, Total	mg/L	0.0000395	0.0044	0.10	0.0981	0.0983	0.0940	0.085 to 0.115	98.1	70 to 130	0.214	20	
AW14669 Barium, Total	mg/L	0.00000389	0.0044	0.10	0.166	0.168	0.0942	0.085 to 0.115	89.7	70 to 130	1.22	20	
AW14669 Cadmium, Total	mg/L	0.00000304	0.00044	0.10	0.0953	0.0968	0.0970	0.085 to 0.115	95.3	70 to 130	1.52	20	
AW14669 Calcium, Total	mg/L	-0.000614	0.22	5.00	24.9	24.8	4.55	4.25 to 5.75	94.0	70 to 130	0.402	20	
AW14669 Lead, Total	mg/L	0.00000171	0.0022	0.10	0.0982	0.0989	0.0977	0.085 to 0.115	98.2	70 to 130	0.686	20	
AW14669 Lithium, Total	mg/L	0.000269	0.022	0.20	0.211	0.207	0.194	0.17 to 0.23	106	70 to 130	3.90	20	
AW14669 Arsenic, Total	mg/L	0.0000114	0.0022	0.10	0.118	0.118	0.0966	0.085 to 0.115	95.9	70 to 130	0.135	20	
AW14669 Thallium, Total	mg/L	0.00000564	0.00044	0.10	0.0975	0.0986	0.0978	0.085 to 0.115	97.5	70 to 130	1.11	20	
AW14669 Antimony, Total	mg/L	0.000276	0.00132	0.10	0.0900	0.0904	0.0890	0.085 to 0.115	90.0	70 to 130	0.488	20	
AW14669 Beryllium, Total	mg/L	0.0000504	0.00132	0.10	0.106	0.0954	0.103	0.085 to 0.115	106	70 to 130	10.4	20	
AW14669 Boron, Total	mg/L	0.00151	0.044	1.00	1.07	1.06	1.01	0.85 to 1.15	100	70 to 130	1.90	20	
AW14669 Chromium, Total	mg/L	0.0000174	0.0044	0.10	0.0995	0.101	0.0960	0.085 to 0.115	96.4	70 to 130	1.29	20	
AW14669 Cobalt, Total	mg/L	0.00000182	0.0044	0.10	0.0998	0.0994	0.0962	0.085 to 0.115	97.0	70 to 130	0.403	20	
AW14669 Selenium, Total	mg/L	0.0000768	0.0044	0.10	0.0975	0.0958	0.0991	0.085 to 0.115	97.5	70 to 130	1.79	20	
AW14671 Mercury, Total by CVAA	mg/L	0.00009	0.0005	0.004	0.00403	0.00401	0.00392	0.0034 to 0.0046	101	70 to 130	0.498	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: WMWBARAPEB
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AW14665

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW14665	Chloride, Total	mg/L	0.000	0.25	10.00	9.97	0.000	9.88	9 to 11	99.7	80 to 120	0	20
AW14670	Solids, Dissolved	mg/L	1.0	25			294	46	40 to 60			1.20	5
AW14665	Fluoride, Total	mg/L	0.000	0.3	2.00	2.03	0.000	2.02	1.8 to 2.2	102	80 to 120	0	20
AW14665	Sulfate, Total	mg/L	0.482	1.0	20.00	20.3	0.000	20.0	18 to 22	102	80 to 120	0	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

Certificate Of Analysis  **Alabama Power**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AW14666

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/31/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	0.0306	mg/L
* Barium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	0.0642	mg/L
* Beryllium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	7/6/2016	EPA 200.7		1.015	0.02	0.1	1.62	mg/L
* Calcium, Total	HRG	7/6/2016	EPA 200.7		10.15	1.0	5.0	48.7	mg/L
* Cadmium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	6/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	7/6/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	6/15/2016	SM 2540C		1		50	314	mg/L
* Chloride, Total	SES	6/10/2016	EPA 300.0		1	0.04	0.25	18.6	mg/L
* Fluoride, Total	SES	6/10/2016	EPA 300.0		1	0.01	0.3	J 0.061	mg/L
* Sulfate, Total	SES	6/10/2016	EPA 300.0		1	0.3	1	J 0.538	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: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AW14666

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW14669 Cadmium, Total	mg/L	0.0000304	0.00044	0.10	0.0953	0.0968	0.0970	0.085 to 0.115	95.3	70 to 130	1.52	20	
AW14669 Molybdenum, Total	mg/L	0.0000395	0.0044	0.10	0.0981	0.0983	0.0940	0.085 to 0.115	98.1	70 to 130	0.214	20	
AW14669 Barium, Total	mg/L	0.0000389	0.0044	0.10	0.166	0.168	0.0942	0.085 to 0.115	89.7	70 to 130	1.22	20	
AW14669 Antimony, Total	mg/L	0.000276	0.00132	0.10	0.0900	0.0904	0.0890	0.085 to 0.115	90.0	70 to 130	0.488	20	
AW14669 Beryllium, Total	mg/L	0.0000504	0.00132	0.10	0.106	0.0954	0.103	0.085 to 0.115	106	70 to 130	10.4	20	
AW14669 Boron, Total	mg/L	0.00151	0.044	1.00	1.07	1.06	1.01	0.85 to 1.15	100	70 to 130	1.90	20	
AW14669 Calcium, Total	mg/L	-0.000614	0.22	5.00	24.9	24.8	4.55	4.25 to 5.75	94.0	70 to 130	0.402	20	
AW14669 Lead, Total	mg/L	0.00000171	0.0022	0.10	0.0982	0.0989	0.0977	0.085 to 0.115	98.2	70 to 130	0.686	20	
AW14669 Lithium, Total	mg/L	0.000269	0.022	0.20	0.211	0.207	0.194	0.17 to 0.23	106	70 to 130	3.90	20	
AW14669 Chromium, Total	mg/L	0.0000174	0.0044	0.10	0.0995	0.101	0.0960	0.085 to 0.115	96.4	70 to 130	1.29	20	
AW14669 Cobalt, Total	mg/L	0.00000182	0.0044	0.10	0.0998	0.0994	0.0962	0.085 to 0.115	97.0	70 to 130	0.403	20	
AW14669 Selenium, Total	mg/L	0.0000768	0.0044	0.10	0.0975	0.0958	0.0991	0.085 to 0.115	97.5	70 to 130	1.79	20	
AW14671 Mercury, Total by CVAA	mg/L	0.00009	0.0005	0.004	0.00403	0.00401	0.00392	0.0034 to 0.0046	101	70 to 130	0.498	20	
AW14669 Arsenic, Total	mg/L	0.0000114	0.0022	0.10	0.118	0.118	0.0966	0.085 to 0.115	95.9	70 to 130	0.135	20	
AW14669 Thallium, Total	mg/L	0.00000564	0.00044	0.10	0.0975	0.0986	0.0978	0.085 to 0.115	97.5	70 to 130	1.11	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: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AW14666

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14670	Solids, Dissolved	mg/L	1.0	25			294	46	40 to 60			1.20	5
AW14675	Sulfate, Total	mg/L	0.483	1.0	20.00	29.3	8.76	20.1	18 to 22	103	80 to 120	0.229	20
AW14675	Chloride, Total	mg/L	0.000	0.25	10.00	13.3	3.16	9.88	9 to 11	102	80 to 120	0.317	20
AW14675	Fluoride, Total	mg/L	0.000	0.3	2.00	2.22	0.064	2.02	1.8 to 2.2	108	80 to 120	1.57	20

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CC:

Reported: 7/27/2017
 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: WMWBARAPFB
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW14667

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/31/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	7/6/2016	EPA 200.7		1.015	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	7/6/2016	EPA 200.7		1.015	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	6/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	7/6/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	6/15/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	6/10/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	6/10/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	6/10/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Expiration: June 30, 2018

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Alabama Power General Test Laboratory
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 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: WMWBARAPFB
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW14667

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW14669 Cadmium, Total	mg/L	0.00000304	0.00044	0.10	0.0953	0.0968	0.0970	0.085 to 0.115	95.3	70 to 130	1.52	20	
AW14669 Barium, Total	mg/L	0.00000389	0.0044	0.10	0.166	0.168	0.0942	0.085 to 0.115	89.7	70 to 130	1.22	20	
AW14669 Molybdenum, Total	mg/L	0.0000395	0.0044	0.10	0.0981	0.0983	0.0940	0.085 to 0.115	98.1	70 to 130	0.214	20	
AW14669 Calcium, Total	mg/L	-0.000614	0.22	5.00	24.9	24.8	4.55	4.25 to 5.75	94.0	70 to 130	0.402	20	
AW14669 Lead, Total	mg/L	0.00000171	0.0022	0.10	0.0982	0.0989	0.0977	0.085 to 0.115	98.2	70 to 130	0.686	20	
AW14669 Lithium, Total	mg/L	0.000269	0.022	0.20	0.211	0.207	0.194	0.17 to 0.23	106	70 to 130	3.90	20	
AW14669 Antimony, Total	mg/L	0.000276	0.00132	0.10	0.0900	0.0904	0.0890	0.085 to 0.115	90.0	70 to 130	0.488	20	
AW14669 Beryllium, Total	mg/L	0.0000504	0.00132	0.10	0.106	0.0954	0.103	0.085 to 0.115	106	70 to 130	10.4	20	
AW14669 Boron, Total	mg/L	0.00151	0.044	1.00	1.07	1.06	1.01	0.85 to 1.15	100	70 to 130	1.90	20	
AW14669 Arsenic, Total	mg/L	0.0000114	0.0022	0.10	0.118	0.118	0.0966	0.085 to 0.115	95.9	70 to 130	0.135	20	
AW14669 Thallium, Total	mg/L	0.00000564	0.00044	0.10	0.0975	0.0986	0.0978	0.085 to 0.115	97.5	70 to 130	1.11	20	
AW14669 Chromium, Total	mg/L	0.0000174	0.0044	0.10	0.0995	0.101	0.0960	0.085 to 0.115	96.4	70 to 130	1.29	20	
AW14669 Cobalt, Total	mg/L	0.00000182	0.0044	0.10	0.0998	0.0994	0.0962	0.085 to 0.115	97.0	70 to 130	0.403	20	
AW14669 Selenium, Total	mg/L	0.0000768	0.0044	0.10	0.0975	0.0958	0.0991	0.085 to 0.115	97.5	70 to 130	1.79	20	
AW14671 Mercury, Total by CVAA	mg/L	0.00009	0.0005	0.004	0.00403	0.00401	0.00392	0.0034 to 0.0046	101	70 to 130	0.498	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: WMWBARAPFB
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW14667

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14670	Solids, Dissolved	mg/L	1.0	25			294	46	40 to 60			1.20	5
AW14675	Sulfate, Total	mg/L	0.483	1.0	20.00	29.3	8.76	20.1	18 to 22	103	80 to 120	0.229	20
AW14675	Chloride, Total	mg/L	0.000	0.25	10.00	13.3	3.16	9.88	9 to 11	102	80 to 120	0.317	20
AW14675	Fluoride, Total	mg/L	0.000	0.3	2.00	2.22	0.064	2.02	1.8 to 2.2	108	80 to 120	1.57	20

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CC:

Reported: 7/27/2017
 Version: 2.0

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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**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AW14668

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/31/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	0.0136	mg/L
* Barium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	0.105	mg/L
* Beryllium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	7/6/2016	EPA 200.7		1.015	0.02	0.1	J 0.0568	mg/L
* Calcium, Total	HRG	7/6/2016	EPA 200.7		1.015	0.1	0.5	27.6	mg/L
* Cadmium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	J 0.00205	mg/L
* Mercury, Total by CVAA	MCW	6/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	7/6/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	6/15/2016	SM 2540C		1		25	324	mg/L
* Chloride, Total	SES	6/10/2016	EPA 300.0		1	0.04	0.25	20.4	mg/L
* Fluoride, Total	SES	6/10/2016	EPA 300.0		1	0.01	0.3	J 0.085	mg/L
* Sulfate, Total	SES	6/10/2016	EPA 300.0		1	0.3	1	J 0.701	mg/L

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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AW14668

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW14669 Cadmium, Total	mg/L	0.0000304	0.00044	0.10	0.0953	0.0968	0.0970	0.085 to 0.115	95.3	70 to 130	1.52	20	
AW14669 Molybdenum, Total	mg/L	0.0000395	0.0044	0.10	0.0981	0.0983	0.0940	0.085 to 0.115	98.1	70 to 130	0.214	20	
AW14669 Calcium, Total	mg/L	-0.000614	0.22	5.00	24.9	24.8	4.55	4.25 to 5.75	94.0	70 to 130	0.402	20	
AW14669 Lead, Total	mg/L	0.00000171	0.0022	0.10	0.0982	0.0989	0.0977	0.085 to 0.115	98.2	70 to 130	0.686	20	
AW14669 Lithium, Total	mg/L	0.000269	0.022	0.20	0.211	0.207	0.194	0.17 to 0.23	106	70 to 130	3.90	20	
AW14669 Barium, Total	mg/L	0.00000389	0.0044	0.10	0.166	0.168	0.0942	0.085 to 0.115	89.7	70 to 130	1.22	20	
AW14669 Chromium, Total	mg/L	0.0000174	0.0044	0.10	0.0995	0.101	0.0960	0.085 to 0.115	96.4	70 to 130	1.29	20	
AW14669 Cobalt, Total	mg/L	0.00000182	0.0044	0.10	0.0998	0.0994	0.0962	0.085 to 0.115	97.0	70 to 130	0.403	20	
AW14669 Selenium, Total	mg/L	0.0000768	0.0044	0.10	0.0975	0.0958	0.0991	0.085 to 0.115	97.5	70 to 130	1.79	20	
AW14671 Mercury, Total by CVAA	mg/L	0.00009	0.0005	0.004	0.00403	0.00401	0.00392	0.0034 to 0.0046	101	70 to 130	0.498	20	
AW14669 Antimony, Total	mg/L	0.000276	0.00132	0.10	0.0900	0.0904	0.0890	0.085 to 0.115	90.0	70 to 130	0.488	20	
AW14669 Beryllium, Total	mg/L	0.0000504	0.00132	0.10	0.106	0.0954	0.103	0.085 to 0.115	106	70 to 130	10.4	20	
AW14669 Boron, Total	mg/L	0.00151	0.044	1.00	1.07	1.06	1.01	0.85 to 1.15	100	70 to 130	1.90	20	
AW14669 Arsenic, Total	mg/L	0.0000114	0.0022	0.10	0.118	0.118	0.0966	0.085 to 0.115	95.9	70 to 130	0.135	20	
AW14669 Thallium, Total	mg/L	0.00000564	0.00044	0.10	0.0975	0.0986	0.0978	0.085 to 0.115	97.5	70 to 130	1.11	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

Reported: 7/27/2017
 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: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AW14668

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
			Limit	Limit			Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW14675	Sulfate, Total	mg/L	0.483	1.0	20.00	29.3	8.76	20.1	18 to 22	103	80 to 120	0.229	20
AW14670	Solids, Dissolved	mg/L	1.0	25			294	46	40 to 60			1.20	5
AW14675	Chloride, Total	mg/L	0.000	0.25	10.00	13.3	3.16	9.88	9 to 11	102	80 to 120	0.317	20
AW14675	Fluoride, Total	mg/L	0.000	0.3	2.00	2.22	0.064	2.02	1.8 to 2.2	108	80 to 120	1.57	20

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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: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AW14669

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	10/31/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	0.0221	mg/L
* Barium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	0.0763	mg/L
* Beryllium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	7/6/2016	EPA 200.7		1.015	0.02	0.1	J 0.0659	mg/L
* Calcium, Total	HRG	7/6/2016	EPA 200.7		1.015	0.1	0.5	20.2	mg/L
* Cadmium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	J 0.00276	mg/L
* Chromium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	J 0.00308	mg/L
* Mercury, Total by CVAA	MCW	6/24/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	7/6/2016	EPA 200.7		1.015	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	6/15/2016	SM 2540C		1		25	330	mg/L
* Chloride, Total	SES	6/10/2016	EPA 300.0		1	0.04	0.25	22.0	mg/L
* Fluoride, Total	SES	6/10/2016	EPA 300.0		1	0.01	0.3	J 0.080	mg/L
* Sulfate, Total	SES	6/10/2016	EPA 300.0		1	0.3	1	J 0.511	mg/L

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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AW14669

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW14669 Cadmium, Total	mg/L	0.00000304	0.00044	0.10	0.0953	0.0968	0.0970	0.085 to 0.115	95.3	70 to 130	1.52	20	
AW14669 Barium, Total	mg/L	0.00000389	0.0044	0.10	0.166	0.168	0.0942	0.085 to 0.115	89.7	70 to 130	1.22	20	
AW14669 Molybdenum, Total	mg/L	0.0000395	0.0044	0.10	0.0981	0.0983	0.0940	0.085 to 0.115	98.1	70 to 130	0.214	20	
AW14669 Calcium, Total	mg/L	-0.000614	0.22	5.00	24.9	24.8	4.55	4.25 to 5.75	94.0	70 to 130	0.402	20	
AW14669 Lead, Total	mg/L	0.00000171	0.0022	0.10	0.0982	0.0989	0.0977	0.085 to 0.115	98.2	70 to 130	0.686	20	
AW14669 Lithium, Total	mg/L	0.000269	0.022	0.20	0.211	0.207	0.194	0.17 to 0.23	106	70 to 130	3.90	20	
AW14669 Chromium, Total	mg/L	0.0000174	0.0044	0.10	0.0995	0.101	0.0960	0.085 to 0.115	96.4	70 to 130	1.29	20	
AW14669 Cobalt, Total	mg/L	0.00000182	0.0044	0.10	0.0998	0.0994	0.0962	0.085 to 0.115	97.0	70 to 130	0.403	20	
AW14669 Selenium, Total	mg/L	0.0000768	0.0044	0.10	0.0975	0.0958	0.0991	0.085 to 0.115	97.5	70 to 130	1.79	20	
AW14671 Mercury, Total by CVAA	mg/L	0.00009	0.0005	0.004	0.00403	0.00401	0.00392	0.0034 to 0.0046	101	70 to 130	0.498	20	
AW14669 Arsenic, Total	mg/L	0.0000114	0.0022	0.10	0.118	0.118	0.0966	0.085 to 0.115	95.9	70 to 130	0.135	20	
AW14669 Thallium, Total	mg/L	0.00000564	0.00044	0.10	0.0975	0.0986	0.0978	0.085 to 0.115	97.5	70 to 130	1.11	20	
AW14669 Antimony, Total	mg/L	0.000276	0.00132	0.10	0.0900	0.0904	0.0890	0.085 to 0.115	90.0	70 to 130	0.488	20	
AW14669 Beryllium, Total	mg/L	0.0000504	0.00132	0.10	0.106	0.0954	0.103	0.085 to 0.115	106	70 to 130	10.4	20	
AW14669 Boron, Total	mg/L	0.00151	0.044	1.00	1.07	1.06	1.01	0.85 to 1.15	100	70 to 130	1.90	20	

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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AW14669

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14670	Solids, Dissolved	mg/L	1.0	25			294	46	40 to 60			1.20	5
AW14675	Sulfate, Total	mg/L	0.483	1.0	20.00	29.3	8.76	20.1	18 to 22	103	80 to 120	0.229	20
AW14675	Chloride, Total	mg/L	0.000	0.25	10.00	13.3	3.16	9.88	9 to 11	102	80 to 120	0.317	20
AW14675	Fluoride, Total	mg/L	0.000	0.3	2.00	2.22	0.064	2.02	1.8 to 2.2	108	80 to 120	1.57	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: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AW14670

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	10/31/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	J	0.00111	mg/L
* Arsenic, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005		0.0121	mg/L
* Barium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01		0.0710	mg/L
* Beryllium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/28/2016	EPA 200.7		1.015	0.02	0.1	J	0.0391	mg/L
* Calcium, Total	HRG	6/28/2016	EPA 200.7		1.015	0.1	0.5		11.7	mg/L
* Cadmium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	J	0.00670	mg/L
* Mercury, Total by CVAA	MCW	6/24/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/28/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	6/16/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/16/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/15/2016	SM 2540C		1		25		287	mg/L
* Chloride, Total	SES	6/10/2016	EPA 300.0		10	0.40	2.50		37.2	mg/L
* Fluoride, Total	SES	6/10/2016	EPA 300.0		1	0.01	0.3	J	0.082	mg/L
* Sulfate, Total	SES	6/10/2016	EPA 300.0		1	0.3	1	J	0.496	mg/L

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Customer Account: WMWBARAP
 Sample Date: 08-Jun-16
 Customer ID:
 Delivery Date: 09-Jun-16

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AW14670

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW14679 Lithium, Total	mg/L	0.000437	0.022	0.20	0.196	0.189	0.198	0.17 to 0.23	98.0	70 to 130	3.64	20	
AW14679 Chromium, Total	mg/L	0.0000605	0.0044	0.10	0.0983	0.0936	0.0978	0.085 to 0.115	98.3	70 to 130	4.86	20	
AW14679 Lead, Total	mg/L	0.0000300	0.0022	0.10	0.0977	0.0932	0.0985	0.085 to 0.115	97.7	70 to 130	4.73	20	
AW14679 Calcium, Total	mg/L	0.00273	0.22	5.00	6.58	6.43	4.99	4.25 to 5.75	98.0	70 to 130	2.31	20	
AW14679 Selenium, Total	mg/L	0.0000757	0.0044	0.10	0.0997	0.0948	0.0999	0.085 to 0.115	99.7	70 to 130	5.04	20	
AW14671 Mercury, Total by CVAA	mg/L	0.00009	0.0005	0.004	0.00403	0.00401	0.00392	0.0034 to 0.0046	101	70 to 130	0.498	20	
AW14679 Boron, Total	mg/L	0.000449	0.044	1.00	1.00	0.999	0.959	0.85 to 1.15	100	70 to 130	0.100	20	
AW14679 Thallium, Total	mg/L	0.0000861	0.00044	0.10	0.0975	0.0929	0.0980	0.085 to 0.115	97.5	70 to 130	4.88	20	
AW14679 Beryllium, Total	mg/L	0.00	0.00132	0.10	0.108	0.105	0.105	0.085 to 0.115	108	70 to 130	2.85	20	
AW14679 Cobalt, Total	mg/L	0.00000189	0.0044	0.10	0.101	0.0961	0.101	0.085 to 0.115	101	70 to 130	5.29	20	
AW14679 Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0970	0.0934	0.0989	0.085 to 0.115	97.0	70 to 130	3.79	20	
AW14679 Cadmium, Total	mg/L	0.00000371	0.00044	0.10	0.0989	0.0938	0.101	0.085 to 0.115	98.9	70 to 130	5.24	20	
AW14679 Molybdenum, Total	mg/L	0.0000281	0.0044	0.10	0.0984	0.0934	0.0968	0.085 to 0.115	98.4	70 to 130	5.25	20	
AW14679 Antimony, Total	mg/L	0.000266	0.00132	0.10	0.0908	0.0872	0.0907	0.085 to 0.115	90.8	70 to 130	3.99	20	
AW14679 Barium, Total	mg/L	0.00000574	0.0044	0.10	0.169	0.162	0.0957	0.085 to 0.115	93.6	70 to 130	4.10	20	

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 John Pugh

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Description: Barry Ash Pond - MW-13

Laboratory ID Number: AW14670

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14670	Solids, Dissolved	mg/L	1.0	25			294	46	40 to 60			1.20	5
AW14675	Sulfate, Total	mg/L	0.483	1.0	20.00	29.3	8.76	20.1	18 to 22	103	80 to 120	0.229	20
AW14675	Chloride, Total	mg/L	0.000	0.25	10.00	13.3	3.16	9.88	9 to 11	102	80 to 120	0.317	20
AW14675	Fluoride, Total	mg/L	0.000	0.3	2.00	2.22	0.064	2.02	1.8 to 2.2	108	80 to 120	1.57	20

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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 06/09/2016 11:00

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Angie Jimmerson	Requested By	Greg Dyer
Collector	Nick Pitts	Location	Barry 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	Rad Dup on MW-14 Bottle 1 - Radiological Bottle 2 - Metals and Hg Bottle 3 - TDS and Anions		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-4	06/07/2016	15:12	3	Groundwater		AW14650
MW-3	06/07/2016	16:18	3	Groundwater		AW14651
MW-2	06/08/2016	09:08	3	Groundwater		AW14652
MW-2 Dup	06/08/2016	09:08	3	Sample Duplicate		AW14653
MW-1	06/08/2016	10:10	3	Groundwater		AW14654
MW-16	06/08/2016	11:18	3	Groundwater		AW14655
MW-14	06/08/2016	12:35	4	Groundwater		AW14656
MW-15	06/08/2016	13:35	3	Groundwater		AW14657
FB-1	06/07/2016	16:50	3	Field Blank		AW14658

Relinquished By	Received By	Date/Time
	Keith Kornegay <small>Digitally signed by Keith Kornegay DN: cn=Keith Kornegay, o=Alabama Power, ou, email=kkorneg@southernco.com, c=US Date: 2016.06.09 15:49:02 -05'00'</small>	06/09/2016 12:14

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	0.0 degrees Celsius
	Thermometer ID	4303-21829-1-1
	pH Strip ID	4611-23048-10-4



Chain of Custody

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Field Complete

Lab Complete

Lab ETA 06/09/2016 12:15

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Angie Jimmerson	Requested By	Greg Dyer
Collector	Jason Rouss	Location	Barry 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	Bottle 1 - Radiological Bottle 2 - Metals and Hg Bottle - Anions and TDS

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-5	06/07/2016	12:25	4	Groundwater		AW14659
MW-8	06/07/2016	13:50	3	Groundwater		AW14660
MW-7	06/07/2016	15:26	3	Groundwater		AW14661
MW-7 Dup	06/07/2016	15:26	3	Sample Duplicate		AW14662
MW-6	06/07/2016	16:40	3	Groundwater		AW14663
MW-9	06/08/2016	09:40	3	Groundwater		AW14664
EB-1	06/08/2016	09:57	3	Equipment Blank		AW14665
MW-10	06/08/2016	11:00	3	Groundwater		AW14666
FB-2	06/08/2016	11:15	3	Field Blank		AW14667
MW-11	06/08/2016	12:10	3	Groundwater		AW14668
MW-12	06/08/2016	13:24	3	Groundwater		AW14669
MW-13	06/08/2016	14:22	3	Groundwater		AW14670

Relinquished By	Received By	Date/Time
	Keith Kornegay <small>Digitally signed by Keith Kornegay DN: cn=Keith Kornegay, o=Alabama Power, ou, email=kkorneg@alabamapower.com, c=US Date: 2016.06.09 15:38:22 -05'00'</small>	06/09/2016 12:14

SmarTroll ID	4696-23444-3-3	All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>
Turbidity ID	LaMotte 112-3410	Cooler Temp
		0.0 degrees Celsius
		Thermometer ID
		4303-21829-1-1
		pH Strip ID
		4611-23048-10-4

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: 400-123615-1

TestAmerica Sample Delivery Group: Barry Ash Pond (3)

Client Project/Site: CCR Plant Barry

For:

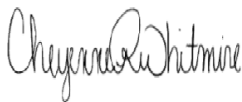
Alabama Power General Test Laboratory

744 County Rd 87

GSC #8

Calera, Alabama 35040

Attn: Sarah Copeland



Authorized for release by:

7/31/2016 10:25:50 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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Method Summary

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

TestAmerica Job ID: 400-123615-1
SDG: Barry 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 Barry

TestAmerica Job ID: 400-123615-1
SDG: Barry Ash Pond (3)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-123615-1	AW14650 MW-4	Water	06/07/16 15:12	06/28/16 15:40
400-123615-2	AW14651 MW-3	Water	06/07/16 16:18	06/28/16 15:40
400-123615-3	AW14652 MW-2	Water	06/08/16 09:08	06/28/16 15:40
400-123615-4	AW14653 MW-2 DUP	Water	06/08/16 09:08	06/28/16 15:40
400-123615-5	AW14654 MW-1	Water	06/08/16 10:10	06/28/16 15:40
400-123615-6	AW14655 MW-16	Water	06/08/16 11:18	06/28/16 15:40
400-123615-7	AW14656 MW-14	Water	06/08/16 12:35	06/28/16 15:40
400-123615-8	AW14657 MW-15	Water	06/08/16 13:35	06/28/16 15:40
400-123615-9	AW14658 FB-1	Water	06/07/16 16:50	06/28/16 15:40
400-123615-10	AW14659 MW-5	Water	06/07/16 12:25	06/28/16 15:40
400-123615-11	AW14660 MW-8	Water	06/07/16 13:50	06/28/16 15:40
400-123615-12	AW14661 MW-7	Water	06/07/16 15:26	06/28/16 15:40
400-123615-13	AW14662 MW-7 DUP	Water	06/07/16 15:26	06/28/16 15:40
400-123615-14	AW14663 MW-6	Water	06/07/16 16:40	06/28/16 15:40
400-123615-15	AW14664 MW-9	Water	06/08/16 09:40	06/28/16 15:40
400-123615-16	AW14665 EB-1	Water	06/08/16 09:57	06/28/16 15:40
400-123615-17	AW14666 MW-10	Water	06/08/16 11:00	06/28/16 15:40
400-123615-18	AW14667 FB-2	Water	06/08/16 11:15	06/28/16 15:40
400-123615-19	AW14668 MW-11	Water	06/08/16 12:10	06/28/16 15:40
400-123615-20	AW14669 MW-12	Water	06/07/16 13:24	06/28/16 15:40
400-123615-21	AW14670 MW-13	Water	06/07/16 14:22	06/28/16 15:40

Client Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14650 MW-4

Lab Sample ID: 400-123615-1

Date Collected: 06/07/16 15:12

Matrix: Water

Date Received: 06/28/16 15:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0895	U	0.0969	0.0972	1.00	0.157	pCi/L	07/06/16 14:34	07/28/16 20:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.8		40 - 110					07/06/16 14:34	07/28/16 20:19	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.197	U	0.290	0.291	1.00	0.486	pCi/L	07/06/16 15:00	07/26/16 17:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.8		40 - 110					07/06/16 15:00	07/26/16 17:04	1
Y Carrier	84.1		40 - 110					07/06/16 15:00	07/26/16 17:04	1

Method: Ra226_Ra228 - Combined Radium-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	0.306	0.307	5.00	0.486	pCi/L		07/30/16 00:26	1

Client Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14651 MW-3

Lab Sample ID: 400-123615-2

Date Collected: 06/07/16 16:18

Matrix: Water

Date Received: 06/28/16 15:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.164		0.101	0.102	1.00	0.138	pCi/L	07/06/16 14:34	07/28/16 20:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.9		40 - 110					07/06/16 14:34	07/28/16 20:20	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.291	U	0.265	0.267	1.00	0.425	pCi/L	07/06/16 15:00	07/26/16 17:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	76.9		40 - 110					07/06/16 15:00	07/26/16 17:05	1
Y Carrier	81.9		40 - 110					07/06/16 15:00	07/26/16 17:05	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.455		0.284	0.285	5.00	0.425	pCi/L		07/30/16 00:30	1

Client Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14652 MW-2

Lab Sample ID: 400-123615-3

Date Collected: 06/08/16 09:08

Matrix: Water

Date Received: 06/28/16 15:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.143		0.0954	0.0963	1.00	0.133	pCi/L	07/06/16 14:34	07/28/16 20:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.8		40 - 110					07/06/16 14:34	07/28/16 20:20	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0225	U	0.245	0.245	1.00	0.449	pCi/L	07/06/16 15:00	07/26/16 17:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.8		40 - 110					07/06/16 15:00	07/26/16 17:05	1
Y Carrier	84.1		40 - 110					07/06/16 15:00	07/26/16 17:05	1

Method: Ra226_Ra228 - Combined Radium-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	0.262	0.263	5.00	0.449	pCi/L		07/30/16 00:30	1

Client Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14653 MW-2 DUP

Lab Sample ID: 400-123615-4

Date Collected: 06/08/16 09:08

Matrix: Water

Date Received: 06/28/16 15:40

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	U	0.106	0.107	1.00	0.164	pCi/L	07/06/16 14:34	07/28/16 20:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.9		40 - 110					07/06/16 14:34	07/28/16 20:20	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.186	U	0.262	0.262	1.00	0.438	pCi/L	07/06/16 15:00	07/26/16 17:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.9		40 - 110					07/06/16 15:00	07/26/16 17:05	1
Y Carrier	80.0		40 - 110					07/06/16 15:00	07/26/16 17:05	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.313	U	0.283	0.283	5.00	0.438	pCi/L		07/30/16 00:30	1

Client Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14654 MW-1

Lab Sample ID: 400-123615-5

Date Collected: 06/08/16 10:10

Matrix: Water

Date Received: 06/28/16 15:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.812		0.185	0.199	1.00	0.177	pCi/L	07/06/16 14:34	07/28/16 20:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.2		40 - 110					07/06/16 14:34	07/28/16 20:20	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.776		0.305	0.314	1.00	0.422	pCi/L	07/06/16 15:00	07/26/16 17:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.2		40 - 110					07/06/16 15:00	07/26/16 17:05	1
Y Carrier	84.9		40 - 110					07/06/16 15:00	07/26/16 17:05	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.59		0.357	0.371	5.00	0.422	pCi/L		07/30/16 00:30	1

Client Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14655 MW-16

Lab Sample ID: 400-123615-6

Date Collected: 06/08/16 11:18

Matrix: Water

Date Received: 06/28/16 15:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.388		0.123	0.127	1.00	0.109	pCi/L	07/06/16 14:34	07/28/16 20:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.5		40 - 110					07/06/16 14:34	07/28/16 20:20	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0443	U	0.240	0.240	1.00	0.442	pCi/L	07/06/16 15:00	07/26/16 17:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.5		40 - 110					07/06/16 15:00	07/26/16 17:05	1
Y Carrier	84.1		40 - 110					07/06/16 15:00	07/26/16 17:05	1

Method: Ra226_Ra228 - Combined Radium-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	0.269	0.272	5.00	0.442	pCi/L		07/30/16 00:30	1

Client Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14656 MW-14

Lab Sample ID: 400-123615-7

Date Collected: 06/08/16 12:35

Matrix: Water

Date Received: 06/28/16 15:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.200		0.0980	0.0996	1.00	0.119	pCi/L	07/06/16 14:34	07/28/16 20:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.3		40 - 110					07/06/16 14:34	07/28/16 20:20	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.431	U	0.289	0.291	1.00	0.444	pCi/L	07/06/16 15:00	07/26/16 17:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.3		40 - 110					07/06/16 15:00	07/26/16 17:05	1
Y Carrier	80.7		40 - 110					07/06/16 15:00	07/26/16 17:05	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.631		0.305	0.308	5.00	0.444	pCi/L		07/30/16 00:30	1

Client Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14657 MW-15

Lab Sample ID: 400-123615-8

Date Collected: 06/08/16 13:35

Matrix: Water

Date Received: 06/28/16 15:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.223		0.110	0.111	1.00	0.138	pCi/L	07/06/16 14:34	07/28/16 20:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.5		40 - 110					07/06/16 14:34	07/28/16 20:20	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.334	U	0.284	0.286	1.00	0.454	pCi/L	07/06/16 15:00	07/26/16 17:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.5		40 - 110					07/06/16 15:00	07/26/16 17:06	1
Y Carrier	86.7		40 - 110					07/06/16 15:00	07/26/16 17:06	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.557		0.305	0.307	5.00	0.454	pCi/L		07/30/16 00:30	1

Client Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14658 FB-1

Lab Sample ID: 400-123615-9

Date Collected: 06/07/16 16:50

Matrix: Water

Date Received: 06/28/16 15:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.00922	U	0.0563	0.0563	1.00	0.120	pCi/L	07/06/16 14:34	07/28/16 20:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.9		40 - 110					07/06/16 14:34	07/28/16 20:20	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0556	U	0.259	0.259	1.00	0.475	pCi/L	07/06/16 15:00	07/26/16 17:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.9		40 - 110					07/06/16 15:00	07/26/16 17:06	1
Y Carrier	77.4		40 - 110					07/06/16 15:00	07/26/16 17:06	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0648	U	0.265	0.265	5.00	0.475	pCi/L		07/30/16 00:30	1

Client Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14659 MW-5

Lab Sample ID: 400-123615-10

Date Collected: 06/07/16 12:25

Matrix: Water

Date Received: 06/28/16 15:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.662		0.174	0.184	1.00	0.184	pCi/L	07/06/16 14:34	07/28/16 20:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.3		40 - 110					07/06/16 14:34	07/28/16 20:21	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.842		0.325	0.334	1.00	0.449	pCi/L	07/06/16 15:00	07/26/16 17:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.3		40 - 110					07/06/16 15:00	07/26/16 17:06	1
Y Carrier	84.5		40 - 110					07/06/16 15:00	07/26/16 17:06	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.50		0.368	0.381	5.00	0.449	pCi/L		07/30/16 00:30	1

Client Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14660 MW-8

Lab Sample ID: 400-123615-11

Date Collected: 06/07/16 13:50

Matrix: Water

Date Received: 06/28/16 15:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.443		0.132	0.138	1.00	0.124	pCi/L	07/06/16 14:34	07/28/16 20:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.5		40 - 110					07/06/16 14:34	07/28/16 20:21	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.410	U	0.279	0.281	1.00	0.429	pCi/L	07/06/16 15:00	07/26/16 17:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.5		40 - 110					07/06/16 15:00	07/26/16 17:06	1
Y Carrier	81.5		40 - 110					07/06/16 15:00	07/26/16 17:06	1

Method: Ra226_Ra228 - Combined Radium-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		0.308	0.313	5.00	0.429	pCi/L		07/30/16 00:30	1

Client Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14661 MW-7

Lab Sample ID: 400-123615-12

Date Collected: 06/07/16 15:26

Matrix: Water

Date Received: 06/28/16 15:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.132	U	0.130	0.130	1.00	0.208	pCi/L	07/06/16 14:34	07/28/16 20:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	70.7		40 - 110					07/06/16 14:34	07/28/16 20:21	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.423	U	0.361	0.363	1.00	0.578	pCi/L	07/06/16 15:00	07/26/16 17:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	70.7		40 - 110					07/06/16 15:00	07/26/16 17:06	1
Y Carrier	81.1		40 - 110					07/06/16 15:00	07/26/16 17:06	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.555	U	0.383	0.386	5.00	0.578	pCi/L		07/30/16 00:30	1

Client Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14662 MW-7 DUP

Lab Sample ID: 400-123615-13

Date Collected: 06/07/16 15:26

Matrix: Water

Date Received: 06/28/16 15:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.224		0.123	0.125	1.00	0.172	pCi/L	07/06/16 14:34	07/28/16 20:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.6		40 - 110					07/06/16 14:34	07/28/16 20:21	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.209	U	0.284	0.284	1.00	0.473	pCi/L	07/06/16 15:00	07/26/16 17:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.6		40 - 110					07/06/16 15:00	07/26/16 17:06	1
Y Carrier	81.9		40 - 110					07/06/16 15:00	07/26/16 17:06	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.433	U	0.309	0.310	5.00	0.473	pCi/L		07/30/16 00:30	1

Client Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14663 MW-6

Lab Sample ID: 400-123615-14

Date Collected: 06/07/16 16:40

Matrix: Water

Date Received: 06/28/16 15:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0447	U	0.0844	0.0845	1.00	0.148	pCi/L	07/06/16 14:34	07/28/16 20:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.5		40 - 110					07/06/16 14:34	07/28/16 20:21	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.308	U	0.273	0.275	1.00	0.438	pCi/L	07/06/16 15:00	07/26/16 17:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.5		40 - 110					07/06/16 15:00	07/26/16 17:06	1
Y Carrier	84.9		40 - 110					07/06/16 15:00	07/26/16 17:06	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.353	U	0.286	0.288	5.00	0.438	pCi/L		07/30/16 00:30	1

Client Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14664 MW-9

Lab Sample ID: 400-123615-15

Date Collected: 06/08/16 09:40

Matrix: Water

Date Received: 06/28/16 15:40

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		0.132	0.139	1.00	0.126	pCi/L	07/06/16 14:34	07/29/16 06:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.2		40 - 110					07/06/16 14:34	07/29/16 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	0.363	U	0.289	0.291	1.00	0.459	pCi/L	07/06/16 15:00	07/26/16 17:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.2		40 - 110					07/06/16 15:00	07/26/16 17:06	1
Y Carrier	82.6		40 - 110					07/06/16 15:00	07/26/16 17:06	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.837		0.318	0.323	5.00	0.459	pCi/L		07/30/16 00:30	1

Client Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14665 EB-1

Lab Sample ID: 400-123615-16

Date Collected: 06/08/16 09:57

Matrix: Water

Date Received: 06/28/16 15:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0471	U	0.0732	0.0733	1.00	0.126	pCi/L	07/06/16 14:34	07/29/16 06:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.1		40 - 110					07/06/16 14:34	07/29/16 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	-0.0227	U	0.263	0.263	1.00	0.474	pCi/L	07/06/16 15:00	07/26/16 17:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.1		40 - 110					07/06/16 15:00	07/26/16 17:06	1
Y Carrier	83.0		40 - 110					07/06/16 15:00	07/26/16 17:06	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0244	U	0.273	0.273	5.00	0.474	pCi/L		07/30/16 00:30	1

Client Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14666 MW-10

Lab Sample ID: 400-123615-17

Date Collected: 06/08/16 11:00

Matrix: Water

Date Received: 06/28/16 15:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.549		0.150	0.158	1.00	0.150	pCi/L	07/06/16 14:34	07/29/16 06:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.8		40 - 110					07/06/16 14:34	07/29/16 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	0.508		0.270	0.274	1.00	0.395	pCi/L	07/06/16 15:00	07/26/16 17:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.8		40 - 110					07/06/16 15:00	07/26/16 17:06	1
Y Carrier	83.4		40 - 110					07/06/16 15:00	07/26/16 17:06	1

Method: Ra226_Ra228 - Combined Radium-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		0.309	0.317	5.00	0.395	pCi/L		07/30/16 00:30	1

Client Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14667 FB-2

Lab Sample ID: 400-123615-18

Date Collected: 06/08/16 11:15

Matrix: Water

Date Received: 06/28/16 15:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0255	U	0.0451	0.0452	1.00	0.110	pCi/L	07/06/16 14:34	07/28/16 20:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.9		40 - 110					07/06/16 14:34	07/28/16 20:16	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.00757	U	0.236	0.236	1.00	0.425	pCi/L	07/06/16 15:00	07/26/16 17:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.9		40 - 110					07/06/16 15:00	07/26/16 17:07	1
Y Carrier	84.1		40 - 110					07/06/16 15:00	07/26/16 17:07	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0179	U	0.240	0.240	5.00	0.425	pCi/L		07/30/16 00:30	1

Client Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14668 MW-11

Lab Sample ID: 400-123615-19

Date Collected: 06/08/16 12:10

Matrix: Water

Date Received: 06/28/16 15:40

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		0.134	0.141	1.00	0.109	pCi/L	07/06/16 14:34	07/28/16 20:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.2		40 - 110					07/06/16 14:34	07/28/16 20:16	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.204	U	0.262	0.263	1.00	0.435	pCi/L	07/06/16 15:00	07/26/16 17:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.2		40 - 110					07/06/16 15:00	07/26/16 17:07	1
Y Carrier	80.0		40 - 110					07/06/16 15:00	07/26/16 17:07	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.704		0.294	0.298	5.00	0.435	pCi/L		07/30/16 00:30	1

Client Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14669 MW-12

Lab Sample ID: 400-123615-20

Date Collected: 06/07/16 13:24

Matrix: Water

Date Received: 06/28/16 15:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.507		0.159	0.165	1.00	0.186	pCi/L	07/06/16 14:34	07/28/16 20:16	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.8		40 - 110					07/06/16 14:34	07/28/16 20:16	1

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		0.332	0.336	1.00	0.506	pCi/L	07/06/16 15:00	07/26/16 17:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.8		40 - 110					07/06/16 15:00	07/26/16 17:07	1
Y Carrier	81.1		40 - 110					07/06/16 15:00	07/26/16 17:07	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.08		0.368	0.375	5.00	0.506	pCi/L		07/30/16 00:30	1

Client Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14670 MW-13

Lab Sample ID: 400-123615-21

Date Collected: 06/07/16 14:22

Matrix: Water

Date Received: 06/28/16 15:40

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.346		0.0910	0.0961	1.00	0.0761	pCi/L	07/01/16 15:44	07/26/16 11:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					07/01/16 15:44	07/26/16 11:40	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.466		0.266	0.270	1.00	0.402	pCi/L	07/01/16 16:39	07/20/16 13:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					07/01/16 16:39	07/20/16 13:45	1
Y Carrier	85.2		40 - 110					07/01/16 16:39	07/20/16 13:45	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.812		0.281	0.286	5.00	0.402	pCi/L		07/30/16 00:30	1

Definitions/Glossary

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

TestAmerica Job ID: 400-123615-1
SDG: Barry 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 Barry

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14650 MW-4

Lab Sample ID: 400-123615-1

Date Collected: 06/07/16 15:12

Matrix: Water

Date Received: 06/28/16 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259396	07/06/16 14:34	MCJ	TAL SL
Total/NA	Analysis	9315		1	262450	07/28/16 20:19	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259400	07/06/16 15:00	MCJ	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 17:04	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:26	RTM	TAL SL

Client Sample ID: AW14651 MW-3

Lab Sample ID: 400-123615-2

Date Collected: 06/07/16 16:18

Matrix: Water

Date Received: 06/28/16 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259396	07/06/16 14:34	MCJ	TAL SL
Total/NA	Analysis	9315		1	262450	07/28/16 20:20	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259400	07/06/16 15:00	MCJ	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 17:05	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:30	RTM	TAL SL

Client Sample ID: AW14652 MW-2

Lab Sample ID: 400-123615-3

Date Collected: 06/08/16 09:08

Matrix: Water

Date Received: 06/28/16 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259396	07/06/16 14:34	MCJ	TAL SL
Total/NA	Analysis	9315		1	262450	07/28/16 20:20	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259400	07/06/16 15:00	MCJ	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 17:05	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:30	RTM	TAL SL

Client Sample ID: AW14653 MW-2 DUP

Lab Sample ID: 400-123615-4

Date Collected: 06/08/16 09:08

Matrix: Water

Date Received: 06/28/16 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259396	07/06/16 14:34	MCJ	TAL SL
Total/NA	Analysis	9315		1	262450	07/28/16 20:20	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259400	07/06/16 15:00	MCJ	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 17:05	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:30	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14654 MW-1

Lab Sample ID: 400-123615-5

Date Collected: 06/08/16 10:10

Matrix: Water

Date Received: 06/28/16 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259396	07/06/16 14:34	MCJ	TAL SL
Total/NA	Analysis	9315		1	262450	07/28/16 20:20	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259400	07/06/16 15:00	MCJ	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 17:05	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:30	RTM	TAL SL

Client Sample ID: AW14655 MW-16

Lab Sample ID: 400-123615-6

Date Collected: 06/08/16 11:18

Matrix: Water

Date Received: 06/28/16 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259396	07/06/16 14:34	MCJ	TAL SL
Total/NA	Analysis	9315		1	262450	07/28/16 20:20	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259400	07/06/16 15:00	MCJ	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 17:05	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:30	RTM	TAL SL

Client Sample ID: AW14656 MW-14

Lab Sample ID: 400-123615-7

Date Collected: 06/08/16 12:35

Matrix: Water

Date Received: 06/28/16 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259396	07/06/16 14:34	MCJ	TAL SL
Total/NA	Analysis	9315		1	262450	07/28/16 20:20	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259400	07/06/16 15:00	MCJ	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 17:05	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:30	RTM	TAL SL

Client Sample ID: AW14657 MW-15

Lab Sample ID: 400-123615-8

Date Collected: 06/08/16 13:35

Matrix: Water

Date Received: 06/28/16 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259396	07/06/16 14:34	MCJ	TAL SL
Total/NA	Analysis	9315		1	262450	07/28/16 20:20	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259400	07/06/16 15:00	MCJ	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 17:06	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:30	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14658 FB-1

Lab Sample ID: 400-123615-9

Date Collected: 06/07/16 16:50

Matrix: Water

Date Received: 06/28/16 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259396	07/06/16 14:34	MCJ	TAL SL
Total/NA	Analysis	9315		1	262450	07/28/16 20:20	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259400	07/06/16 15:00	MCJ	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 17:06	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:30	RTM	TAL SL

Client Sample ID: AW14659 MW-5

Lab Sample ID: 400-123615-10

Date Collected: 06/07/16 12:25

Matrix: Water

Date Received: 06/28/16 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259396	07/06/16 14:34	MCJ	TAL SL
Total/NA	Analysis	9315		1	262450	07/28/16 20:21	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259400	07/06/16 15:00	MCJ	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 17:06	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:30	RTM	TAL SL

Client Sample ID: AW14660 MW-8

Lab Sample ID: 400-123615-11

Date Collected: 06/07/16 13:50

Matrix: Water

Date Received: 06/28/16 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259396	07/06/16 14:34	MCJ	TAL SL
Total/NA	Analysis	9315		1	262450	07/28/16 20:21	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259400	07/06/16 15:00	MCJ	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 17:06	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:30	RTM	TAL SL

Client Sample ID: AW14661 MW-7

Lab Sample ID: 400-123615-12

Date Collected: 06/07/16 15:26

Matrix: Water

Date Received: 06/28/16 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259396	07/06/16 14:34	MCJ	TAL SL
Total/NA	Analysis	9315		1	262450	07/28/16 20:21	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259400	07/06/16 15:00	MCJ	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 17:06	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:30	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14662 MW-7 DUP

Lab Sample ID: 400-123615-13

Date Collected: 06/07/16 15:26

Matrix: Water

Date Received: 06/28/16 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259396	07/06/16 14:34	MCJ	TAL SL
Total/NA	Analysis	9315		1	262450	07/28/16 20:21	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259400	07/06/16 15:00	MCJ	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 17:06	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:30	RTM	TAL SL

Client Sample ID: AW14663 MW-6

Lab Sample ID: 400-123615-14

Date Collected: 06/07/16 16:40

Matrix: Water

Date Received: 06/28/16 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259396	07/06/16 14:34	MCJ	TAL SL
Total/NA	Analysis	9315		1	262450	07/28/16 20:21	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259400	07/06/16 15:00	MCJ	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 17:06	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:30	RTM	TAL SL

Client Sample ID: AW14664 MW-9

Lab Sample ID: 400-123615-15

Date Collected: 06/08/16 09:40

Matrix: Water

Date Received: 06/28/16 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259396	07/06/16 14:34	MCJ	TAL SL
Total/NA	Analysis	9315		1	262632	07/29/16 06:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259400	07/06/16 15:00	MCJ	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 17:06	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:30	RTM	TAL SL

Client Sample ID: AW14665 EB-1

Lab Sample ID: 400-123615-16

Date Collected: 06/08/16 09:57

Matrix: Water

Date Received: 06/28/16 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259396	07/06/16 14:34	MCJ	TAL SL
Total/NA	Analysis	9315		1	262632	07/29/16 06:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259400	07/06/16 15:00	MCJ	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 17:06	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:30	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Client Sample ID: AW14666 MW-10

Lab Sample ID: 400-123615-17

Date Collected: 06/08/16 11:00

Matrix: Water

Date Received: 06/28/16 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259396	07/06/16 14:34	MCJ	TAL SL
Total/NA	Analysis	9315		1	262632	07/29/16 06:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259400	07/06/16 15:00	MCJ	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 17:06	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:30	RTM	TAL SL

Client Sample ID: AW14667 FB-2

Lab Sample ID: 400-123615-18

Date Collected: 06/08/16 11:15

Matrix: Water

Date Received: 06/28/16 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259396	07/06/16 14:34	MCJ	TAL SL
Total/NA	Analysis	9315		1	262466	07/28/16 20:16	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259400	07/06/16 15:00	MCJ	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 17:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:30	RTM	TAL SL

Client Sample ID: AW14668 MW-11

Lab Sample ID: 400-123615-19

Date Collected: 06/08/16 12:10

Matrix: Water

Date Received: 06/28/16 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259396	07/06/16 14:34	MCJ	TAL SL
Total/NA	Analysis	9315		1	262466	07/28/16 20:16	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259400	07/06/16 15:00	MCJ	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 17:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:30	RTM	TAL SL

Client Sample ID: AW14669 MW-12

Lab Sample ID: 400-123615-20

Date Collected: 06/07/16 13:24

Matrix: Water

Date Received: 06/28/16 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259396	07/06/16 14:34	MCJ	TAL SL
Total/NA	Analysis	9315		1	262466	07/28/16 20:16	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259400	07/06/16 15:00	MCJ	TAL SL
Total/NA	Analysis	9320		1	262071	07/26/16 17:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:30	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-123615-1
SDG: Barry Ash Pond (3)

Client Sample ID: AW14670 MW-13

Lab Sample ID: 400-123615-21

Date Collected: 06/07/16 14:22

Matrix: Water

Date Received: 06/28/16 15:40

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			258931	07/01/16 15:44	MCJ	TAL SL
Total/NA	Analysis	9315		1	262069	07/26/16 11:40	RTM	TAL SL
Total/NA	Prep	PrecSep_0			258935	07/01/16 16:39	MCJ	TAL SL
Total/NA	Analysis	9320		1	261340	07/20/16 13:45	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:30	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 Barry

TestAmerica Job ID: 400-123615-1
SDG: Barry Ash Pond (3)

Rad

Prep Batch: 258931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123615-21	AW14670 MW-13	Total/NA	Water	PrecSep-21	
MB 160-258931/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-258931/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-123618-D-11-C DU	Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 258935

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123615-21	AW14670 MW-13	Total/NA	Water	PrecSep_0	
MB 160-258935/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-258935/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-123618-D-11-D DU	Duplicate	Total/NA	Water	PrecSep_0	

Prep Batch: 259396

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123615-1	AW14650 MW-4	Total/NA	Water	PrecSep-21	
400-123615-2	AW14651 MW-3	Total/NA	Water	PrecSep-21	
400-123615-3	AW14652 MW-2	Total/NA	Water	PrecSep-21	
400-123615-4	AW14653 MW-2 DUP	Total/NA	Water	PrecSep-21	
400-123615-5	AW14654 MW-1	Total/NA	Water	PrecSep-21	
400-123615-6	AW14655 MW-16	Total/NA	Water	PrecSep-21	
400-123615-7	AW14656 MW-14	Total/NA	Water	PrecSep-21	
400-123615-8	AW14657 MW-15	Total/NA	Water	PrecSep-21	
400-123615-9	AW14658 FB-1	Total/NA	Water	PrecSep-21	
400-123615-10	AW14659 MW-5	Total/NA	Water	PrecSep-21	
400-123615-11	AW14660 MW-8	Total/NA	Water	PrecSep-21	
400-123615-12	AW14661 MW-7	Total/NA	Water	PrecSep-21	
400-123615-13	AW14662 MW-7 DUP	Total/NA	Water	PrecSep-21	
400-123615-14	AW14663 MW-6	Total/NA	Water	PrecSep-21	
400-123615-15	AW14664 MW-9	Total/NA	Water	PrecSep-21	
400-123615-16	AW14665 EB-1	Total/NA	Water	PrecSep-21	
400-123615-17	AW14666 MW-10	Total/NA	Water	PrecSep-21	
400-123615-18	AW14667 FB-2	Total/NA	Water	PrecSep-21	
400-123615-19	AW14668 MW-11	Total/NA	Water	PrecSep-21	
400-123615-20	AW14669 MW-12	Total/NA	Water	PrecSep-21	
MB 160-259396/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-259396/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-123615-7 DU	AW14656 MW-14	Total/NA	Water	PrecSep-21	

Prep Batch: 259400

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123615-1	AW14650 MW-4	Total/NA	Water	PrecSep_0	
400-123615-2	AW14651 MW-3	Total/NA	Water	PrecSep_0	
400-123615-3	AW14652 MW-2	Total/NA	Water	PrecSep_0	
400-123615-4	AW14653 MW-2 DUP	Total/NA	Water	PrecSep_0	
400-123615-5	AW14654 MW-1	Total/NA	Water	PrecSep_0	
400-123615-6	AW14655 MW-16	Total/NA	Water	PrecSep_0	
400-123615-7	AW14656 MW-14	Total/NA	Water	PrecSep_0	
400-123615-8	AW14657 MW-15	Total/NA	Water	PrecSep_0	
400-123615-9	AW14658 FB-1	Total/NA	Water	PrecSep_0	
400-123615-10	AW14659 MW-5	Total/NA	Water	PrecSep_0	
400-123615-11	AW14660 MW-8	Total/NA	Water	PrecSep_0	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-123615-1
SDG: Barry Ash Pond (3)

Rad (Continued)

Prep Batch: 259400 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123615-12	AW14661 MW-7	Total/NA	Water	PrecSep_0	
400-123615-13	AW14662 MW-7 DUP	Total/NA	Water	PrecSep_0	
400-123615-14	AW14663 MW-6	Total/NA	Water	PrecSep_0	
400-123615-15	AW14664 MW-9	Total/NA	Water	PrecSep_0	
400-123615-16	AW14665 EB-1	Total/NA	Water	PrecSep_0	
400-123615-17	AW14666 MW-10	Total/NA	Water	PrecSep_0	
400-123615-18	AW14667 FB-2	Total/NA	Water	PrecSep_0	
400-123615-19	AW14668 MW-11	Total/NA	Water	PrecSep_0	
400-123615-20	AW14669 MW-12	Total/NA	Water	PrecSep_0	
MB 160-259400/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-259400/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-123615-7 DU	AW14656 MW-14	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-258931/1-A
Matrix: Water
Analysis Batch: 262074

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 258931

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.07412	U	0.0704	0.0708	1.00	0.112	pCi/L	07/01/16 15:44	07/26/16 08:06	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					07/01/16 15:44	07/26/16 08:06	1

Lab Sample ID: LCS 160-258931/2-A
Matrix: Water
Analysis Batch: 262074

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 258931

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	11.2	13.82		1.35	1.00	0.0782	pCi/L	124	68 - 137
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	94.0		40 - 110						

Lab Sample ID: 400-123618-D-11-C DU
Matrix: Water
Analysis Batch: 262071

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 258931

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.130		0.1370		0.0690	1.00	0.0909	pCi/L	0.05	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	95.2		40 - 110							

Lab Sample ID: MB 160-259396/1-A
Matrix: Water
Analysis Batch: 262450

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 259396

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.08594	U	0.0851	0.0854	1.00	0.201	pCi/L	07/06/16 14:34	07/28/16 20:19	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	55.8		40 - 110					07/06/16 14:34	07/28/16 20:19	1

Lab Sample ID: LCS 160-259396/2-A
Matrix: Water
Analysis Batch: 262450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 259396

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	11.2	15.25		1.54	1.00	0.124	pCi/L	137	68 - 137

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

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

Lab Sample ID: LCS 160-259396/2-A
Matrix: Water
Analysis Batch: 262450

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 259396

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	77.8		40 - 110

Lab Sample ID: 400-123615-7 DU
Matrix: Water
Analysis Batch: 262450

Client Sample ID: AW14656 MW-14
Prep Type: Total/NA
Prep Batch: 259396

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.200		0.1607		0.0980	1.00	0.131	pCi/L	0.20	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	78.3		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-258935/1-A
Matrix: Water
Analysis Batch: 261340

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 258935

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2132	U	0.271	0.272	1.00	0.449	pCi/L	07/01/16 16:39	07/20/16 13:44	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110	07/01/16 16:39	07/20/16 13:44	1
Y Carrier	83.4		40 - 110	07/01/16 16:39	07/20/16 13:44	1

Lab Sample ID: LCS 160-258935/2-A
Matrix: Water
Analysis Batch: 261340

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 258935

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	14.8	19.16		2.00	1.00	0.417	pCi/L	129	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	94.0		40 - 110
Y Carrier	85.2		40 - 110

Lab Sample ID: 400-123618-D-11-D DU
Matrix: Water
Analysis Batch: 261340

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 258935

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	-0.187	U	-0.04634	U	0.190	1.00	0.354	pCi/L	0.35	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-123615-1
 SDG: Barry Ash Pond (3)

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

Lab Sample ID: 400-123618-D-11-D DU
Matrix: Water
Analysis Batch: 261340

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 258935

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	95.2		40 - 110
Y Carrier	84.1		40 - 110

Lab Sample ID: MB 160-259400/1-A
Matrix: Water
Analysis Batch: 262074

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 259400

Analyte	MB MB		Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	0.2589	U	0.370	0.371	1.00	0.620	pCi/L	07/06/16 15:00	07/26/16 17:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	55.8		40 - 110					07/06/16 15:00	07/26/16 17:04	1
Y Carrier	81.1		40 - 110					07/06/16 15:00	07/26/16 17:04	1

Lab Sample ID: LCS 160-259400/2-A
Matrix: Water
Analysis Batch: 262074

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 259400

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	
Radium-228	14.8	16.39		1.80	1.00	0.440	pCi/L	111	56 - 140	
Carrier	%Yield	Qualifier	Limits							
Ba Carrier	77.8		40 - 110							
Y Carrier	80.0		40 - 110							

Lab Sample ID: 400-123615-7 DU
Matrix: Water
Analysis Batch: 262074

Client Sample ID: AW14656 MW-14
Prep Type: Total/NA
Prep Batch: 259400

Analyte	Sample Sample		DU DU		Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	Limit
	Result	Qual	Result	Qual						
Radium-228	0.431	U	0.1515	U	0.302	1.00	0.513	pCi/L	0.47	1
Carrier	%Yield	Qualifier	Limits							
Ba Carrier	78.3		40 - 110							
Y Carrier	83.4		40 - 110							

Chain of Custody Record

Client Information		Lab PM: Whitmire, Cheyenne R		Carrier Tracking No(s): 400-56525-24537.1	
Client Contact: Sarah Copeland		Phone: 205-664-6121		Page: 1 of 2	
Company: Alabama Power General Test Laboratory		E-Mail: cheyenne.whitmire@testamericainc.com		Job #: 400-123615	
Address: 744 County Rd 87 GSC #8		Due Date Requested:		Preservation Codes:	
City: Callera		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:	
State, Zip: AL, 35040		PO #:		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)	
Phone: 205-664-6121(Tel)		WO #:		Total Number of Containers	
Email: sgcopela@southernco.com		Project #:		Special Instructions/Note:	
Project Name: CCR		40007143			
Site: Barry Ash Pond (3)		SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=organic)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Analysis Requested	Total Number of Containers	Special Instructions/Note:
AW14650	6/7/16	1512	G	Water	X	X	9316_Ra226, 9320_Ra228, Ra226Ra228_GPPC	1	MW-4
AW14651	6/7/16	1618	G	Water	X	X		1	MW-3
AW14652	6/8/16	0908	G	Water	X	X		1	MW-2
AW14653	6/8/16	0908	G	Water	X	X		1	MW-2 Dup (Sample Duplicate)
AW14654	6/8/16	1010	G	Water	X	X		1	MW-1
AW14655	6/8/16	1118	G	Water	X	X		1	MW-16
AW14656	6/8/16	1235	G	Water	Y	X		2	MW-14
AW14657	6/8/16	1335	G	Water	X	X		1	MW-15
AW14658	6/7/16	1650	G	Water	X	X		1	FB-1 (Field Blank)
AW14659	6/7/16	1225	G	Water	Y	X		2	MW-5
AW14660	6/7/16	1350	G	Water	X	X		1	MW-8

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant Unknown Radiological

Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by: _____ Date: _____

Relinquished by: Sarah Copeland Date/Time: 6/27/16, 1330 Company: APC

Relinquished by: *[Signature]* Date/Time: 6/28/16 1540 Company: ABC

Relinquished by: *[Signature]* Date/Time: 6/28/16 15:40 Company: TA

Custody Seals Intact: Yes No No
 Cooler Temperature(s) °C and Other Remarks:



Chain of Custody Record

92615

Client Information		Sampler: Nick Pitts / Jason Rouss		Lab PM: Whitmire, Cheyenne R		COC No: 400-56525-24537.1	
Client Contact: Sarah Copeland		Phone: 205-664-6121		E-Mail: cheyenne.whitmire@testamericainc.com		Page: 2 of 2	
Company: Alabama Power General Test Laboratory		Address: 744 County Rd 87 GSC #8		City: Calera		Job #: 9316_Ra226, 9320_Ra228, Ra228, Ra226Ra228_GPPC	
State, Zip: AL, 35040		Phone: 205-664-6121 (Tel)		E-Mail: sgcopela@southernco.com		Carrier Tracking No(s):	
Project Name: CCR		Project #: 40007143		SSOW#: Barry Ash Pond (3)		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Sample Identification		Due Date Requested:		Analysis Requested		Special Instructions/Note:	
AW14661	Sample Date: 6/7/16	Sample Time: 1526	Sample Type (C=Comp, G=grab): G	Matrix (Water, Solid, Other): Water	Field Filtered Sample (Yes or No): X	Perform MS/MSD (Yes or No): X	Total Number of Containers: 1
AW14662	6/7/16	1526	G	Water	X	X	1
AW14663	6/7/16	1640	G	Water	X	X	1
AW14664	6/8/16	0940	G	Water	X	X	1
AW14665	6/8/16	0957	G	Water	X	X	1
AW14666	6/8/16	1100	G	Water	X	X	1
AW14667	6/8/16	1115	G	Water	X	X	1
AW14668	6/8/16	1210	G	Water	X	X	1
AW14669	6/7/16	1324	G	Water	X	X	1
AW14670	6/7/16	1422	G	Water	X	X	1
Possible Hazard Identification		Date: 6/27/16, 1330		Date/Time: 6/28/16 15:40		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)	
<input type="checkbox"/> Non-Hazard		<input type="checkbox"/> Flammable		<input type="checkbox"/> Skin Irritant		<input type="checkbox"/> Polson B	
<input type="checkbox"/> Unknown		<input type="checkbox"/> Radiological		<input type="checkbox"/> Return To Client		<input type="checkbox"/> Disposal By Lab	
Deliverable Requested: I, II, III, IV, Other (specify)		Date: 6/27/16, 1330		Date/Time: 6/28/16 15:40		Archive For: Months	
Empty Kit Relinquished by: Sarah Copeland		Date: 6/27/16, 1330		Date/Time: 6/28/16 15:40		Special Instructions/QC Requirements:	
Relinquished by: Sarah Copeland		Date: 6/27/16, 1330		Date/Time: 6/28/16 15:40		Method of Shipment:	
Relinquished by: <i>John Sidel</i>		Date: 6/28/16 15:40		Date/Time: 6/28/16 15:40		Company: APC	
Relinquished by: <i>John Sidel</i>		Date: 6/28/16 15:40		Date/Time: 6/28/16 15:40		Company: APC	
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: 400-123615-1
SDG Number: Barry Ash Pond (3)

Login Number: 123615

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 Barry

TestAmerica Job ID: 400-123615-1
 SDG: Barry 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	06-30-16 *
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 Barry

TestAmerica Job ID: 400-123615-1
SDG: Barry 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.

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 : WMWBARAP_40

Project/Site : Barry Ash Pond
Bucks, AL 36512

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

Barry Ash Pond

WMWBARAP_40

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>
AW22350	574475	574477	574479	WMWBARAP_40
AW22351	574475	574477	574479	WMWBARAP_40
AW22352	574475	574477	574479	WMWBARAP_40
AW22353	574475	574477	574479	WMWBARAP_40
AW22354	574475	574477	574479	WMWBARAP_40
AW22355	574475	574477	574479	WMWBARAP_40
AW22356	574475	574477	574479	WMWBARAP_40
AW22357	574475	574477	574479	WMWBARAP_40
AW22358	574475	574477	574479	WMWBARAP_40
AW22359	574475	574477	574479	WMWBARAP_40
AW22360	574476	574478	574480	WMWBARAP_40
AW22361	574476	574478	574480	WMWBARAP_40
AW22362	574476	574478	574480	WMWBARAP_40
AW22363	574476	574478	574480	WMWBARAP_40
AW22364	574476	574478	574480	WMWBARAP_40
AW22365	574476	574478	574480	WMWBARAP_40
AW22366	574476	574478	574480	WMWBARAP_40
AW22367	574476	574478	574480	WMWBARAP_40
AW22368	574476	574478	574480	WMWBARAP_40
AW22369	574476	574478	574480	WMWBARAP_40
AW22370	574534	574536	574538	WMWBARAP_40

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. It is noted that the Instrument Performance Check standard analyzed after the initial calibration of 09/01/2016 was utilized as the opening LFB for batches 574475, 574477 and 574479.
- 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 AW22362, AW22363 and AW22365 were re-analyzed for chloride at a 10x dilution, due to undiluted results exceeding the calibrated range of the detector. The dilution results for chloride 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>
AW22362		Chloride		10X
AW22363		Chloride		10X
AW22365		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.



Metals ICP

Barry Ash Pond

WMWBARAP_40

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>
AW22350	20160921A	WMWBARAP_40
AW22351	20160921A	WMWBARAP_40
AW22352	20160921A	WMWBARAP_40
AW22353	20160921A	WMWBARAP_40
AW22354	20160921A	WMWBARAP_40
AW22355	20160921A	WMWBARAP_40
AW22356	20160921A	WMWBARAP_40
AW22357	20160921A	WMWBARAP_40
AW22358	20160921A	WMWBARAP_40
AW22359	20160921A	WMWBARAP_40
AW22360	20160921B	WMWBARAP_40
AW22361	20160921B	WMWBARAP_40
AW22362	20160921B	WMWBARAP_40
AW22363	20160921B	WMWBARAP_40
AW22364	20160921B	WMWBARAP_40
AW22365	20160921B	WMWBARAP_40
AW22366	20160921B	WMWBARAP_40
AW22367	20160921B	WMWBARAP_40
AW22368	20160921B	WMWBARAP_40
AW22369	20160921B	WMWBARAP_40
AW22370	20160921C	WMWBARAP_40

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 exception: The following sample was diluted due to sample concentration from the undiluted analysis was over the high standard of the calibration curve.

Sample ID	Analyte	Dilution Factor
AW22356	Calcium	10X

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



Metals ICPMS

Barry Ash Pond

WMWBARAP_40

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>
AW22350	575506	WMWBARAP_40
AW22351	575506	WMWBARAP_40
AW22352	575506	WMWBARAP_40
AW22353	575506	WMWBARAP_40
AW22354	575506	WMWBARAP_40
AW22355	575506	WMWBARAP_40
AW22356	575506	WMWBARAP_40
AW22357	575506	WMWBARAP_40
AW22358	575506	WMWBARAP_40
AW22359	575507	WMWBARAP_40
AW22360	575507	WMWBARAP_40
AW22361	575507	WMWBARAP_40
AW22362	575507	WMWBARAP_40
AW22363	575507	WMWBARAP_40
AW22364	575507	WMWBARAP_40
AW22365	575507	WMWBARAP_40
AW22366	575507	WMWBARAP_40
AW22367	575507	WMWBARAP_40
AW22368	575507	WMWBARAP_40
AW22369	575508	WMWBARAP_40
AW22370	575508	WMWBARAP_40

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

Barry Ash Pond

WMWBARAP_40

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>
AW22350	574711	WMWBARAP_40
AW22351	574711	WMWBARAP_40
AW22352	574711	WMWBARAP_40
AW22353	574711	WMWBARAP_40
AW22354	574711	WMWBARAP_40
AW22355	574711	WMWBARAP_40
AW22356	574711	WMWBARAP_40
AW22357	575060	WMWBARAP_40
AW22358	575060	WMWBARAP_40
AW22359	575060	WMWBARAP_40
AW22360	575060	WMWBARAP_40
AW22361	575060	WMWBARAP_40
AW22362	575060	WMWBARAP_40
AW22363	575060	WMWBARAP_40
AW22364	575060	WMWBARAP_40
AW22365	575060	WMWBARAP_40
AW22366	575060	WMWBARAP_40
AW22367	575061	WMWBARAP_40
AW22368	575061	WMWBARAP_40
AW22369	575061	WMWBARAP_40
AW22370	575061	WMWBARAP_40

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

Barry Ash Pond

WMWBARAP_40

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>
AW22350	574635	WMWBARAP_40
AW22351	574635	WMWBARAP_40
AW22352	574635	WMWBARAP_40
AW22353	574635	WMWBARAP_40
AW22354	574635	WMWBARAP_40
AW22355	574635	WMWBARAP_40
AW22356	574635	WMWBARAP_40
AW22357	574635	WMWBARAP_40
AW22358	574635	WMWBARAP_40
AW22359	574635	WMWBARAP_40
AW22360	574636	WMWBARAP_40
AW22361	574636	WMWBARAP_40
AW22362	574636	WMWBARAP_40
AW22363	574636	WMWBARAP_40
AW22364	574636	WMWBARAP_40
AW22365	574636	WMWBARAP_40
AW22366	574636	WMWBARAP_40
AW22367	574636	WMWBARAP_40
AW22368	574636	WMWBARAP_40
AW22369	574636	WMWBARAP_40
AW22370	574712	WMWBARAP_40

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. This has been corrected based on filter volume and project limits.

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



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 AW22358, AW22361 and AW22366 which were <2.5mg.

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 30-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AW22350

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/5/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	0.0387	mg/L
* Barium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	0.147	mg/L
* Beryllium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/21/2016	EPA 200.7		1	0.02	0.1	1.67	mg/L
* Calcium, Total	HRG	9/21/2016	EPA 200.7		1	0.1	0.5	34.1	mg/L
* Cadmium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/6/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/21/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/6/2016	SM 2540C		1		25	308	mg/L
* Chloride, Total	SES	9/1/2016	EPA 300.0		1	0.04	0.25	21.6	mg/L
* Fluoride, Total	SES	9/1/2016	EPA 300.0		1	0.01	0.3	J 0.052	mg/L
* Sulfate, Total	SES	9/1/2016	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: 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: WMWBARAP
 Sample Date: 30-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AW22350

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	Spike				Limit	Rec	Limit	Prec			
AW22358 Arsenic, Total	mg/L	0.0000129	0.0022	0.10	0.100	0.0999	0.103	0.085 to 0.115		100	70 to 130		0.207	20
AW22358 Lead, Total	mg/L	0.00000852	0.0022	0.10	0.104	0.104	0.101	0.085 to 0.115		104	70 to 130		0.257	20
AW22358 Cadmium, Total	mg/L	0.000000569	0.00044	0.10	0.0997	0.101	0.106	0.085 to 0.115		99.7	70 to 130		1.23	20
AW22359 Boron, Total	mg/L	-0.000375	0.044	1.00	0.964	0.927	0.925	0.85 to 1.15		96.4	70 to 130		3.91	20
AW22358 Molybdenum, Total	mg/L	0.00000879	0.0044	0.10	0.0997	0.0990	0.103	0.085 to 0.115		99.7	70 to 130		0.675	20
AW22359 Calcium, Total	mg/L	-0.0402	0.22	5.00	5.86	5.16	4.55	4.25 to 5.75		98.2	70 to 130		12.7	20
AW22358 Selenium, Total	mg/L	0.0000701	0.0044	0.10	0.0967	0.0971	0.103	0.085 to 0.115		96.7	70 to 130		0.487	20
AW22358 Thallium, Total	mg/L	0.0000209	0.00044	0.10	0.102	0.103	0.0999	0.085 to 0.115		102	70 to 130		0.316	20
AW22358 Chromium, Total	mg/L	0.00000465	0.0044	0.10	0.103	0.103	0.105	0.085 to 0.115		103	70 to 130		0.299	20
AW22358 Cobalt, Total	mg/L	-0.00000185	0.0044	0.10	0.0945	0.0949	0.102	0.085 to 0.115		94.5	70 to 130		0.462	20
AW22359 Lithium, Total	mg/L	0.000320	0.022	0.200	0.211	0.183	0.199	0.17 to 0.23		106	70 to 130		14.2	20
AW22356 Mercury, Total by CVAA	mg/L	0.000114	0.0005	0.004	0.00372	0.00367	0.00388	0.0034 to 0.0046		93.0	70 to 130		1.39	20
AW22358 Antimony, Total	mg/L	0.0000563	0.00132	0.10	0.0964	0.0968	0.101	0.085 to 0.115		96.4	70 to 130		0.411	20
AW22358 Barium, Total	mg/L	0.00000544	0.0044	0.10	0.0974	0.0962	0.100	0.085 to 0.115		97.4	70 to 130		1.22	20
AW22358 Beryllium, Total	mg/L	0.00000889	0.00132	0.10	0.105	0.104	0.108	0.085 to 0.115		105	70 to 130		0.268	20

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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Alabama Power 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: WMWBARAP
 Sample Date: 30-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AW22350

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW22359	Sulfate, Total	mg/L	0.007	1.0	20.00	23.3	2.94	19.8	18 to 22	102	80 to 120	4.52	20
AW22359	Fluoride, Total	mg/L	0.000	0.3	2.00	2.07	0.035	2.03	1.8 to 2.2	102	80 to 120	0.00	20
AW22350	Solids, Dissolved	mg/L	-1.0	25			312	45.0	40 to 60			0.645	5
AW22359	Chloride, Total	mg/L	0.000	0.25	10.00	20.7	10.8	9.85	9 to 11	99.0	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: 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

CC:

Reported: 8/1/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 30-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AW22351

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/5/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	0.0330	mg/L
* Barium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	0.136	mg/L
* Beryllium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/21/2016	EPA 200.7		1	0.02	0.1	J 0.0675	mg/L
* Calcium, Total	HRG	9/21/2016	EPA 200.7		1	0.1	0.5	13.7	mg/L
* Cadmium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/6/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/21/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/6/2016	SM 2540C		1		25	244	mg/L
* Chloride, Total	SES	9/1/2016	EPA 300.0		1	0.04	0.25	17.9	mg/L
* Fluoride, Total	SES	9/1/2016	EPA 300.0		1	0.01	0.3	J 0.057	mg/L
* Sulfate, Total	SES	9/1/2016	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: 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: WMWBARAP
 Sample Date: 30-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AW22351

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW22358 Lead, Total	mg/L	0.0000852	0.0022	0.10	0.104	0.104	0.101	0.085 to 0.115	104	70 to 130	0.257	20	
AW22358 Arsenic, Total	mg/L	0.0000129	0.0022	0.10	0.100	0.0999	0.103	0.085 to 0.115	100	70 to 130	0.207	20	
AW22358 Selenium, Total	mg/L	0.0000701	0.0044	0.10	0.0967	0.0971	0.103	0.085 to 0.115	96.7	70 to 130	0.487	20	
AW22358 Thallium, Total	mg/L	0.0000209	0.00044	0.10	0.102	0.103	0.0999	0.085 to 0.115	102	70 to 130	0.316	20	
AW22358 Molybdenum, Total	mg/L	0.0000879	0.0044	0.10	0.0997	0.0990	0.103	0.085 to 0.115	99.7	70 to 130	0.675	20	
AW22359 Calcium, Total	mg/L	-0.0402	0.22	5.00	5.86	5.16	4.55	4.25 to 5.75	98.2	70 to 130	12.7	20	
AW22358 Cadmium, Total	mg/L	0.00000569	0.00044	0.10	0.0997	0.101	0.106	0.085 to 0.115	99.7	70 to 130	1.23	20	
AW22359 Boron, Total	mg/L	-0.000375	0.044	1.00	0.964	0.927	0.925	0.85 to 1.15	96.4	70 to 130	3.91	20	
AW22356 Mercury, Total by CVAA	mg/L	0.000114	0.0005	0.004	0.00372	0.00367	0.00388	0.0034 to 0.0046	93.0	70 to 130	1.39	20	
AW22358 Antimony, Total	mg/L	0.0000563	0.00132	0.10	0.0964	0.0968	0.101	0.085 to 0.115	96.4	70 to 130	0.411	20	
AW22358 Barium, Total	mg/L	0.00000544	0.0044	0.10	0.0974	0.0962	0.100	0.085 to 0.115	97.4	70 to 130	1.22	20	
AW22358 Beryllium, Total	mg/L	0.00000889	0.00132	0.10	0.105	0.104	0.108	0.085 to 0.115	105	70 to 130	0.268	20	
AW22358 Chromium, Total	mg/L	0.00000465	0.0044	0.10	0.103	0.103	0.105	0.085 to 0.115	103	70 to 130	0.299	20	
AW22358 Cobalt, Total	mg/L	-0.00000185	0.0044	0.10	0.0945	0.0949	0.102	0.085 to 0.115	94.5	70 to 130	0.462	20	
AW22359 Lithium, Total	mg/L	0.000320	0.022	0.200	0.211	0.183	0.199	0.17 to 0.23	106	70 to 130	14.2	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.
 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: WMWBARAP
 Sample Date: 30-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AW22351

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW22359	Fluoride, Total	mg/L	0.000	0.3	2.00	2.07	0.035	2.03	1.8 to 2.2	102	80 to 120	0.00	20
AW22359	Sulfate, Total	mg/L	0.007	1.0	20.00	23.3	2.94	19.8	18 to 22	102	80 to 120	4.52	20
AW22350	Solids, Dissolved	mg/L	-1.0	25			312	45.0	40 to 60			0.645	5
AW22359	Chloride, Total	mg/L	0.000	0.25	10.00	20.7	10.8	9.85	9 to 11	99.0	80 to 120	0.00	20

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 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

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: WMWBARAP
 Sample Date: 30-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-5 Dup

Laboratory ID Number: AW22352

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/5/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	0.0324	mg/L
* Barium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	0.134	mg/L
* Beryllium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/21/2016	EPA 200.7		1	0.02	0.1	J 0.0603	mg/L
* Calcium, Total	HRG	9/21/2016	EPA 200.7		1	0.1	0.5	13.3	mg/L
* Cadmium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/6/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/21/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/6/2016	SM 2540C		1		25	247	mg/L
* Chloride, Total	SES	9/1/2016	EPA 300.0		1	0.04	0.25	18.0	mg/L
* Fluoride, Total	SES	9/1/2016	EPA 300.0		1	0.01	0.3	J 0.056	mg/L
* Sulfate, Total	SES	9/1/2016	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.
 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: WMWBARAP
 Sample Date: 30-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-5 Dup

Laboratory ID Number: AW22352

Sample Analysis	Units	MB	MB				LFB		Rec		Prec	
			Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	
AW22358 Arsenic, Total	mg/L	0.0000129	0.0022	0.10	0.100	0.0999	0.103	0.085 to 0.115	100	70 to 130	0.207	20
AW22358 Lead, Total	mg/L	0.00000852	0.0022	0.10	0.104	0.104	0.101	0.085 to 0.115	104	70 to 130	0.257	20
AW22358 Molybdenum, Total	mg/L	0.00000879	0.0044	0.10	0.0997	0.0990	0.103	0.085 to 0.115	99.7	70 to 130	0.675	20
AW22359 Calcium, Total	mg/L	-0.0402	0.22	5.00	5.86	5.16	4.55	4.25 to 5.75	98.2	70 to 130	12.7	20
AW22358 Chromium, Total	mg/L	0.00000465	0.0044	0.10	0.103	0.103	0.105	0.085 to 0.115	103	70 to 130	0.299	20
AW22358 Cobalt, Total	mg/L	-0.00000185	0.0044	0.10	0.0945	0.0949	0.102	0.085 to 0.115	94.5	70 to 130	0.462	20
AW22359 Lithium, Total	mg/L	0.000320	0.022	0.200	0.211	0.183	0.199	0.17 to 0.23	106	70 to 130	14.2	20
AW22358 Selenium, Total	mg/L	0.0000701	0.0044	0.10	0.0967	0.0971	0.103	0.085 to 0.115	96.7	70 to 130	0.487	20
AW22358 Thallium, Total	mg/L	0.0000209	0.00044	0.10	0.102	0.103	0.0999	0.085 to 0.115	102	70 to 130	0.316	20
AW22358 Cadmium, Total	mg/L	0.000000569	0.00044	0.10	0.0997	0.101	0.106	0.085 to 0.115	99.7	70 to 130	1.23	20
AW22359 Boron, Total	mg/L	-0.000375	0.044	1.00	0.964	0.927	0.925	0.85 to 1.15	96.4	70 to 130	3.91	20
AW22356 Mercury, Total by CVAA	mg/L	0.000114	0.0005	0.004	0.00372	0.00367	0.00388	0.0034 to 0.0046	93.0	70 to 130	1.39	20
AW22358 Antimony, Total	mg/L	0.0000563	0.00132	0.10	0.0964	0.0968	0.101	0.085 to 0.115	96.4	70 to 130	0.411	20
AW22358 Barium, Total	mg/L	0.00000544	0.0044	0.10	0.0974	0.0962	0.100	0.085 to 0.115	97.4	70 to 130	1.22	20
AW22358 Beryllium, Total	mg/L	0.00000889	0.00132	0.10	0.105	0.104	0.108	0.085 to 0.115	105	70 to 130	0.268	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: WMWBARAP
 Sample Date: 30-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-5 Dup

Laboratory ID Number: AW22352

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW22359	Sulfate, Total	mg/L	0.007	1.0	20.00	23.3	2.94	19.8	18 to 22	102	80 to 120	4.52	20
AW22359	Fluoride, Total	mg/L	0.000	0.3	2.00	2.07	0.035	2.03	1.8 to 2.2	102	80 to 120	0.00	20
AW22350	Solids, Dissolved	mg/L	-1.0	25			312	45.0	40 to 60			0.645	5
AW22359	Chloride, Total	mg/L	0.000	0.25	10.00	20.7	10.8	9.85	9 to 11	99.0	80 to 120	0.00	20

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CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 30-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AW22353

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/5/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	0.0242	mg/L
* Beryllium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/21/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	9/21/2016	EPA 200.7		1	0.1	0.5	1.77	mg/L
* Cadmium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/6/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/21/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/6/2016	SM 2540C		1		25	30.0	mg/L
* Chloride, Total	SES	9/1/2016	EPA 300.0		1	0.04	0.25	5.50	mg/L
* Fluoride, Total	SES	9/1/2016	EPA 300.0		1	0.01	0.3	J 0.034	mg/L
* Sulfate, Total	SES	9/1/2016	EPA 300.0		1	0.3	1	1.08	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 30-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AW22353

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	Spike				Limit	Rec	Limit	Prec			
AW22358 Lead, Total	mg/L	0.00000852	0.0022	0.10	0.104	0.104	0.101	0.085 to 0.115		104	70 to 130		0.257	20
AW22358 Arsenic, Total	mg/L	0.0000129	0.0022	0.10	0.100	0.0999	0.103	0.085 to 0.115		100	70 to 130		0.207	20
AW22358 Cadmium, Total	mg/L	0.000000569	0.00044	0.10	0.0997	0.101	0.106	0.085 to 0.115		99.7	70 to 130		1.23	20
AW22359 Boron, Total	mg/L	-0.000375	0.044	1.00	0.964	0.927	0.925	0.85 to 1.15		96.4	70 to 130		3.91	20
AW22358 Selenium, Total	mg/L	0.0000701	0.0044	0.10	0.0967	0.0971	0.103	0.085 to 0.115		96.7	70 to 130		0.487	20
AW22358 Thallium, Total	mg/L	0.0000209	0.00044	0.10	0.102	0.103	0.0999	0.085 to 0.115		102	70 to 130		0.316	20
AW22356 Mercury, Total by CVAA	mg/L	0.000114	0.0005	0.004	0.00372	0.00367	0.00388	0.0034 to 0.0046		93.0	70 to 130		1.39	20
AW22358 Antimony, Total	mg/L	0.0000563	0.00132	0.10	0.0964	0.0968	0.101	0.085 to 0.115		96.4	70 to 130		0.411	20
AW22358 Barium, Total	mg/L	0.00000544	0.0044	0.10	0.0974	0.0962	0.100	0.085 to 0.115		97.4	70 to 130		1.22	20
AW22358 Beryllium, Total	mg/L	0.00000889	0.00132	0.10	0.105	0.104	0.108	0.085 to 0.115		105	70 to 130		0.268	20
AW22358 Chromium, Total	mg/L	0.00000465	0.0044	0.10	0.103	0.103	0.105	0.085 to 0.115		103	70 to 130		0.299	20
AW22358 Cobalt, Total	mg/L	-0.00000185	0.0044	0.10	0.0945	0.0949	0.102	0.085 to 0.115		94.5	70 to 130		0.462	20
AW22359 Lithium, Total	mg/L	0.000320	0.022	0.200	0.211	0.183	0.199	0.17 to 0.23		106	70 to 130		14.2	20
AW22358 Molybdenum, Total	mg/L	0.00000879	0.0044	0.10	0.0997	0.0990	0.103	0.085 to 0.115		99.7	70 to 130		0.675	20
AW22359 Calcium, Total	mg/L	-0.0402	0.22	5.00	5.86	5.16	4.55	4.25 to 5.75		98.2	70 to 130		12.7	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: WMWBARAP
 Sample Date: 30-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AW22353

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW22359	Sulfate, Total	mg/L	0.007	1.0	20.00	23.3	2.94	19.8	18 to 22	102	80 to 120	4.52	20
AW22359	Fluoride, Total	mg/L	0.000	0.3	2.00	2.07	0.035	2.03	1.8 to 2.2	102	80 to 120	0.00	20
AW22350	Solids, Dissolved	mg/L	-1.0	25			312	45.0	40 to 60			0.645	5
AW22359	Chloride, Total	mg/L	0.000	0.25	10.00	20.7	10.8	9.85	9 to 11	99.0	80 to 120	0.00	20

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AW22354

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/5/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	0.0231	mg/L
* Barium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	0.0614	mg/L
* Beryllium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/21/2016	EPA 200.7		1	0.02	0.1	J 0.0360	mg/L
* Calcium, Total	HRG	9/21/2016	EPA 200.7		1	0.1	0.5	8.10	mg/L
* Cadmium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	0.0175	mg/L
* Chromium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/6/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/21/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/6/2016	SM 2540C		1		25	112	mg/L
* Chloride, Total	SES	9/1/2016	EPA 300.0		1	0.04	0.25	10.8	mg/L
* Fluoride, Total	SES	9/1/2016	EPA 300.0		1	0.01	0.3	J 0.086	mg/L
* Sulfate, Total	SES	9/1/2016	EPA 300.0		1	0.3	1	J 0.445	mg/L

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 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AW22354

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec Limit
			Limit	Spike				Limit	Rec	Limit		
AW22358 Lead, Total	mg/L	0.00000852	0.0022	0.10	0.104	0.104	0.101	0.085 to 0.115	104	70 to 130	0.257	20
AW22358 Arsenic, Total	mg/L	0.0000129	0.0022	0.10	0.100	0.0999	0.103	0.085 to 0.115	100	70 to 130	0.207	20
AW22358 Molybdenum, Total	mg/L	0.00000879	0.0044	0.10	0.0997	0.0990	0.103	0.085 to 0.115	99.7	70 to 130	0.675	20
AW22359 Calcium, Total	mg/L	-0.0402	0.22	5.00	5.86	5.16	4.55	4.25 to 5.75	98.2	70 to 130	12.7	20
AW22358 Selenium, Total	mg/L	0.0000701	0.0044	0.10	0.0967	0.0971	0.103	0.085 to 0.115	96.7	70 to 130	0.487	20
AW22358 Thallium, Total	mg/L	0.0000209	0.00044	0.10	0.102	0.103	0.0999	0.085 to 0.115	102	70 to 130	0.316	20
AW22358 Cadmium, Total	mg/L	0.000000569	0.00044	0.10	0.0997	0.101	0.106	0.085 to 0.115	99.7	70 to 130	1.23	20
AW22359 Boron, Total	mg/L	-0.000375	0.044	1.00	0.964	0.927	0.925	0.85 to 1.15	96.4	70 to 130	3.91	20
AW22356 Mercury, Total by CVAA	mg/L	0.000114	0.0005	0.004	0.00372	0.00367	0.00388	0.0034 to 0.0046	93.0	70 to 130	1.39	20
AW22358 Antimony, Total	mg/L	0.0000563	0.00132	0.10	0.0964	0.0968	0.101	0.085 to 0.115	96.4	70 to 130	0.411	20
AW22358 Barium, Total	mg/L	0.00000544	0.0044	0.10	0.0974	0.0962	0.100	0.085 to 0.115	97.4	70 to 130	1.22	20
AW22358 Beryllium, Total	mg/L	0.00000889	0.00132	0.10	0.105	0.104	0.108	0.085 to 0.115	105	70 to 130	0.268	20
AW22358 Chromium, Total	mg/L	0.00000465	0.0044	0.10	0.103	0.103	0.105	0.085 to 0.115	103	70 to 130	0.299	20
AW22358 Cobalt, Total	mg/L	-0.00000185	0.0044	0.10	0.0945	0.0949	0.102	0.085 to 0.115	94.5	70 to 130	0.462	20
AW22359 Lithium, Total	mg/L	0.000320	0.022	0.200	0.211	0.183	0.199	0.17 to 0.23	106	70 to 130	14.2	20

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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AW22354

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW22359	Sulfate, Total	mg/L	0.007	1.0	20.00	23.3	2.94	19.8	18 to 22	102	80 to 120	4.52	20
AW22359	Fluoride, Total	mg/L	0.000	0.3	2.00	2.07	0.035	2.03	1.8 to 2.2	102	80 to 120	0.00	20
AW22350	Solids, Dissolved	mg/L	-1.0	25			312	45.0	40 to 60			0.645	5
AW22359	Chloride, Total	mg/L	0.000	0.25	10.00	20.7	10.8	9.85	9 to 11	99.0	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 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

CC:

Reported: 8/1/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AW22355

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/5/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	0.0404	mg/L
* Barium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	0.123	mg/L
* Beryllium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/21/2016	EPA 200.7		1	0.02	0.1	2.14	mg/L
* Calcium, Total	HRG	9/21/2016	EPA 200.7		1	0.1	0.5	38.2	mg/L
* Cadmium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/6/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/21/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/6/2016	SM 2540C		1		25	334	mg/L
* Chloride, Total	SES	9/1/2016	EPA 300.0		1	0.04	0.25	24.4	mg/L
* Fluoride, Total	SES	9/1/2016	EPA 300.0		1	0.01	0.3	J 0.056	mg/L
* Sulfate, Total	SES	9/1/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AW22355

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW22358 Lead, Total	mg/L	0.00000852	0.0022	0.10	0.104	0.104	0.101	0.085 to 0.115	104	70 to 130	0.257	20	
AW22358 Arsenic, Total	mg/L	0.0000129	0.0022	0.10	0.100	0.0999	0.103	0.085 to 0.115	100	70 to 130	0.207	20	
AW22358 Molybdenum, Total	mg/L	0.00000879	0.0044	0.10	0.0997	0.0990	0.103	0.085 to 0.115	99.7	70 to 130	0.675	20	
AW22359 Calcium, Total	mg/L	-0.0402	0.22	5.00	5.86	5.16	4.55	4.25 to 5.75	98.2	70 to 130	12.7	20	
AW22358 Cadmium, Total	mg/L	0.000000569	0.00044	0.10	0.0997	0.101	0.106	0.085 to 0.115	99.7	70 to 130	1.23	20	
AW22359 Boron, Total	mg/L	-0.000375	0.044	1.00	0.964	0.927	0.925	0.85 to 1.15	96.4	70 to 130	3.91	20	
AW22356 Mercury, Total by CVAA	mg/L	0.000114	0.0005	0.004	0.00372	0.00367	0.00388	0.0034 to 0.0046	93.0	70 to 130	1.39	20	
AW22358 Antimony, Total	mg/L	0.0000563	0.00132	0.10	0.0964	0.0968	0.101	0.085 to 0.115	96.4	70 to 130	0.411	20	
AW22358 Barium, Total	mg/L	0.00000544	0.0044	0.10	0.0974	0.0962	0.100	0.085 to 0.115	97.4	70 to 130	1.22	20	
AW22358 Beryllium, Total	mg/L	0.00000889	0.00132	0.10	0.105	0.104	0.108	0.085 to 0.115	105	70 to 130	0.268	20	
AW22358 Chromium, Total	mg/L	0.00000465	0.0044	0.10	0.103	0.103	0.105	0.085 to 0.115	103	70 to 130	0.299	20	
AW22358 Cobalt, Total	mg/L	-0.00000185	0.0044	0.10	0.0945	0.0949	0.102	0.085 to 0.115	94.5	70 to 130	0.462	20	
AW22359 Lithium, Total	mg/L	0.000320	0.022	0.200	0.211	0.183	0.199	0.17 to 0.23	106	70 to 130	14.2	20	
AW22358 Selenium, Total	mg/L	0.0000701	0.0044	0.10	0.0967	0.0971	0.103	0.085 to 0.115	96.7	70 to 130	0.487	20	
AW22358 Thallium, Total	mg/L	0.0000209	0.00044	0.10	0.102	0.103	0.0999	0.085 to 0.115	102	70 to 130	0.316	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: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AW22355

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW22359	Fluoride, Total	mg/L	0.000	0.3	2.00	2.07	0.035	2.03	1.8 to 2.2	102	80 to 120	0.00	20
AW22359	Sulfate, Total	mg/L	0.007	1.0	20.00	23.3	2.94	19.8	18 to 22	102	80 to 120	4.52	20
AW22350	Solids, Dissolved	mg/L	-1.0	25			312	45.0	40 to 60			0.645	5
AW22359	Chloride, Total	mg/L	0.000	0.25	10.00	20.7	10.8	9.85	9 to 11	99.0	80 to 120	0.00	20

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Reported: 8/1/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AW22356

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/5/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	0.0304	mg/L
* Barium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	0.0630	mg/L
* Beryllium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/21/2016	EPA 200.7		1	0.02	0.1	1.73	mg/L
* Calcium, Total	HRG	9/21/2016	EPA 200.7		10	1.00	5.00	57.9	mg/L
* Cadmium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/6/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/21/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/6/2016	SM 2540C		1		50	368	mg/L
* Chloride, Total	SES	9/1/2016	EPA 300.0		1	0.04	0.25	18.5	mg/L
* Fluoride, Total	SES	9/1/2016	EPA 300.0		1	0.01	0.3	J 0.040	mg/L
* Sulfate, Total	SES	9/1/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AW22356

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	Spike				Limit	Rec	Limit	Prec			
AW22358 Arsenic, Total	mg/L	0.0000129	0.0022	0.10	0.100	0.0999	0.103	0.085 to 0.115		100	70 to 130		0.207	20
AW22358 Lead, Total	mg/L	0.00000852	0.0022	0.10	0.104	0.104	0.101	0.085 to 0.115		104	70 to 130		0.257	20
AW22358 Selenium, Total	mg/L	0.0000701	0.0044	0.10	0.0967	0.0971	0.103	0.085 to 0.115		96.7	70 to 130		0.487	20
AW22358 Thallium, Total	mg/L	0.0000209	0.00044	0.10	0.102	0.103	0.0999	0.085 to 0.115		102	70 to 130		0.316	20
AW22358 Cadmium, Total	mg/L	0.000000569	0.00044	0.10	0.0997	0.101	0.106	0.085 to 0.115		99.7	70 to 130		1.23	20
AW22359 Boron, Total	mg/L	-0.000375	0.044	1.00	0.964	0.927	0.925	0.85 to 1.15		96.4	70 to 130		3.91	20
AW22358 Molybdenum, Total	mg/L	0.00000879	0.0044	0.10	0.0997	0.0990	0.103	0.085 to 0.115		99.7	70 to 130		0.675	20
AW22359 Calcium, Total	mg/L	-0.0402	0.22	5.00	5.86	5.16	4.55	4.25 to 5.75		98.2	70 to 130		12.7	20
AW22356 Mercury, Total by CVAA	mg/L	0.000114	0.0005	0.004	0.00372	0.00367	0.00388	0.0034 to 0.0046		93.0	70 to 130		1.39	20
AW22358 Antimony, Total	mg/L	0.0000563	0.00132	0.10	0.0964	0.0968	0.101	0.085 to 0.115		96.4	70 to 130		0.411	20
AW22358 Barium, Total	mg/L	0.00000544	0.0044	0.10	0.0974	0.0962	0.100	0.085 to 0.115		97.4	70 to 130		1.22	20
AW22358 Beryllium, Total	mg/L	0.00000889	0.00132	0.10	0.105	0.104	0.108	0.085 to 0.115		105	70 to 130		0.268	20
AW22358 Chromium, Total	mg/L	0.00000465	0.0044	0.10	0.103	0.103	0.105	0.085 to 0.115		103	70 to 130		0.299	20
AW22358 Cobalt, Total	mg/L	-0.00000185	0.0044	0.10	0.0945	0.0949	0.102	0.085 to 0.115		94.5	70 to 130		0.462	20
AW22359 Lithium, Total	mg/L	0.000320	0.022	0.200	0.211	0.183	0.199	0.17 to 0.23		106	70 to 130		14.2	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: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AW22356

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW22359	Fluoride, Total	mg/L	0.000	0.3	2.00	2.07	0.035	2.03	1.8 to 2.2	102	80 to 120	0.00	20
AW22359	Sulfate, Total	mg/L	0.007	1.0	20.00	23.3	2.94	19.8	18 to 22	102	80 to 120	4.52	20
AW22350	Solids, Dissolved	mg/L	-1.0	25			312	45.0	40 to 60			0.645	5
AW22359	Chloride, Total	mg/L	0.000	0.25	10.00	20.7	10.8	9.85	9 to 11	99.0	80 to 120	0.00	20

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Reported: 8/1/2017
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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AW22357

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/5/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	0.0149	mg/L
* Barium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	0.102	mg/L
* Beryllium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/21/2016	EPA 200.7		1	0.02	0.1	J 0.0651	mg/L
* Calcium, Total	HRG	9/21/2016	EPA 200.7		1	0.1	0.5	25.4	mg/L
* Cadmium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	J 0.00221	mg/L
* Mercury, Total by CVAA	MCW	9/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/21/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/6/2016	SM 2540C		1		25	367	mg/L
* Chloride, Total	SES	9/1/2016	EPA 300.0		1	0.04	0.25	20.3	mg/L
* Fluoride, Total	SES	9/1/2016	EPA 300.0		1	0.01	0.3	J 0.064	mg/L
* Sulfate, Total	SES	9/1/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AW22357

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			Limit	Spike				Limit	Rec	Limit	Prec			
AW22358 Lead, Total	mg/L	0.00000852	0.0022	0.10	0.104	0.104	0.101	0.085 to 0.115		104	70 to 130		0.257	20
AW22358 Arsenic, Total	mg/L	0.0000129	0.0022	0.10	0.100	0.0999	0.103	0.085 to 0.115		100	70 to 130		0.207	20
AW22358 Cadmium, Total	mg/L	0.000000569	0.00044	0.10	0.0997	0.101	0.106	0.085 to 0.115		99.7	70 to 130		1.23	20
AW22359 Boron, Total	mg/L	-0.000375	0.044	1.00	0.964	0.927	0.925	0.85 to 1.15		96.4	70 to 130		3.91	20
AW22358 Molybdenum, Total	mg/L	0.00000879	0.0044	0.10	0.0997	0.0990	0.103	0.085 to 0.115		99.7	70 to 130		0.675	20
AW22359 Calcium, Total	mg/L	-0.0402	0.22	5.00	5.86	5.16	4.55	4.25 to 5.75		98.2	70 to 130		12.7	20
AW22358 Antimony, Total	mg/L	0.0000563	0.00132	0.10	0.0964	0.0968	0.101	0.085 to 0.115		96.4	70 to 130		0.411	20
AW22358 Barium, Total	mg/L	0.00000544	0.0044	0.10	0.0974	0.0962	0.100	0.085 to 0.115		97.4	70 to 130		1.22	20
AW22358 Beryllium, Total	mg/L	0.00000889	0.00132	0.10	0.105	0.104	0.108	0.085 to 0.115		105	70 to 130		0.268	20
AW22366 Mercury, Total by CVAA	mg/L	0.0000953	0.0005	0.004	0.00381	0.00384	0.00377	0.0034 to 0.0046		95.2	70 to 130		0.781	20
AW22358 Selenium, Total	mg/L	0.0000701	0.0044	0.10	0.0967	0.0971	0.103	0.085 to 0.115		96.7	70 to 130		0.487	20
AW22358 Thallium, Total	mg/L	0.0000209	0.00044	0.10	0.102	0.103	0.0999	0.085 to 0.115		102	70 to 130		0.316	20
AW22358 Chromium, Total	mg/L	0.00000465	0.0044	0.10	0.103	0.103	0.105	0.085 to 0.115		103	70 to 130		0.299	20
AW22358 Cobalt, Total	mg/L	-0.00000185	0.0044	0.10	0.0945	0.0949	0.102	0.085 to 0.115		94.5	70 to 130		0.462	20
AW22359 Lithium, Total	mg/L	0.000320	0.022	0.200	0.211	0.183	0.199	0.17 to 0.23		106	70 to 130		14.2	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.
 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: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AW22357

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW22359	Fluoride, Total	mg/L	0.000	0.3	2.00	2.07	0.035	2.03	1.8 to 2.2	102	80 to 120	0.00	20
AW22359	Sulfate, Total	mg/L	0.007	1.0	20.00	23.3	2.94	19.8	18 to 22	102	80 to 120	4.52	20
AW22350	Solids, Dissolved	mg/L	-1.0	25			312	45.0	40 to 60			0.645	5
AW22359	Chloride, Total	mg/L	0.000	0.25	10.00	20.7	10.8	9.85	9 to 11	99.0	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

Certificate Of Analysis  **Alabama Power**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAPEB
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AW22358

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/5/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/21/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	9/21/2016	EPA 200.7		1	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/21/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/6/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	9/1/2016	EPA 300.0		1	0.04	0.25	J 0.186	mg/L
* Fluoride, Total	SES	9/1/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	9/1/2016	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: WMWBARAPEB
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AW22358

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec Limit
			Limit	Spike				Limit	Rec	Limit		
AW22358 Lead, Total	mg/L	0.00000852	0.0022	0.10	0.104	0.104	0.101	0.085 to 0.115	104	70 to 130	0.257	20
AW22358 Arsenic, Total	mg/L	0.0000129	0.0022	0.10	0.100	0.0999	0.103	0.085 to 0.115	100	70 to 130	0.207	20
AW22358 Selenium, Total	mg/L	0.0000701	0.0044	0.10	0.0967	0.0971	0.103	0.085 to 0.115	96.7	70 to 130	0.487	20
AW22358 Thallium, Total	mg/L	0.0000209	0.00044	0.10	0.102	0.103	0.0999	0.085 to 0.115	102	70 to 130	0.316	20
AW22358 Molybdenum, Total	mg/L	0.00000879	0.0044	0.10	0.0997	0.0990	0.103	0.085 to 0.115	99.7	70 to 130	0.675	20
AW22359 Calcium, Total	mg/L	-0.0402	0.22	5.00	5.86	5.16	4.55	4.25 to 5.75	98.2	70 to 130	12.7	20
AW22358 Cadmium, Total	mg/L	0.000000569	0.00044	0.10	0.0997	0.101	0.106	0.085 to 0.115	99.7	70 to 130	1.23	20
AW22359 Boron, Total	mg/L	-0.000375	0.044	1.00	0.964	0.927	0.925	0.85 to 1.15	96.4	70 to 130	3.91	20
AW22358 Antimony, Total	mg/L	0.0000563	0.00132	0.10	0.0964	0.0968	0.101	0.085 to 0.115	96.4	70 to 130	0.411	20
AW22358 Barium, Total	mg/L	0.00000544	0.0044	0.10	0.0974	0.0962	0.100	0.085 to 0.115	97.4	70 to 130	1.22	20
AW22358 Beryllium, Total	mg/L	0.00000889	0.00132	0.10	0.105	0.104	0.108	0.085 to 0.115	105	70 to 130	0.268	20
AW22366 Mercury, Total by CVAA	mg/L	0.0000953	0.0005	0.004	0.00381	0.00384	0.00377	0.0034 to 0.0046	95.2	70 to 130	0.781	20
AW22358 Chromium, Total	mg/L	0.00000465	0.0044	0.10	0.103	0.103	0.105	0.085 to 0.115	103	70 to 130	0.299	20
AW22358 Cobalt, Total	mg/L	-0.00000185	0.0044	0.10	0.0945	0.0949	0.102	0.085 to 0.115	94.5	70 to 130	0.462	20
AW22359 Lithium, Total	mg/L	0.000320	0.022	0.200	0.211	0.183	0.199	0.17 to 0.23	106	70 to 130	14.2	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: WMWBARAPEB
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AW22358

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW22359	Sulfate, Total	mg/L	0.007	1.0	20.00	23.3	2.94	19.8	18 to 22	102	80 to 120	4.52	20
AW22359	Fluoride, Total	mg/L	0.000	0.3	2.00	2.07	0.035	2.03	1.8 to 2.2	102	80 to 120	0.00	20
AW22350	Solids, Dissolved	mg/L	-1.0	25			312	45.0	40 to 60			0.645	5
AW22359	Chloride, Total	mg/L	0.000	0.25	10.00	20.7	10.8	9.85	9 to 11	99.0	80 to 120	0.00	20

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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: WMWBARAP
 Sample Date: 30-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AW22359

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/5/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	0.0312	mg/L
* Beryllium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/21/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	9/21/2016	EPA 200.7		1	0.1	0.5	0.952	mg/L
* Cadmium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	J 0.00262	mg/L
* Chromium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/21/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/6/2016	SM 2540C		1		25	32.7	mg/L
* Chloride, Total	SES	9/1/2016	EPA 300.0		1	0.04	0.25	10.8	mg/L
* Fluoride, Total	SES	9/1/2016	EPA 300.0		1	0.01	0.3	J 0.035	mg/L
* Sulfate, Total	SES	9/1/2016	EPA 300.0		1	0.3	1	2.81	mg/L

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Alabama Power General Test Laboratory
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 Calera, AL 35040
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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 30-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AW22359

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW22359 Boron, Total	mg/L	-0.000375	0.044	1.00	0.964	0.927	0.925	0.85 to 1.15	96.4	70 to 130	3.91	20	
AW22359 Lithium, Total	mg/L	0.000320	0.022	0.200	0.211	0.183	0.199	0.17 to 0.23	106	70 to 130	14.2	20	
AW22368 Arsenic, Total	mg/L	0.0000129	0.0022	0.10	0.0995	0.0996	0.103	0.085 to 0.115	99.5	70 to 130	0.139	20	
AW22368 Chromium, Total	mg/L	0.00000465	0.0044	0.10	0.103	0.103	0.105	0.085 to 0.115	103	70 to 130	0.0352	20	
AW22368 Selenium, Total	mg/L	0.0000701	0.0044	0.10	0.0953	0.0962	0.103	0.085 to 0.115	95.3	70 to 130	0.912	20	
AW22368 Thallium, Total	mg/L	0.0000209	0.00044	0.10	0.102	0.100	0.0999	0.085 to 0.115	102	70 to 130	1.99	20	
AW22368 Antimony, Total	mg/L	0.0000563	0.00132	0.10	0.0982	0.0975	0.101	0.085 to 0.115	98.2	70 to 130	0.796	20	
AW22368 Beryllium, Total	mg/L	0.00000889	0.00132	0.10	0.108	0.104	0.108	0.085 to 0.115	108	70 to 130	3.58	20	
AW22368 Lead, Total	mg/L	0.00000852	0.0022	0.10	0.103	0.101	0.101	0.085 to 0.115	103	70 to 130	2.15	20	
AW22366 Mercury, Total by CVAA	mg/L	0.0000953	0.0005	0.004	0.00381	0.00384	0.00377	0.0034 to 0.0046	95.2	70 to 130	0.781	20	
AW22368 Molybdenum, Total	mg/L	0.00000879	0.0044	0.10	0.1000	0.100	0.103	0.085 to 0.115	100	70 to 130	0.0815	20	
AW22359 Calcium, Total	mg/L	-0.0402	0.22	5.00	5.86	5.16	4.55	4.25 to 5.75	98.2	70 to 130	12.7	20	
AW22368 Barium, Total	mg/L	0.00000544	0.0044	0.10	0.131	0.130	0.100	0.085 to 0.115	98.3	70 to 130	0.852	20	
AW22368 Cadmium, Total	mg/L	0.000000569	0.00044	0.10	0.103	0.102	0.106	0.085 to 0.115	103	70 to 130	0.712	20	
AW22368 Cobalt, Total	mg/L	-0.00000185	0.0044	0.10	0.0960	0.0967	0.102	0.085 to 0.115	96.0	70 to 130	0.753	20	

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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 30-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AW22359

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW22359	Sulfate, Total	mg/L	0.007	1.0	20.00	23.3	2.94	19.8	18 to 22	102	80 to 120	4.52	20
AW22359	Fluoride, Total	mg/L	0.000	0.3	2.00	2.07	0.035	2.03	1.8 to 2.2	102	80 to 120	0.00	20
AW22350	Solids, Dissolved	mg/L	-1.0	25			312	45.0	40 to 60			0.645	5
AW22359	Chloride, Total	mg/L	0.000	0.25	10.00	20.7	10.8	9.85	9 to 11	99.0	80 to 120	0.00	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

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 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

CC:

Reported: 8/1/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AW22360

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/5/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	0.0117	mg/L
* Barium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	0.0801	mg/L
* Beryllium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/21/2016	EPA 200.7		1	0.02	0.1	1.68	mg/L
* Calcium, Total	HRG	9/21/2016	EPA 200.7		1	0.1	0.5	11.8	mg/L
* Cadmium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	0.0134	mg/L
* Chromium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	J 0.00215	mg/L
* Mercury, Total by CVAA	MCW	9/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/21/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/6/2016	SM 2540C		1		25	279	mg/L
* Chloride, Total	SES	9/2/2016	EPA 300.0		1	0.04	0.25	15.9	mg/L
* Fluoride, Total	SES	9/2/2016	EPA 300.0		1	0.01	0.3	J 0.051	mg/L
* Sulfate, Total	SES	9/2/2016	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.
 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: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AW22360

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW22366 Mercury, Total by CVAA	mg/L	0.0000953	0.0005	0.004	0.00381	0.00384	0.00377	0.0034 to 0.0046		95.2	70 to 130	0.781	20
AW22368 Molybdenum, Total	mg/L	0.00000879	0.0044	0.10	0.1000	0.100	0.103	0.085 to 0.115		100	70 to 130	0.0815	20
AW22369 Boron, Total	mg/L	0.00501	0.044	1.00	0.935	0.940	0.965	0.85 to 1.15		93.5	70 to 130	0.533	20
AW22368 Antimony, Total	mg/L	0.0000563	0.00132	0.10	0.0982	0.0975	0.101	0.085 to 0.115		98.2	70 to 130	0.796	20
AW22368 Beryllium, Total	mg/L	0.00000889	0.00132	0.10	0.108	0.104	0.108	0.085 to 0.115		108	70 to 130	3.58	20
AW22368 Lead, Total	mg/L	0.00000852	0.0022	0.10	0.103	0.101	0.101	0.085 to 0.115		103	70 to 130	2.15	20
AW22368 Barium, Total	mg/L	0.00000544	0.0044	0.10	0.131	0.130	0.100	0.085 to 0.115		98.3	70 to 130	0.852	20
AW22368 Cadmium, Total	mg/L	0.000000569	0.00044	0.10	0.103	0.102	0.106	0.085 to 0.115		103	70 to 130	0.712	20
AW22368 Cobalt, Total	mg/L	-0.00000185	0.0044	0.10	0.0960	0.0967	0.102	0.085 to 0.115		96.0	70 to 130	0.753	20
AW22369 Lithium, Total	mg/L	0.000301	0.022	0.20	0.203	0.192	0.215	0.17 to 0.23		101	70 to 130	5.57	20
AW22368 Arsenic, Total	mg/L	0.0000129	0.0022	0.10	0.0995	0.0996	0.103	0.085 to 0.115		99.5	70 to 130	0.139	20
AW22368 Chromium, Total	mg/L	0.00000465	0.0044	0.10	0.103	0.103	0.105	0.085 to 0.115		103	70 to 130	0.0352	20
AW22368 Selenium, Total	mg/L	0.0000701	0.0044	0.10	0.0953	0.0962	0.103	0.085 to 0.115		95.3	70 to 130	0.912	20
AW22368 Thallium, Total	mg/L	0.0000209	0.00044	0.10	0.102	0.100	0.0999	0.085 to 0.115		102	70 to 130	1.99	20
AW22369 Calcium, Total	mg/L	-0.0399	0.22	5.00	7.54	7.58	4.86	4.25 to 5.75		89.5	70 to 130	0.529	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: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AW22360

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW22369	Chloride, Total	mg/L	0.000	0.25	10.00	16.3	6.50	9.86	9 to 11	97.9	80 to 120	0.154	20
AW22369	Fluoride, Total	mg/L	0.000	0.3	2.00	1.92	0.050	1.94	1.8 to 2.2	93.5	80 to 120	0.00	20
AW22360	Solids, Dissolved	mg/L	-1.0	25			284	45.0	40 to 60			0.888	5
AW22369	Sulfate, Total	mg/L	-0.004	1.0	20.00	19.5	0.165	19.1	18 to 22	97.5	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: 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

CC:

Reported: 8/1/2017
 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: WMWBARAPFB
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW22361

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/5/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/21/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	9/21/2016	EPA 200.7		1	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/21/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/6/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	9/2/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	9/2/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	9/2/2016	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

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 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: WMWBARAPFB
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW22361

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW22366 Mercury, Total by CVAA	mg/L	0.0000953	0.0005	0.004	0.00381	0.00384	0.00377	0.0034 to 0.0046	95.2	70 to 130	0.781	20	
AW22368 Molybdenum, Total	mg/L	0.00000879	0.0044	0.10	0.1000	0.100	0.103	0.085 to 0.115	100	70 to 130	0.0815	20	
AW22369 Boron, Total	mg/L	0.00501	0.044	1.00	0.935	0.940	0.965	0.85 to 1.15	93.5	70 to 130	0.533	20	
AW22368 Arsenic, Total	mg/L	0.0000129	0.0022	0.10	0.0995	0.0996	0.103	0.085 to 0.115	99.5	70 to 130	0.139	20	
AW22368 Chromium, Total	mg/L	0.00000465	0.0044	0.10	0.103	0.103	0.105	0.085 to 0.115	103	70 to 130	0.0352	20	
AW22368 Selenium, Total	mg/L	0.0000701	0.0044	0.10	0.0953	0.0962	0.103	0.085 to 0.115	95.3	70 to 130	0.912	20	
AW22368 Thallium, Total	mg/L	0.0000209	0.00044	0.10	0.102	0.100	0.0999	0.085 to 0.115	102	70 to 130	1.99	20	
AW22369 Calcium, Total	mg/L	-0.0399	0.22	5.00	7.54	7.58	4.86	4.25 to 5.75	89.5	70 to 130	0.529	20	
AW22368 Barium, Total	mg/L	0.00000544	0.0044	0.10	0.131	0.130	0.100	0.085 to 0.115	98.3	70 to 130	0.852	20	
AW22368 Cadmium, Total	mg/L	0.000000569	0.00044	0.10	0.103	0.102	0.106	0.085 to 0.115	103	70 to 130	0.712	20	
AW22368 Cobalt, Total	mg/L	-0.00000185	0.0044	0.10	0.0960	0.0967	0.102	0.085 to 0.115	96.0	70 to 130	0.753	20	
AW22369 Lithium, Total	mg/L	0.000301	0.022	0.20	0.203	0.192	0.215	0.17 to 0.23	101	70 to 130	5.57	20	
AW22368 Antimony, Total	mg/L	0.0000563	0.00132	0.10	0.0982	0.0975	0.101	0.085 to 0.115	98.2	70 to 130	0.796	20	
AW22368 Beryllium, Total	mg/L	0.00000889	0.00132	0.10	0.108	0.104	0.108	0.085 to 0.115	108	70 to 130	3.58	20	
AW22368 Lead, Total	mg/L	0.00000852	0.0022	0.10	0.103	0.101	0.101	0.085 to 0.115	103	70 to 130	2.15	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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Alabama Power 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: WMWBARAPFB
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW22361

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW22369	Chloride, Total	mg/L	0.000	0.25	10.00	16.3	6.50	9.86	9 to 11	97.9	80 to 120	0.154	20
AW22360	Solids, Dissolved	mg/L	-1.0	25			284	45.0	40 to 60			0.888	5
AW22369	Sulfate, Total	mg/L	-0.004	1.0	20.00	19.5	0.165	19.1	18 to 22	97.5	80 to 120	0	20
AW22369	Fluoride, Total	mg/L	0.000	0.3	2.00	1.92	0.050	1.94	1.8 to 2.2	93.5	80 to 120	0.00	20

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CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AW22362

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/5/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	0.0168	mg/L
* Barium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	0.0464	mg/L
* Beryllium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/21/2016	EPA 200.7		1	0.02	0.1	J 0.0632	mg/L
* Calcium, Total	HRG	9/21/2016	EPA 200.7		1	0.1	0.5	6.28	mg/L
* Cadmium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	0.0272	mg/L
* Chromium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/21/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/6/2016	SM 2540C		1		25	188	mg/L
* Chloride, Total	SES	9/2/2016	EPA 300.0		10	0.40	2.50	28.0	mg/L
* Fluoride, Total	SES	9/2/2016	EPA 300.0		1	0.01	0.3	J 0.196	mg/L
* Sulfate, Total	SES	9/2/2016	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

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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: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AW22362

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW22368 Antimony, Total	mg/L	0.0000563	0.00132	0.10	0.0982	0.0975	0.101	0.085 to 0.115	98.2	70 to 130	0.796	20	
AW22368 Beryllium, Total	mg/L	0.00000889	0.00132	0.10	0.108	0.104	0.108	0.085 to 0.115	108	70 to 130	3.58	20	
AW22368 Lead, Total	mg/L	0.00000852	0.0022	0.10	0.103	0.101	0.101	0.085 to 0.115	103	70 to 130	2.15	20	
AW22366 Mercury, Total by CVAA	mg/L	0.0000953	0.0005	0.004	0.00381	0.00384	0.00377	0.0034 to 0.0046	95.2	70 to 130	0.781	20	
AW22368 Molybdenum, Total	mg/L	0.00000879	0.0044	0.10	0.1000	0.100	0.103	0.085 to 0.115	100	70 to 130	0.0815	20	
AW22369 Boron, Total	mg/L	0.00501	0.044	1.00	0.935	0.940	0.965	0.85 to 1.15	93.5	70 to 130	0.533	20	
AW22368 Barium, Total	mg/L	0.00000544	0.0044	0.10	0.131	0.130	0.100	0.085 to 0.115	98.3	70 to 130	0.852	20	
AW22368 Cadmium, Total	mg/L	0.000000569	0.00044	0.10	0.103	0.102	0.106	0.085 to 0.115	103	70 to 130	0.712	20	
AW22368 Cobalt, Total	mg/L	-0.00000185	0.0044	0.10	0.0960	0.0967	0.102	0.085 to 0.115	96.0	70 to 130	0.753	20	
AW22369 Lithium, Total	mg/L	0.000301	0.022	0.20	0.203	0.192	0.215	0.17 to 0.23	101	70 to 130	5.57	20	
AW22368 Arsenic, Total	mg/L	0.0000129	0.0022	0.10	0.0995	0.0996	0.103	0.085 to 0.115	99.5	70 to 130	0.139	20	
AW22368 Chromium, Total	mg/L	0.00000465	0.0044	0.10	0.103	0.103	0.105	0.085 to 0.115	103	70 to 130	0.0352	20	
AW22368 Selenium, Total	mg/L	0.0000701	0.0044	0.10	0.0953	0.0962	0.103	0.085 to 0.115	95.3	70 to 130	0.912	20	
AW22368 Thallium, Total	mg/L	0.0000209	0.00044	0.10	0.102	0.100	0.0999	0.085 to 0.115	102	70 to 130	1.99	20	
AW22369 Calcium, Total	mg/L	-0.0399	0.22	5.00	7.54	7.58	4.86	4.25 to 5.75	89.5	70 to 130	0.529	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: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AW22362

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW22369	Chloride, Total	mg/L	0.000	0.25	10.00	16.3	6.50	9.86	9 to 11	97.9	80 to 120	0.154	20
AW22369	Fluoride, Total	mg/L	0.000	0.3	2.00	1.92	0.050	1.94	1.8 to 2.2	93.5	80 to 120	0.00	20
AW22360	Solids, Dissolved	mg/L	-1.0	25			284	45.0	40 to 60			0.888	5
AW22369	Sulfate, Total	mg/L	-0.004	1.0	20.00	19.5	0.165	19.1	18 to 22	97.5	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: 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

CC:

Reported: 8/1/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AW22363

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/5/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	0.0127	mg/L
* Barium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	0.0722	mg/L
* Beryllium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/21/2016	EPA 200.7		1	0.02	0.1	J 0.0401	mg/L
* Calcium, Total	HRG	9/21/2016	EPA 200.7		1	0.1	0.5	11.3	mg/L
* Cadmium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	J 0.00693	mg/L
* Mercury, Total by CVAA	MCW	9/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/21/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/6/2016	SM 2540C		1		25	295	mg/L
* Chloride, Total	SES	9/2/2016	EPA 300.0		10	0.40	2.50	38.2	mg/L
* Fluoride, Total	SES	9/2/2016	EPA 300.0		1	0.01	0.3	J 0.062	mg/L
* Sulfate, Total	SES	9/2/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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 John Pugh

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 Sample Date: 31-Aug-16
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 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AW22363

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW22366 Mercury, Total by CVAA	mg/L	0.0000953	0.0005	0.004	0.00381	0.00384	0.00377	0.0034 to 0.0046		95.2	70 to 130	0.781	20
AW22368 Molybdenum, Total	mg/L	0.00000879	0.0044	0.10	0.1000	0.100	0.103	0.085 to 0.115		100	70 to 130	0.0815	20
AW22369 Boron, Total	mg/L	0.00501	0.044	1.00	0.935	0.940	0.965	0.85 to 1.15		93.5	70 to 130	0.533	20
AW22368 Antimony, Total	mg/L	0.0000563	0.00132	0.10	0.0982	0.0975	0.101	0.085 to 0.115		98.2	70 to 130	0.796	20
AW22368 Beryllium, Total	mg/L	0.00000889	0.00132	0.10	0.108	0.104	0.108	0.085 to 0.115		108	70 to 130	3.58	20
AW22368 Lead, Total	mg/L	0.00000852	0.0022	0.10	0.103	0.101	0.101	0.085 to 0.115		103	70 to 130	2.15	20
AW22368 Barium, Total	mg/L	0.00000544	0.0044	0.10	0.131	0.130	0.100	0.085 to 0.115		98.3	70 to 130	0.852	20
AW22368 Cadmium, Total	mg/L	0.000000569	0.00044	0.10	0.103	0.102	0.106	0.085 to 0.115		103	70 to 130	0.712	20
AW22368 Cobalt, Total	mg/L	-0.00000185	0.0044	0.10	0.0960	0.0967	0.102	0.085 to 0.115		96.0	70 to 130	0.753	20
AW22369 Lithium, Total	mg/L	0.000301	0.022	0.20	0.203	0.192	0.215	0.17 to 0.23		101	70 to 130	5.57	20
AW22368 Arsenic, Total	mg/L	0.0000129	0.0022	0.10	0.0995	0.0996	0.103	0.085 to 0.115		99.5	70 to 130	0.139	20
AW22368 Chromium, Total	mg/L	0.00000465	0.0044	0.10	0.103	0.103	0.105	0.085 to 0.115		103	70 to 130	0.0352	20
AW22368 Selenium, Total	mg/L	0.0000701	0.0044	0.10	0.0953	0.0962	0.103	0.085 to 0.115		95.3	70 to 130	0.912	20
AW22368 Thallium, Total	mg/L	0.0000209	0.00044	0.10	0.102	0.100	0.0999	0.085 to 0.115		102	70 to 130	1.99	20
AW22369 Calcium, Total	mg/L	-0.0399	0.22	5.00	7.54	7.58	4.86	4.25 to 5.75		89.5	70 to 130	0.529	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: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AW22363

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW22369	Chloride, Total	mg/L	0.000	0.25	10.00	16.3	6.50	9.86	9 to 11	97.9	80 to 120	0.154	20
AW22369	Fluoride, Total	mg/L	0.000	0.3	2.00	1.92	0.050	1.94	1.8 to 2.2	93.5	80 to 120	0.00	20
AW22360	Solids, Dissolved	mg/L	-1.0	25			284	45.0	40 to 60			0.888	5
AW22369	Sulfate, Total	mg/L	-0.004	1.0	20.00	19.5	0.165	19.1	18 to 22	97.5	80 to 120	0	20

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Expiration: June 30, 2018

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CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AW22364

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/5/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	0.0223	mg/L
* Barium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	0.0741	mg/L
* Beryllium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/21/2016	EPA 200.7		1	0.02	0.1	J 0.0650	mg/L
* Calcium, Total	HRG	9/21/2016	EPA 200.7		1	0.1	0.5	19.9	mg/L
* Cadmium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	J 0.00261	mg/L
* Chromium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	J 0.00320	mg/L
* Mercury, Total by CVAA	MCW	9/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/21/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/6/2016	SM 2540C		1		25	354	mg/L
* Chloride, Total	SES	9/2/2016	EPA 300.0		1	0.04	0.25	22.3	mg/L
* Fluoride, Total	SES	9/2/2016	EPA 300.0		1	0.01	0.3	J 0.059	mg/L
* Sulfate, Total	SES	9/2/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AW22364

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW22366 Mercury, Total by CVAA	mg/L	0.0000953	0.0005	0.004	0.00381	0.00384	0.00377	0.0034 to 0.0046		95.2	70 to 130	0.781	20
AW22368 Molybdenum, Total	mg/L	0.00000879	0.0044	0.10	0.1000	0.100	0.103	0.085 to 0.115		100	70 to 130	0.0815	20
AW22369 Boron, Total	mg/L	0.00501	0.044	1.00	0.935	0.940	0.965	0.85 to 1.15		93.5	70 to 130	0.533	20
AW22368 Barium, Total	mg/L	0.00000544	0.0044	0.10	0.131	0.130	0.100	0.085 to 0.115		98.3	70 to 130	0.852	20
AW22368 Cadmium, Total	mg/L	0.000000569	0.00044	0.10	0.103	0.102	0.106	0.085 to 0.115		103	70 to 130	0.712	20
AW22368 Cobalt, Total	mg/L	-0.00000185	0.0044	0.10	0.0960	0.0967	0.102	0.085 to 0.115		96.0	70 to 130	0.753	20
AW22369 Lithium, Total	mg/L	0.000301	0.022	0.20	0.203	0.192	0.215	0.17 to 0.23		101	70 to 130	5.57	20
AW22368 Antimony, Total	mg/L	0.0000563	0.00132	0.10	0.0982	0.0975	0.101	0.085 to 0.115		98.2	70 to 130	0.796	20
AW22368 Beryllium, Total	mg/L	0.00000889	0.00132	0.10	0.108	0.104	0.108	0.085 to 0.115		108	70 to 130	3.58	20
AW22368 Lead, Total	mg/L	0.00000852	0.0022	0.10	0.103	0.101	0.101	0.085 to 0.115		103	70 to 130	2.15	20
AW22368 Arsenic, Total	mg/L	0.0000129	0.0022	0.10	0.0995	0.0996	0.103	0.085 to 0.115		99.5	70 to 130	0.139	20
AW22368 Chromium, Total	mg/L	0.00000465	0.0044	0.10	0.103	0.103	0.105	0.085 to 0.115		103	70 to 130	0.0352	20
AW22368 Selenium, Total	mg/L	0.0000701	0.0044	0.10	0.0953	0.0962	0.103	0.085 to 0.115		95.3	70 to 130	0.912	20
AW22368 Thallium, Total	mg/L	0.0000209	0.00044	0.10	0.102	0.100	0.0999	0.085 to 0.115		102	70 to 130	1.99	20
AW22369 Calcium, Total	mg/L	-0.0399	0.22	5.00	7.54	7.58	4.86	4.25 to 5.75		89.5	70 to 130	0.529	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: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AW22364

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW22369	Chloride, Total	mg/L	0.000	0.25	10.00	16.3	6.50	9.86	9 to 11	97.9	80 to 120	0.154	20
AW22369	Fluoride, Total	mg/L	0.000	0.3	2.00	1.92	0.050	1.94	1.8 to 2.2	93.5	80 to 120	0.00	20
AW22360	Solids, Dissolved	mg/L	-1.0	25			284	45.0	40 to 60			0.888	5
AW22369	Sulfate, Total	mg/L	-0.004	1.0	20.00	19.5	0.165	19.1	18 to 22	97.5	80 to 120	0	20

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CC:

Reported: 8/1/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 30-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AW22365

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/5/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	0.0127	mg/L
* Barium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	0.0635	mg/L
* Beryllium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/21/2016	EPA 200.7		1	0.02	0.1	J 0.0534	mg/L
* Calcium, Total	HRG	9/21/2016	EPA 200.7		1	0.1	0.5	12.1	mg/L
* Cadmium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	J 0.00534	mg/L
* Mercury, Total by CVAA	MCW	9/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/21/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/6/2016	SM 2540C		1		25	328	mg/L
* Chloride, Total	SES	9/2/2016	EPA 300.0		10	0.40	2.50	41.6	mg/L
* Fluoride, Total	SES	9/2/2016	EPA 300.0		1	0.01	0.3	J 0.083	mg/L
* Sulfate, Total	SES	9/2/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 30-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AW22365

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW22366 Mercury, Total by CVAA	mg/L	0.0000953	0.0005	0.004	0.00381	0.00384	0.00377	0.0034 to 0.0046	95.2	70 to 130	0.781	20	
AW22368 Molybdenum, Total	mg/L	0.0000879	0.0044	0.10	0.1000	0.100	0.103	0.085 to 0.115	100	70 to 130	0.0815	20	
AW22369 Boron, Total	mg/L	0.00501	0.044	1.00	0.935	0.940	0.965	0.85 to 1.15	93.5	70 to 130	0.533	20	
AW22368 Antimony, Total	mg/L	0.0000563	0.00132	0.10	0.0982	0.0975	0.101	0.085 to 0.115	98.2	70 to 130	0.796	20	
AW22368 Beryllium, Total	mg/L	0.0000889	0.00132	0.10	0.108	0.104	0.108	0.085 to 0.115	108	70 to 130	3.58	20	
AW22368 Lead, Total	mg/L	0.0000852	0.0022	0.10	0.103	0.101	0.101	0.085 to 0.115	103	70 to 130	2.15	20	
AW22368 Barium, Total	mg/L	0.0000544	0.0044	0.10	0.131	0.130	0.100	0.085 to 0.115	98.3	70 to 130	0.852	20	
AW22368 Cadmium, Total	mg/L	0.00000569	0.00044	0.10	0.103	0.102	0.106	0.085 to 0.115	103	70 to 130	0.712	20	
AW22368 Cobalt, Total	mg/L	-0.00000185	0.0044	0.10	0.0960	0.0967	0.102	0.085 to 0.115	96.0	70 to 130	0.753	20	
AW22369 Lithium, Total	mg/L	0.000301	0.022	0.20	0.203	0.192	0.215	0.17 to 0.23	101	70 to 130	5.57	20	
AW22368 Arsenic, Total	mg/L	0.0000129	0.0022	0.10	0.0995	0.0996	0.103	0.085 to 0.115	99.5	70 to 130	0.139	20	
AW22368 Chromium, Total	mg/L	0.00000465	0.0044	0.10	0.103	0.103	0.105	0.085 to 0.115	103	70 to 130	0.0352	20	
AW22368 Selenium, Total	mg/L	0.0000701	0.0044	0.10	0.0953	0.0962	0.103	0.085 to 0.115	95.3	70 to 130	0.912	20	
AW22368 Thallium, Total	mg/L	0.0000209	0.00044	0.10	0.102	0.100	0.0999	0.085 to 0.115	102	70 to 130	1.99	20	
AW22369 Calcium, Total	mg/L	-0.0399	0.22	5.00	7.54	7.58	4.86	4.25 to 5.75	89.5	70 to 130	0.529	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: WMWBARAP
 Sample Date: 30-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AW22365

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW22369	Chloride, Total	mg/L	0.000	0.25	10.00	16.3	6.50	9.86	9 to 11	97.9	80 to 120	0.154	20
AW22369	Fluoride, Total	mg/L	0.000	0.3	2.00	1.92	0.050	1.94	1.8 to 2.2	93.5	80 to 120	0.00	20
AW22360	Solids, Dissolved	mg/L	-1.0	25			284	45.0	40 to 60			0.888	5
AW22369	Sulfate, Total	mg/L	-0.004	1.0	20.00	19.5	0.165	19.1	18 to 22	97.5	80 to 120	0	20

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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.
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CC:

Reported: 8/1/2017
 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: WMWBARAPFB
 Sample Date: 30-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW22366

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/5/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Beryllium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/21/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	9/21/2016	EPA 200.7		1	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/21/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/6/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	9/2/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	9/2/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	9/2/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Laboratory certification ID: E571114

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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAPFB
 Sample Date: 30-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW22366

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW22368 Antimony, Total	mg/L	0.0000563	0.00132	0.10	0.0982	0.0975	0.101	0.085 to 0.115	98.2	70 to 130	0.796	20	
AW22368 Beryllium, Total	mg/L	0.00000889	0.00132	0.10	0.108	0.104	0.108	0.085 to 0.115	108	70 to 130	3.58	20	
AW22368 Lead, Total	mg/L	0.00000852	0.0022	0.10	0.103	0.101	0.101	0.085 to 0.115	103	70 to 130	2.15	20	
AW22366 Mercury, Total by CVAA	mg/L	0.0000953	0.0005	0.004	0.00381	0.00384	0.00377	0.0034 to 0.0046	95.2	70 to 130	0.781	20	
AW22368 Molybdenum, Total	mg/L	0.00000879	0.0044	0.10	0.1000	0.100	0.103	0.085 to 0.115	100	70 to 130	0.0815	20	
AW22369 Boron, Total	mg/L	0.00501	0.044	1.00	0.935	0.940	0.965	0.85 to 1.15	93.5	70 to 130	0.533	20	
AW22368 Barium, Total	mg/L	0.00000544	0.0044	0.10	0.131	0.130	0.100	0.085 to 0.115	98.3	70 to 130	0.852	20	
AW22368 Cadmium, Total	mg/L	0.000000569	0.00044	0.10	0.103	0.102	0.106	0.085 to 0.115	103	70 to 130	0.712	20	
AW22368 Cobalt, Total	mg/L	-0.00000185	0.0044	0.10	0.0960	0.0967	0.102	0.085 to 0.115	96.0	70 to 130	0.753	20	
AW22369 Lithium, Total	mg/L	0.000301	0.022	0.20	0.203	0.192	0.215	0.17 to 0.23	101	70 to 130	5.57	20	
AW22368 Arsenic, Total	mg/L	0.0000129	0.0022	0.10	0.0995	0.0996	0.103	0.085 to 0.115	99.5	70 to 130	0.139	20	
AW22368 Chromium, Total	mg/L	0.00000465	0.0044	0.10	0.103	0.103	0.105	0.085 to 0.115	103	70 to 130	0.0352	20	
AW22368 Selenium, Total	mg/L	0.0000701	0.0044	0.10	0.0953	0.0962	0.103	0.085 to 0.115	95.3	70 to 130	0.912	20	
AW22368 Thallium, Total	mg/L	0.0000209	0.00044	0.10	0.102	0.100	0.0999	0.085 to 0.115	102	70 to 130	1.99	20	
AW22369 Calcium, Total	mg/L	-0.0399	0.22	5.00	7.54	7.58	4.86	4.25 to 5.75	89.5	70 to 130	0.529	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: WMWBARAPFB
 Sample Date: 30-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW22366

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW22369	Chloride, Total	mg/L	0.000	0.25	10.00	16.3	6.50	9.86	9 to 11	97.9	80 to 120	0.154	20
AW22369	Fluoride, Total	mg/L	0.000	0.3	2.00	1.92	0.050	1.94	1.8 to 2.2	93.5	80 to 120	0.00	20
AW22360	Solids, Dissolved	mg/L	-1.0	25			284	45.0	40 to 60			0.888	5
AW22369	Sulfate, Total	mg/L	-0.004	1.0	20.00	19.5	0.165	19.1	18 to 22	97.5	80 to 120	0	20

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CC:

Reported: 8/1/2017
 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: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AW22367

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/5/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	0.0324	mg/L
* Beryllium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/21/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	9/21/2016	EPA 200.7		1	0.1	0.5	0.978	mg/L
* Cadmium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/21/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/6/2016	SM 2540C		1		25	29.3	mg/L
* Chloride, Total	SES	9/2/2016	EPA 300.0		1	0.04	0.25	7.70	mg/L
* Fluoride, Total	SES	9/2/2016	EPA 300.0		1	0.01	0.3	J 0.034	mg/L
* Sulfate, Total	SES	9/2/2016	EPA 300.0		1	0.3	1	J 0.702	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AW22367

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW22376 Mercury, Total by CVAA	mg/L	0.0000980	0.0005	0.004	0.00391	0.00391	0.00388	0.0034 to 0.0046	97.8	70 to 130	0.251	20	
AW22368 Molybdenum, Total	mg/L	0.00000879	0.0044	0.10	0.1000	0.100	0.103	0.085 to 0.115	100	70 to 130	0.0815	20	
AW22369 Boron, Total	mg/L	0.00501	0.044	1.00	0.935	0.940	0.965	0.85 to 1.15	93.5	70 to 130	0.533	20	
AW22368 Antimony, Total	mg/L	0.0000563	0.00132	0.10	0.0982	0.0975	0.101	0.085 to 0.115	98.2	70 to 130	0.796	20	
AW22368 Beryllium, Total	mg/L	0.00000889	0.00132	0.10	0.108	0.104	0.108	0.085 to 0.115	108	70 to 130	3.58	20	
AW22368 Lead, Total	mg/L	0.00000852	0.0022	0.10	0.103	0.101	0.101	0.085 to 0.115	103	70 to 130	2.15	20	
AW22368 Barium, Total	mg/L	0.00000544	0.0044	0.10	0.131	0.130	0.100	0.085 to 0.115	98.3	70 to 130	0.852	20	
AW22368 Cadmium, Total	mg/L	0.000000569	0.00044	0.10	0.103	0.102	0.106	0.085 to 0.115	103	70 to 130	0.712	20	
AW22368 Cobalt, Total	mg/L	-0.00000185	0.0044	0.10	0.0960	0.0967	0.102	0.085 to 0.115	96.0	70 to 130	0.753	20	
AW22369 Lithium, Total	mg/L	0.000301	0.022	0.20	0.203	0.192	0.215	0.17 to 0.23	101	70 to 130	5.57	20	
AW22368 Arsenic, Total	mg/L	0.0000129	0.0022	0.10	0.0995	0.0996	0.103	0.085 to 0.115	99.5	70 to 130	0.139	20	
AW22368 Chromium, Total	mg/L	0.00000465	0.0044	0.10	0.103	0.103	0.105	0.085 to 0.115	103	70 to 130	0.0352	20	
AW22368 Selenium, Total	mg/L	0.0000701	0.0044	0.10	0.0953	0.0962	0.103	0.085 to 0.115	95.3	70 to 130	0.912	20	
AW22368 Thallium, Total	mg/L	0.0000209	0.00044	0.10	0.102	0.100	0.0999	0.085 to 0.115	102	70 to 130	1.99	20	
AW22369 Calcium, Total	mg/L	-0.0399	0.22	5.00	7.54	7.58	4.86	4.25 to 5.75	89.5	70 to 130	0.529	20	

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 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: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AW22367

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW22369	Fluoride, Total	mg/L	0.000	0.3	2.00	1.92	0.050	1.94	1.8 to 2.2	93.5	80 to 120	0.00	20
AW22369	Chloride, Total	mg/L	0.000	0.25	10.00	16.3	6.50	9.86	9 to 11	97.9	80 to 120	0.154	20
AW22360	Solids, Dissolved	mg/L	-1.0	25			284	45.0	40 to 60			0.888	5
AW22369	Sulfate, Total	mg/L	-0.004	1.0	20.00	19.5	0.165	19.1	18 to 22	97.5	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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CC:

Alabama Power General Test Laboratory
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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: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-3 Dup

Laboratory ID Number: AW22368

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/5/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Barium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	0.0327	mg/L
* Beryllium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/21/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	9/21/2016	EPA 200.7		1	0.1	0.5	0.970	mg/L
* Cadmium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/21/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/6/2016	SM 2540C		1		25	34.7	mg/L
* Chloride, Total	SES	9/2/2016	EPA 300.0		1	0.04	0.25	7.71	mg/L
* Fluoride, Total	SES	9/2/2016	EPA 300.0		1	0.01	0.3	J 0.035	mg/L
* Sulfate, Total	SES	9/2/2016	EPA 300.0		1	0.3	1	J 0.704	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.
 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: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-3 Dup

Laboratory ID Number: AW22368

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW22376 Mercury, Total by CVAA	mg/L	0.0000980	0.0005	0.004	0.00391	0.00391	0.00388	0.0034 to 0.0046	97.8	70 to 130	0.251	20	
AW22368 Molybdenum, Total	mg/L	0.00000879	0.0044	0.10	0.1000	0.100	0.103	0.085 to 0.115	100	70 to 130	0.0815	20	
AW22369 Boron, Total	mg/L	0.00501	0.044	1.00	0.935	0.940	0.965	0.85 to 1.15	93.5	70 to 130	0.533	20	
AW22368 Antimony, Total	mg/L	0.0000563	0.00132	0.10	0.0982	0.0975	0.101	0.085 to 0.115	98.2	70 to 130	0.796	20	
AW22368 Beryllium, Total	mg/L	0.00000889	0.00132	0.10	0.108	0.104	0.108	0.085 to 0.115	108	70 to 130	3.58	20	
AW22368 Lead, Total	mg/L	0.00000852	0.0022	0.10	0.103	0.101	0.101	0.085 to 0.115	103	70 to 130	2.15	20	
AW22368 Arsenic, Total	mg/L	0.0000129	0.0022	0.10	0.0995	0.0996	0.103	0.085 to 0.115	99.5	70 to 130	0.139	20	
AW22368 Chromium, Total	mg/L	0.00000465	0.0044	0.10	0.103	0.103	0.105	0.085 to 0.115	103	70 to 130	0.0352	20	
AW22368 Selenium, Total	mg/L	0.0000701	0.0044	0.10	0.0953	0.0962	0.103	0.085 to 0.115	95.3	70 to 130	0.912	20	
AW22368 Thallium, Total	mg/L	0.0000209	0.00044	0.10	0.102	0.100	0.0999	0.085 to 0.115	102	70 to 130	1.99	20	
AW22369 Calcium, Total	mg/L	-0.0399	0.22	5.00	7.54	7.58	4.86	4.25 to 5.75	89.5	70 to 130	0.529	20	
AW22368 Barium, Total	mg/L	0.00000544	0.0044	0.10	0.131	0.130	0.100	0.085 to 0.115	98.3	70 to 130	0.852	20	
AW22368 Cadmium, Total	mg/L	0.000000569	0.00044	0.10	0.103	0.102	0.106	0.085 to 0.115	103	70 to 130	0.712	20	
AW22368 Cobalt, Total	mg/L	-0.00000185	0.0044	0.10	0.0960	0.0967	0.102	0.085 to 0.115	96.0	70 to 130	0.753	20	
AW22369 Lithium, Total	mg/L	0.000301	0.022	0.20	0.203	0.192	0.215	0.17 to 0.23	101	70 to 130	5.57	20	

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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-3 Dup

Laboratory ID Number: AW22368

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW22369	Chloride, Total	mg/L	0.000	0.25	10.00	16.3	6.50	9.86	9 to 11	97.9	80 to 120	0.154	20
AW22369	Fluoride, Total	mg/L	0.000	0.3	2.00	1.92	0.050	1.94	1.8 to 2.2	93.5	80 to 120	0.00	20
AW22360	Solids, Dissolved	mg/L	-1.0	25			284	45.0	40 to 60			0.888	5
AW22369	Sulfate, Total	mg/L	-0.004	1.0	20.00	19.5	0.165	19.1	18 to 22	97.5	80 to 120	0	20

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CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AW22369

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/5/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	J 0.00237	mg/L
* Barium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	0.0260	mg/L
* Beryllium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/21/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	9/21/2016	EPA 200.7		1	0.1	0.5	3.07	mg/L
* Cadmium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	J 0.00752	mg/L
* Chromium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/21/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/6/2016	SM 2540C		1		25	32.7	mg/L
* Chloride, Total	SES	9/2/2016	EPA 300.0		1	0.04	0.25	6.51	mg/L
* Fluoride, Total	SES	9/2/2016	EPA 300.0		1	0.01	0.3	J 0.050	mg/L
* Sulfate, Total	SES	9/2/2016	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: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AW22369

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW22378 Antimony, Total	mg/L	0.0000585	0.00132	0.10	0.0948	0.0963	0.0993	0.085 to 0.115		94.8	70 to 130	1.56	20
AW22376 Mercury, Total by CVAA	mg/L	0.0000980	0.0005	0.004	0.00391	0.00391	0.00388	0.0034 to 0.0046		97.8	70 to 130	0.251	20
AW22378 Beryllium, Total	mg/L	0.00000700	0.00132	0.10	0.105	0.105	0.107	0.085 to 0.115		105	70 to 130	0.106	20
AW22378 Selenium, Total	mg/L	0.0000552	0.0044	0.10	0.0994	0.0987	0.103	0.085 to 0.115		99.4	70 to 130	0.772	20
AW22369 Boron, Total	mg/L	0.00501	0.044	1.00	0.935	0.940	0.965	0.85 to 1.15		93.5	70 to 130	0.533	20
AW22378 Barium, Total	mg/L	-0.00000123	0.0044	0.10	0.0972	0.0992	0.0988	0.085 to 0.115		97.2	70 to 130	2.06	20
AW22378 Arsenic, Total	mg/L	0.0000152	0.0022	0.10	0.0999	0.102	0.103	0.085 to 0.115		99.9	70 to 130	2.07	20
AW22378 Lead, Total	mg/L	0.00000940	0.0022	0.10	0.103	0.104	0.102	0.085 to 0.115		103	70 to 130	0.643	20
AW22369 Lithium, Total	mg/L	0.000301	0.022	0.20	0.203	0.192	0.215	0.17 to 0.23		101	70 to 130	5.57	20
AW22378 Cobalt, Total	mg/L	-0.00000217	0.0044	0.10	0.0966	0.0986	0.1000	0.085 to 0.115		96.6	70 to 130	2.11	20
AW22378 Molybdenum, Total	mg/L	0.0000118	0.0044	0.10	0.0976	0.100	0.102	0.085 to 0.115		97.6	70 to 130	2.65	20
AW22378 Thallium, Total	mg/L	0.0000226	0.00044	0.10	0.102	0.103	0.0994	0.085 to 0.115		102	70 to 130	0.965	20
AW22369 Calcium, Total	mg/L	-0.0399	0.22	5.00	7.54	7.58	4.86	4.25 to 5.75		89.5	70 to 130	0.529	20
AW22378 Cadmium, Total	mg/L	0.00000619	0.00044	0.10	0.101	0.104	0.104	0.085 to 0.115		101	70 to 130	2.83	20
AW22378 Chromium, Total	mg/L	0.0000102	0.0044	0.10	0.103	0.105	0.103	0.085 to 0.115		103	70 to 130	2.49	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: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AW22369

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW22369	Chloride, Total	mg/L	0.000	0.25	10.00	16.3	6.50	9.86	9 to 11	97.9	80 to 120	0.154	20
AW22369	Fluoride, Total	mg/L	0.000	0.3	2.00	1.92	0.050	1.94	1.8 to 2.2	93.5	80 to 120	0.00	20
AW22360	Solids, Dissolved	mg/L	-1.0	25			284	45.0	40 to 60			0.888	5
AW22369	Sulfate, Total	mg/L	-0.004	1.0	20.00	19.5	0.165	19.1	18 to 22	97.5	80 to 120	0	20

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CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AW22370

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/5/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Arsenic, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	0.0687	mg/L
* Barium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	0.296	mg/L
* Beryllium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0006	0.003	U Not Detected	mg/L
* Boron, Total	HRG	9/21/2016	EPA 200.7		1	0.02	0.1	1.55	mg/L
* Calcium, Total	HRG	9/21/2016	EPA 200.7		1	0.1	0.5	34.2	mg/L
* Cadmium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
* Cobalt, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	J 0.00246	mg/L
* Mercury, Total by CVAA	MCW	9/9/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	9/21/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Lead, Total	JHK	9/14/2016	EPA 200.8		5.075	0.001	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.002	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	9/14/2016	EPA 200.8		5.075	0.0002	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	9/7/2016	SM 2540C		1		50	456	mg/L
* Chloride, Total	SES	9/2/2016	EPA 300.0		1	0.04	0.25	21.0	mg/L
* Fluoride, Total	SES	9/2/2016	EPA 300.0		1	0.01	0.3	J 0.043	mg/L
* Sulfate, Total	SES	9/2/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AW22370

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW22378 Antimony, Total	mg/L	0.0000585	0.00132	0.10	0.0948	0.0963	0.0993	0.085 to 0.115	94.8	70 to 130	1.56	20	
AW22378 Arsenic, Total	mg/L	0.0000152	0.0022	0.10	0.0999	0.102	0.103	0.085 to 0.115	99.9	70 to 130	2.07	20	
AW22378 Lead, Total	mg/L	0.00000940	0.0022	0.10	0.103	0.104	0.102	0.085 to 0.115	103	70 to 130	0.643	20	
AW22378 Barium, Total	mg/L	-0.00000123	0.0044	0.10	0.0972	0.0992	0.0988	0.085 to 0.115	97.2	70 to 130	2.06	20	
AW22379 Calcium, Total	mg/L	-0.0403	0.22	5.00	5.67	5.70	4.84	4.25 to 5.75	90.8	70 to 130	0.528	20	
AW22378 Cadmium, Total	mg/L	0.000000619	0.00044	0.10	0.101	0.104	0.104	0.085 to 0.115	101	70 to 130	2.83	20	
AW22378 Chromium, Total	mg/L	0.0000102	0.0044	0.10	0.103	0.105	0.103	0.085 to 0.115	103	70 to 130	2.49	20	
AW22379 Boron, Total	mg/L	0.00425	0.044	1.00	0.934	0.950	0.969	0.85 to 1.15	93.4	70 to 130	1.70	20	
AW22378 Beryllium, Total	mg/L	0.00000700	0.00132	0.10	0.105	0.105	0.107	0.085 to 0.115	105	70 to 130	0.106	20	
AW22378 Selenium, Total	mg/L	0.0000552	0.0044	0.10	0.0994	0.0987	0.103	0.085 to 0.115	99.4	70 to 130	0.772	20	
AW22378 Cobalt, Total	mg/L	-0.00000217	0.0044	0.10	0.0966	0.0986	0.1000	0.085 to 0.115	96.6	70 to 130	2.11	20	
AW22378 Molybdenum, Total	mg/L	0.0000118	0.0044	0.10	0.0976	0.100	0.102	0.085 to 0.115	97.6	70 to 130	2.65	20	
AW22378 Thallium, Total	mg/L	0.0000226	0.00044	0.10	0.102	0.103	0.0994	0.085 to 0.115	102	70 to 130	0.965	20	
AW22376 Mercury, Total by CVAA	mg/L	0.0000980	0.0005	0.004	0.00391	0.00391	0.00388	0.0034 to 0.0046	97.8	70 to 130	0.251	20	
AW22379 Lithium, Total	mg/L	0.000387	0.022	0.20	0.215	0.199	0.216	0.17 to 0.23	107	70 to 130	7.73	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: WMWBARAP
 Sample Date: 31-Aug-16
 Customer ID:
 Delivery Date: 01-Sep-16

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AW22370

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
			Limit	Limit			Duplicate	LFB	Limit	Limit	Limit		
AW22370	Solids, Dissolved	mg/L	-1.0	25			450	47	40 to 60		0.662	5	
AW22379	Sulfate, Total	mg/L	0.003	1.0	20.00	23.5	3.56	19.6	18 to 22	99.4	80 to 120	1.67	20
AW22379	Chloride, Total	mg/L	0.000	0.25	10.00	14.6	4.59	9.87	9 to 11	100	80 to 120	0.218	20
AW22379	Fluoride, Total	mg/L	0.000	0.3	2.00	2.05	0.037	2.01	1.8 to 2.2	101	80 to 120	5.26	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.
 Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

CC:

Reported: 8/1/2017
 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 09/01/2016 12:30

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="Angie Jimmerson"/>	Requested By	<input type="text" value="Greg Dyer"/>
Collector	<input type="text" value="Jason Rouss"/>	Location	<input type="text" value="Barry 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 style="height: 30px;" type="text"/>

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-8	08/30/2016	12:50	3	Groundwater		AW22350
MW-5	08/30/2016	14:10	3	Groundwater		AW22351
MW-5 Dup	08/30/2016	14:10	3	Sample Duplicate		AW22352
MW-6	08/30/2016	15:25	3	Groundwater		AW22353
MW-7	08/31/2016	10:45	3	Groundwater		AW22354
MW-9	08/31/2016	11:53	3	Groundwater		AW22355
MW-10	08/31/2016	12:55	3	Groundwater		AW22356
MW-11	08/31/2016	13:55	3	Groundwater		AW22357
EB-1	08/31/2016	14:10	3	Equipment Blank		AW22358

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: 2016.09.01 17:12:05 -05'00'</small>	09/01/2016 17:12

SmarTroll ID	<input type="text" value="4696-23441-1-1"/>
Turbidity ID	<input type="text" value="4677-23342-4-1"/>

All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>	
Cooler Temp	<input type="text" value="2.2 degrees C"/>
Thermometer ID	<input type="text" value="5408-27568-2-2"/>
pH Strip ID	<input type="text" value="4831-24392-20-19"/>



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-4	08/30/2016	14:53	4	Groundwater		AW22359
MW-16	08/31/2016	10:44	3	Groundwater		AW22360
FB-2	08/31/2016	10:51	3	Field Blank		AW22361
MW-15	08/31/2016	11:44	3	Groundwater		AW22362
MW-13	08/31/2016	12:52	3	Groundwater		AW22363
MW-12	08/31/2016	13:55	3	Groundwater		AW22364

Relinquished By <i>Anthony Goggins</i>	Received By Sarah Copeland <small>Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o.ou, email=sgcopela@southernco.com, c=US Date: 2016.09.01 17:13:31 -05'00'</small>	Date/Time 09/01/2016 17:13

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-14	08/30/2016	15:23	3	Groundwater		AW22365
FB-1	08/30/2016	15:40	3	Field Blank		AW22366
MW-3	08/31/2016	12:30	3	Groundwater		AW22367
MW-3 Dup	08/31/2016	12:30	3	Sample Duplicate		AW22368
MW-2	08/31/2016	13:45	3	Groundwater		AW22369
MW-1	08/31/2016	14:50	3	Groundwater		AW22370

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: 2016.09.01 17:14:54 -05'00'</small>	09/01/2016 17:14

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: 400-126934-1

TestAmerica Sample Delivery Group: Barry Ash Pond (4)

Client Project/Site: CCR Plant Barry

For:

Alabama Power General Test Laboratory

744 County Rd 87

GSC #8

Calera, Alabama 35040

Attn: Sarah Copeland



Authorized for release by:

10/10/2016 6:11:22 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

LINKS

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

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

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

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Case Narrative

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

TestAmerica Job ID: 400-126934-1
SDG: Barry Ash Pond (4)

Job ID: 400-126934-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-126934-1

RAD

Method(s) PrecSep_0: Radium-228 Prep Batch 160-270094: The following samples were run at a reduced aliquot due to limited sample available: AW22350 MW-8 (400-126934-1), AW22351 MW-5 (400-126934-2), AW22352 MW-5 DUP (400-126934-3), AW22353 MW-6 (400-126934-4), AW22354 MW-7 (400-126934-5), AW22355 MW-9 (400-126934-6), AW22356 MW-10 (400-126934-7), AW22357 MW-11 (400-126934-8), AW22358 EB-1 (400-126934-9), AW22359 MW-4 (400-126934-10), AW22359 MW-4 (400-126934-10[DU]), AW22360 MW-16 (400-126934-11), AW22361 FB-2 (400-126934-12), AW22362 MW-15 (400-126934-13), AW22363 MW-13 (400-126934-14), AW22364 MW-12 (400-126934-15), AW22365 MW-14 (400-126934-16), AW22366 FB-1 (400-126934-17), AW22367 MW-3 (400-126934-18), AW22368 MW-3 DUP (400-126934-19) and AW22369 MW-2 (400-126934-20).

Method(s) PrecSep_0: Radium-228 Prep Batch: 160-270105: The following samples were prepared at a reduced aliquot due to limited volume AW22370 MW-1 (400-126934-21).

Method(s) PrecSep-21: Radium-226 Prep Batch: 160-270101: The following samples were prepared at a reduced aliquot due to limited volume AW22370 MW-1 (400-126934-21).

Method(s) PrecSep-21: Radium-226 Prep Batch 160-270093: The following samples were run at a reduced aliquot due to limited sample available: AW22350 MW-8 (400-126934-1), AW22351 MW-5 (400-126934-2), AW22352 MW-5 DUP (400-126934-3), AW22353 MW-6 (400-126934-4), AW22354 MW-7 (400-126934-5), AW22355 MW-9 (400-126934-6), AW22356 MW-10 (400-126934-7), AW22357 MW-11 (400-126934-8), AW22358 EB-1 (400-126934-9), AW22359 MW-4 (400-126934-10), AW22359 MW-4 (400-126934-10[DU]), AW22360 MW-16 (400-126934-11), AW22361 FB-2 (400-126934-12), AW22362 MW-15 (400-126934-13), AW22363 MW-13 (400-126934-14), AW22364 MW-12 (400-126934-15), AW22365 MW-14 (400-126934-16), AW22366 FB-1 (400-126934-17), AW22367 MW-3 (400-126934-18), AW22368 MW-3 DUP (400-126934-19) and AW22369 MW-2 (400-126934-20).

Method Summary

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

TestAmerica Job ID: 400-126934-1
SDG: Barry 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 Barry

TestAmerica Job ID: 400-126934-1
SDG: Barry Ash Pond (4)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-126934-1	AW22350 MW-8	Water	08/30/16 12:50	09/09/16 15:30
400-126934-2	AW22351 MW-5	Water	08/30/16 14:10	09/09/16 15:30
400-126934-3	AW22352 MW-5 DUP	Water	08/30/16 14:10	09/09/16 15:30
400-126934-4	AW22353 MW-6	Water	08/30/16 15:25	09/09/16 15:30
400-126934-5	AW22354 MW-7	Water	08/31/16 10:45	09/09/16 15:30
400-126934-6	AW22355 MW-9	Water	08/31/16 11:53	09/09/16 15:30
400-126934-7	AW22356 MW-10	Water	08/31/16 12:55	09/09/16 15:30
400-126934-8	AW22357 MW-11	Water	08/31/16 13:55	09/09/16 15:30
400-126934-9	AW22358 EB-1	Water	08/31/16 14:10	09/09/16 15:30
400-126934-10	AW22359 MW-4	Water	08/30/16 14:53	09/09/16 15:30
400-126934-11	AW22360 MW-16	Water	08/31/16 10:44	09/09/16 15:30
400-126934-12	AW22361 FB-2	Water	08/31/16 10:51	09/09/16 15:30
400-126934-13	AW22362 MW-15	Water	08/31/16 11:44	09/09/16 15:30
400-126934-14	AW22363 MW-13	Water	08/31/16 12:52	09/09/16 15:30
400-126934-15	AW22364 MW-12	Water	08/31/16 13:55	09/09/16 15:30
400-126934-16	AW22365 MW-14	Water	08/30/16 15:23	09/09/16 15:30
400-126934-17	AW22366 FB-1	Water	08/30/16 15:40	09/09/16 15:30
400-126934-18	AW22367 MW-3	Water	08/31/16 12:30	09/09/16 15:30
400-126934-19	AW22368 MW-3 DUP	Water	08/31/16 12:30	09/09/16 15:30
400-126934-20	AW22369 MW-2	Water	08/31/16 13:45	09/09/16 15:30
400-126934-21	AW22370 MW-1	Water	08/31/16 14:50	09/09/16 15:30

Client Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22350 MW-8

Lab Sample ID: 400-126934-1

Date Collected: 08/30/16 12:50

Matrix: Water

Date Received: 09/09/16 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	0.407		0.164	0.168	1.00	0.191	pCi/L	09/15/16 17:43	10/07/16 07:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.9		40 - 110					09/15/16 17:43	10/07/16 07:18	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.262	U	0.341	0.342	1.00	0.567	pCi/L	09/15/16 18:07	10/05/16 14:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.9		40 - 110					09/15/16 18:07	10/05/16 14:44	1
Y Carrier	87.9		40 - 110					09/15/16 18:07	10/05/16 14:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.669		0.379	0.381	5.00	0.567	pCi/L		10/10/16 04:02	1

Client Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22351 MW-5

Lab Sample ID: 400-126934-2

Date Collected: 08/30/16 14:10

Matrix: Water

Date Received: 09/09/16 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	0.608		0.197	0.205	1.00	0.223	pCi/L	09/15/16 17:43	10/07/16 07:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.6		40 - 110					09/15/16 17:43	10/07/16 07:19	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.559		0.355	0.359	1.00	0.549	pCi/L	09/15/16 18:07	10/05/16 14:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.6		40 - 110					09/15/16 18:07	10/05/16 14:44	1
Y Carrier	90.8		40 - 110					09/15/16 18:07	10/05/16 14:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.17		0.406	0.413	5.00	0.549	pCi/L		10/10/16 04:02	1

Client Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22352 MW-5 DUP

Lab Sample ID: 400-126934-3

Date Collected: 08/30/16 14:10

Matrix: Water

Date Received: 09/09/16 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	0.593		0.187	0.194	1.00	0.196	pCi/L	09/15/16 17:43	10/07/16 07:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.7		40 - 110					09/15/16 17:43	10/07/16 07:19	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.427	U	0.346	0.348	1.00	0.551	pCi/L	09/15/16 18:07	10/05/16 14:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.7		40 - 110					09/15/16 18:07	10/05/16 14:44	1
Y Carrier	90.1		40 - 110					09/15/16 18:07	10/05/16 14:44	1

Method: Ra226_Ra228 - Combined Radium-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		0.393	0.399	5.00	0.551	pCi/L		10/10/16 04:02	1

Client Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22353 MW-6

Lab Sample ID: 400-126934-4

Date Collected: 08/30/16 15:25

Matrix: Water

Date Received: 09/09/16 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	0.320		0.182	0.184	1.00	0.259	pCi/L	09/15/16 17:43	10/07/16 07:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.3		40 - 110					09/15/16 17:43	10/07/16 07:19	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.108	U	0.324	0.324	1.00	0.563	pCi/L	09/15/16 18:07	10/05/16 14:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.3		40 - 110					09/15/16 18:07	10/05/16 14:44	1
Y Carrier	87.1		40 - 110					09/15/16 18:07	10/05/16 14:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.428	U	0.371	0.373	5.00	0.563	pCi/L		10/10/16 04:02	1

Client Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22354 MW-7

Lab Sample ID: 400-126934-5

Date Collected: 08/31/16 10:45

Matrix: Water

Date Received: 09/09/16 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	0.179	U	0.155	0.156	1.00	0.243	pCi/L	09/15/16 17:43	10/07/16 07:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.3		40 - 110					09/15/16 17:43	10/07/16 07:19	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.105	U	0.337	0.337	1.00	0.582	pCi/L	09/15/16 18:07	10/05/16 14:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.3		40 - 110					09/15/16 18:07	10/05/16 14:44	1
Y Carrier	95.3		40 - 110					09/15/16 18:07	10/05/16 14:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.284	U	0.371	0.371	5.00	0.582	pCi/L		10/10/16 04:02	1

Client Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22355 MW-9

Lab Sample ID: 400-126934-6

Date Collected: 08/31/16 11:53

Matrix: Water

Date Received: 09/09/16 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	0.589		0.187	0.194	1.00	0.197	pCi/L	09/15/16 17:43	10/07/16 07:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		40 - 110					09/15/16 17:43	10/07/16 07:19	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.329	U	0.326	0.328	1.00	0.530	pCi/L	09/15/16 18:07	10/05/16 14:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		40 - 110					09/15/16 18:07	10/05/16 14:44	1
Y Carrier	93.8		40 - 110					09/15/16 18:07	10/05/16 14:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.917		0.376	0.381	5.00	0.530	pCi/L		10/10/16 04:02	1

Client Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22356 MW-10

Lab Sample ID: 400-126934-7

Date Collected: 08/31/16 12:55

Matrix: Water

Date Received: 09/09/16 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	0.513		0.164	0.170	1.00	0.151	pCi/L	09/15/16 17:43	10/07/16 07:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					09/15/16 17:43	10/07/16 07:19	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.357	U	0.324	0.326	1.00	0.521	pCi/L	09/15/16 18:07	10/05/16 14:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					09/15/16 18:07	10/05/16 14:44	1
Y Carrier	86.4		40 - 110					09/15/16 18:07	10/05/16 14:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.871		0.363	0.368	5.00	0.521	pCi/L		10/10/16 04:02	1

Client Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22357 MW-11

Lab Sample ID: 400-126934-8

Date Collected: 08/31/16 13:55

Matrix: Water

Date Received: 09/09/16 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	0.519		0.170	0.177	1.00	0.173	pCi/L	09/15/16 17:43	10/07/16 07:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					09/15/16 17:43	10/07/16 07:19	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.207	U	0.306	0.307	1.00	0.515	pCi/L	09/15/16 18:07	10/05/16 14:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					09/15/16 18:07	10/05/16 14:44	1
Y Carrier	82.6		40 - 110					09/15/16 18:07	10/05/16 14:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.726		0.350	0.354	5.00	0.515	pCi/L		10/10/16 04:02	1

Client Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22358 EB-1

Lab Sample ID: 400-126934-9

Date Collected: 08/31/16 14:10

Matrix: Water

Date Received: 09/09/16 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	0.112	U	0.118	0.119	1.00	0.190	pCi/L	09/15/16 17:43	10/07/16 07:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					09/15/16 17:43	10/07/16 07:19	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0250	U	0.270	0.270	1.00	0.496	pCi/L	09/15/16 18:07	10/05/16 14:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					09/15/16 18:07	10/05/16 14:44	1
Y Carrier	86.0		40 - 110					09/15/16 18:07	10/05/16 14:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0869	U	0.295	0.295	5.00	0.496	pCi/L		10/10/16 04:02	1

Client Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22359 MW-4

Lab Sample ID: 400-126934-10

Date Collected: 08/30/16 14:53

Matrix: Water

Date Received: 09/09/16 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	0.315		0.160	0.162	1.00	0.219	pCi/L	09/15/16 17:43	10/07/16 07:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.9		40 - 110					09/15/16 17:43	10/07/16 07:21	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.270	U	0.349	0.350	1.00	0.580	pCi/L	09/15/16 18:07	10/05/16 14:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.9		40 - 110					09/15/16 18:07	10/05/16 14:44	1
Y Carrier	89.7		40 - 110					09/15/16 18:07	10/05/16 14:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.585		0.384	0.386	5.00	0.580	pCi/L		10/10/16 04:02	1

Client Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22360 MW-16

Lab Sample ID: 400-126934-11

Date Collected: 08/31/16 10:44

Matrix: Water

Date Received: 09/09/16 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	0.485		0.178	0.184	1.00	0.213	pCi/L	09/15/16 17:43	10/07/16 07:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		40 - 110					09/15/16 17:43	10/07/16 07:21	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0964	U	0.274	0.274	1.00	0.478	pCi/L	09/15/16 18:07	10/05/16 14:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		40 - 110					09/15/16 18:07	10/05/16 14:44	1
Y Carrier	88.6		40 - 110					09/15/16 18:07	10/05/16 14:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.582		0.327	0.330	5.00	0.478	pCi/L		10/10/16 04:02	1

Client Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22361 FB-2

Lab Sample ID: 400-126934-12

Date Collected: 08/31/16 10:51

Matrix: Water

Date Received: 09/09/16 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	0.209	U	0.151	0.153	1.00	0.229	pCi/L	09/15/16 17:43	10/07/16 07:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.7		40 - 110					09/15/16 17:43	10/07/16 07:21	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.108	U	0.255	0.255	1.00	0.441	pCi/L	09/15/16 18:07	10/05/16 14:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.7		40 - 110					09/15/16 18:07	10/05/16 14:44	1
Y Carrier	89.7		40 - 110					09/15/16 18:07	10/05/16 14:44	1

Method: Ra226_Ra228 - Combined Radium-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	0.296	0.297	5.00	0.441	pCi/L		10/10/16 04:02	1

Client Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22362 MW-15

Lab Sample ID: 400-126934-13

Date Collected: 08/31/16 11:44

Matrix: Water

Date Received: 09/09/16 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	0.318		0.145	0.148	1.00	0.178	pCi/L	09/15/16 17:43	10/07/16 07:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					09/15/16 17:43	10/07/16 07:21	1

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	0.329	0.332	1.00	0.515	pCi/L	09/15/16 18:07	10/05/16 14:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					09/15/16 18:07	10/05/16 14:44	1
Y Carrier	89.3		40 - 110					09/15/16 18:07	10/05/16 14:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.765		0.360	0.363	5.00	0.515	pCi/L		10/10/16 04:02	1

Client Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22363 MW-13

Lab Sample ID: 400-126934-14

Date Collected: 08/31/16 12:52

Matrix: Water

Date Received: 09/09/16 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	0.418		0.174	0.178	1.00	0.216	pCi/L	09/15/16 17:43	10/07/16 07:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		40 - 110					09/15/16 17:43	10/07/16 07:21	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0421	U	0.292	0.292	1.00	0.518	pCi/L	09/15/16 18:07	10/05/16 14:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		40 - 110					09/15/16 18:07	10/05/16 14:45	1
Y Carrier	90.8		40 - 110					09/15/16 18:07	10/05/16 14:45	1

Method: Ra226_Ra228 - Combined Radium-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	0.339	0.342	5.00	0.518	pCi/L		10/10/16 04:02	1

Client Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22364 MW-12

Lab Sample ID: 400-126934-15

Date Collected: 08/31/16 13:55

Matrix: Water

Date Received: 09/09/16 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	0.463		0.177	0.182	1.00	0.212	pCi/L	09/15/16 17:43	10/07/16 07:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		40 - 110					09/15/16 17:43	10/07/16 07:22	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0642	U	0.273	0.273	1.00	0.482	pCi/L	09/15/16 18:07	10/05/16 14:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		40 - 110					09/15/16 18:07	10/05/16 14:45	1
Y Carrier	89.3		40 - 110					09/15/16 18:07	10/05/16 14:45	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.528		0.325	0.328	5.00	0.482	pCi/L		10/10/16 04:02	1

Client Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22365 MW-14

Lab Sample ID: 400-126934-16

Date Collected: 08/30/16 15:23

Matrix: Water

Date Received: 09/09/16 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	0.367		0.146	0.149	1.00	0.163	pCi/L	09/15/16 17:43	10/07/16 07:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		40 - 110					09/15/16 17:43	10/07/16 07:22	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.325	U	0.318	0.319	1.00	0.514	pCi/L	09/15/16 18:07	10/05/16 14:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		40 - 110					09/15/16 18:07	10/05/16 14:45	1
Y Carrier	90.5		40 - 110					09/15/16 18:07	10/05/16 14:45	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.693		0.349	0.352	5.00	0.514	pCi/L		10/10/16 04:02	1

Client Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22366 FB-1

Lab Sample ID: 400-126934-17

Date Collected: 08/30/16 15:40

Matrix: Water

Date Received: 09/09/16 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	0.210		0.129	0.131	1.00	0.180	pCi/L	09/15/16 17:43	10/07/16 07:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.6		40 - 110					09/15/16 17:43	10/07/16 07:22	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.109	U	0.282	0.282	1.00	0.522	pCi/L	09/15/16 18:07	10/05/16 14:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.6		40 - 110					09/15/16 18:07	10/05/16 14:45	1
Y Carrier	92.7		40 - 110					09/15/16 18:07	10/05/16 14:45	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.101	U	0.310	0.311	5.00	0.522	pCi/L		10/10/16 04:02	1

Client Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22367 MW-3

Lab Sample ID: 400-126934-18

Date Collected: 08/31/16 12:30

Matrix: Water

Date Received: 09/09/16 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	0.213	U	0.152	0.153	1.00	0.229	pCi/L	09/15/16 17:43	10/07/16 07:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.6		40 - 110					09/15/16 17:43	10/07/16 07:22	1

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	0.261	0.261	1.00	0.451	pCi/L	09/15/16 18:07	10/05/16 14:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.6		40 - 110					09/15/16 18:07	10/05/16 14:45	1
Y Carrier	86.0		40 - 110					09/15/16 18:07	10/05/16 14:45	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.329	U	0.302	0.303	5.00	0.451	pCi/L		10/10/16 04:02	1

Client Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22368 MW-3 DUP

Lab Sample ID: 400-126934-19

Date Collected: 08/31/16 12:30

Matrix: Water

Date Received: 09/09/16 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	0.0521	U	0.103	0.103	1.00	0.182	pCi/L	09/15/16 17:43	10/07/16 07:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					09/15/16 17:43	10/07/16 07:22	1

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	0.411	0.412	1.00	0.702	pCi/L	09/15/16 18:07	10/05/16 14:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					09/15/16 18:07	10/05/16 14:45	1
Y Carrier	89.0		40 - 110					09/15/16 18:07	10/05/16 14:45	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.221	U	0.424	0.424	5.00	0.702	pCi/L		10/10/16 04:02	1

Client Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22369 MW-2

Lab Sample ID: 400-126934-20

Date Collected: 08/31/16 13:45

Matrix: Water

Date Received: 09/09/16 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	0.122	U	0.138	0.138	1.00	0.225	pCi/L	09/15/16 17:43	10/07/16 07:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.9		40 - 110					09/15/16 17:43	10/07/16 07:22	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.226	U	0.340	0.340	1.00	0.571	pCi/L	09/15/16 18:07	10/05/16 14:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.9		40 - 110					09/15/16 18:07	10/05/16 14:39	1
Y Carrier	91.2		40 - 110					09/15/16 18:07	10/05/16 14:39	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	0.348	U	0.367	0.367	5.00	0.571	pCi/L		10/10/16 04:02	1

Client Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22370 MW-1

Lab Sample ID: 400-126934-21

Date Collected: 08/31/16 14:50

Matrix: Water

Date Received: 09/09/16 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	1.13		0.228	0.250	1.00	0.159	pCi/L	09/15/16 20:29	10/07/16 10:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.2		40 - 110					09/15/16 20:29	10/07/16 10:40	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		0.522	0.531	1.00	0.768	pCi/L	09/15/16 21:45	10/04/16 16:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.2		40 - 110					09/15/16 21:45	10/04/16 16:30	1
Y Carrier	77.8		40 - 110					09/15/16 21:45	10/04/16 16:30	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	2.19		0.570	0.587	5.00	0.768	pCi/L		10/10/16 04:02	1

Definitions/Glossary

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

TestAmerica Job ID: 400-126934-1
SDG: Barry Ash Pond (4)

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 Barry

TestAmerica Job ID: 400-126934-1
SDG: Barry Ash Pond (4)

Client Sample ID: AW22350 MW-8

Lab Sample ID: 400-126934-1

Date Collected: 08/30/16 12:50

Matrix: Water

Date Received: 09/09/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			270093	09/15/16 17:43	MCJ	TAL SL
Total/NA	Analysis	9315		1	273592	10/07/16 07:18	RTM	TAL SL
Total/NA	Prep	PrecSep_0			270094	09/15/16 18:07	MCJ	TAL SL
Total/NA	Analysis	9320		1	273263	10/05/16 14:44	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273695	10/10/16 04:02	ALS	TAL SL

Client Sample ID: AW22351 MW-5

Lab Sample ID: 400-126934-2

Date Collected: 08/30/16 14:10

Matrix: Water

Date Received: 09/09/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			270093	09/15/16 17:43	MCJ	TAL SL
Total/NA	Analysis	9315		1	273592	10/07/16 07:19	RTM	TAL SL
Total/NA	Prep	PrecSep_0			270094	09/15/16 18:07	MCJ	TAL SL
Total/NA	Analysis	9320		1	273263	10/05/16 14:44	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273695	10/10/16 04:02	ALS	TAL SL

Client Sample ID: AW22352 MW-5 DUP

Lab Sample ID: 400-126934-3

Date Collected: 08/30/16 14:10

Matrix: Water

Date Received: 09/09/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			270093	09/15/16 17:43	MCJ	TAL SL
Total/NA	Analysis	9315		1	273592	10/07/16 07:19	RTM	TAL SL
Total/NA	Prep	PrecSep_0			270094	09/15/16 18:07	MCJ	TAL SL
Total/NA	Analysis	9320		1	273263	10/05/16 14:44	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273695	10/10/16 04:02	ALS	TAL SL

Client Sample ID: AW22353 MW-6

Lab Sample ID: 400-126934-4

Date Collected: 08/30/16 15:25

Matrix: Water

Date Received: 09/09/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			270093	09/15/16 17:43	MCJ	TAL SL
Total/NA	Analysis	9315		1	273592	10/07/16 07:19	RTM	TAL SL
Total/NA	Prep	PrecSep_0			270094	09/15/16 18:07	MCJ	TAL SL
Total/NA	Analysis	9320		1	273263	10/05/16 14:44	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273695	10/10/16 04:02	ALS	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22354 MW-7

Lab Sample ID: 400-126934-5

Date Collected: 08/31/16 10:45

Matrix: Water

Date Received: 09/09/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			270093	09/15/16 17:43	MCJ	TAL SL
Total/NA	Analysis	9315		1	273592	10/07/16 07:19	RTM	TAL SL
Total/NA	Prep	PrecSep_0			270094	09/15/16 18:07	MCJ	TAL SL
Total/NA	Analysis	9320		1	273263	10/05/16 14:44	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273695	10/10/16 04:02	ALS	TAL SL

Client Sample ID: AW22355 MW-9

Lab Sample ID: 400-126934-6

Date Collected: 08/31/16 11:53

Matrix: Water

Date Received: 09/09/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			270093	09/15/16 17:43	MCJ	TAL SL
Total/NA	Analysis	9315		1	273592	10/07/16 07:19	RTM	TAL SL
Total/NA	Prep	PrecSep_0			270094	09/15/16 18:07	MCJ	TAL SL
Total/NA	Analysis	9320		1	273263	10/05/16 14:44	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273695	10/10/16 04:02	ALS	TAL SL

Client Sample ID: AW22356 MW-10

Lab Sample ID: 400-126934-7

Date Collected: 08/31/16 12:55

Matrix: Water

Date Received: 09/09/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			270093	09/15/16 17:43	MCJ	TAL SL
Total/NA	Analysis	9315		1	273592	10/07/16 07:19	RTM	TAL SL
Total/NA	Prep	PrecSep_0			270094	09/15/16 18:07	MCJ	TAL SL
Total/NA	Analysis	9320		1	273263	10/05/16 14:44	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273695	10/10/16 04:02	ALS	TAL SL

Client Sample ID: AW22357 MW-11

Lab Sample ID: 400-126934-8

Date Collected: 08/31/16 13:55

Matrix: Water

Date Received: 09/09/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			270093	09/15/16 17:43	MCJ	TAL SL
Total/NA	Analysis	9315		1	273592	10/07/16 07:19	RTM	TAL SL
Total/NA	Prep	PrecSep_0			270094	09/15/16 18:07	MCJ	TAL SL
Total/NA	Analysis	9320		1	273263	10/05/16 14:44	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273695	10/10/16 04:02	ALS	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22358 EB-1

Lab Sample ID: 400-126934-9

Date Collected: 08/31/16 14:10

Matrix: Water

Date Received: 09/09/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			270093	09/15/16 17:43	MCJ	TAL SL
Total/NA	Analysis	9315		1	273592	10/07/16 07:19	RTM	TAL SL
Total/NA	Prep	PrecSep_0			270094	09/15/16 18:07	MCJ	TAL SL
Total/NA	Analysis	9320		1	273263	10/05/16 14:44	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273695	10/10/16 04:02	ALS	TAL SL

Client Sample ID: AW22359 MW-4

Lab Sample ID: 400-126934-10

Date Collected: 08/30/16 14:53

Matrix: Water

Date Received: 09/09/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			270093	09/15/16 17:43	MCJ	TAL SL
Total/NA	Analysis	9315		1	273593	10/07/16 07:21	RTM	TAL SL
Total/NA	Prep	PrecSep_0			270094	09/15/16 18:07	MCJ	TAL SL
Total/NA	Analysis	9320		1	273263	10/05/16 14:44	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273695	10/10/16 04:02	ALS	TAL SL

Client Sample ID: AW22360 MW-16

Lab Sample ID: 400-126934-11

Date Collected: 08/31/16 10:44

Matrix: Water

Date Received: 09/09/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			270093	09/15/16 17:43	MCJ	TAL SL
Total/NA	Analysis	9315		1	273593	10/07/16 07:21	RTM	TAL SL
Total/NA	Prep	PrecSep_0			270094	09/15/16 18:07	MCJ	TAL SL
Total/NA	Analysis	9320		1	273263	10/05/16 14:44	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273695	10/10/16 04:02	ALS	TAL SL

Client Sample ID: AW22361 FB-2

Lab Sample ID: 400-126934-12

Date Collected: 08/31/16 10:51

Matrix: Water

Date Received: 09/09/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			270093	09/15/16 17:43	MCJ	TAL SL
Total/NA	Analysis	9315		1	273593	10/07/16 07:21	RTM	TAL SL
Total/NA	Prep	PrecSep_0			270094	09/15/16 18:07	MCJ	TAL SL
Total/NA	Analysis	9320		1	273263	10/05/16 14:44	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273695	10/10/16 04:02	ALS	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-126934-1
SDG: Barry Ash Pond (4)

Client Sample ID: AW22362 MW-15

Lab Sample ID: 400-126934-13

Date Collected: 08/31/16 11:44

Matrix: Water

Date Received: 09/09/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			270093	09/15/16 17:43	MCJ	TAL SL
Total/NA	Analysis	9315		1	273593	10/07/16 07:21	RTM	TAL SL
Total/NA	Prep	PrecSep_0			270094	09/15/16 18:07	MCJ	TAL SL
Total/NA	Analysis	9320		1	273263	10/05/16 14:44	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273695	10/10/16 04:02	ALS	TAL SL

Client Sample ID: AW22363 MW-13

Lab Sample ID: 400-126934-14

Date Collected: 08/31/16 12:52

Matrix: Water

Date Received: 09/09/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			270093	09/15/16 17:43	MCJ	TAL SL
Total/NA	Analysis	9315		1	273593	10/07/16 07:21	RTM	TAL SL
Total/NA	Prep	PrecSep_0			270094	09/15/16 18:07	MCJ	TAL SL
Total/NA	Analysis	9320		1	273263	10/05/16 14:45	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273695	10/10/16 04:02	ALS	TAL SL

Client Sample ID: AW22364 MW-12

Lab Sample ID: 400-126934-15

Date Collected: 08/31/16 13:55

Matrix: Water

Date Received: 09/09/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			270093	09/15/16 17:43	MCJ	TAL SL
Total/NA	Analysis	9315		1	273593	10/07/16 07:22	RTM	TAL SL
Total/NA	Prep	PrecSep_0			270094	09/15/16 18:07	MCJ	TAL SL
Total/NA	Analysis	9320		1	273263	10/05/16 14:45	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273695	10/10/16 04:02	ALS	TAL SL

Client Sample ID: AW22365 MW-14

Lab Sample ID: 400-126934-16

Date Collected: 08/30/16 15:23

Matrix: Water

Date Received: 09/09/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			270093	09/15/16 17:43	MCJ	TAL SL
Total/NA	Analysis	9315		1	273593	10/07/16 07:22	RTM	TAL SL
Total/NA	Prep	PrecSep_0			270094	09/15/16 18:07	MCJ	TAL SL
Total/NA	Analysis	9320		1	273263	10/05/16 14:45	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273695	10/10/16 04:02	ALS	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Client Sample ID: AW22366 FB-1

Lab Sample ID: 400-126934-17

Date Collected: 08/30/16 15:40

Matrix: Water

Date Received: 09/09/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			270093	09/15/16 17:43	MCJ	TAL SL
Total/NA	Analysis	9315		1	273593	10/07/16 07:22	RTM	TAL SL
Total/NA	Prep	PrecSep_0			270094	09/15/16 18:07	MCJ	TAL SL
Total/NA	Analysis	9320		1	273263	10/05/16 14:45	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273695	10/10/16 04:02	ALS	TAL SL

Client Sample ID: AW22367 MW-3

Lab Sample ID: 400-126934-18

Date Collected: 08/31/16 12:30

Matrix: Water

Date Received: 09/09/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			270093	09/15/16 17:43	MCJ	TAL SL
Total/NA	Analysis	9315		1	273593	10/07/16 07:22	RTM	TAL SL
Total/NA	Prep	PrecSep_0			270094	09/15/16 18:07	MCJ	TAL SL
Total/NA	Analysis	9320		1	273263	10/05/16 14:45	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273695	10/10/16 04:02	ALS	TAL SL

Client Sample ID: AW22368 MW-3 DUP

Lab Sample ID: 400-126934-19

Date Collected: 08/31/16 12:30

Matrix: Water

Date Received: 09/09/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			270093	09/15/16 17:43	MCJ	TAL SL
Total/NA	Analysis	9315		1	273593	10/07/16 07:22	RTM	TAL SL
Total/NA	Prep	PrecSep_0			270094	09/15/16 18:07	MCJ	TAL SL
Total/NA	Analysis	9320		1	273263	10/05/16 14:45	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273695	10/10/16 04:02	ALS	TAL SL

Client Sample ID: AW22369 MW-2

Lab Sample ID: 400-126934-20

Date Collected: 08/31/16 13:45

Matrix: Water

Date Received: 09/09/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			270093	09/15/16 17:43	MCJ	TAL SL
Total/NA	Analysis	9315		1	273593	10/07/16 07:22	RTM	TAL SL
Total/NA	Prep	PrecSep_0			270094	09/15/16 18:07	MCJ	TAL SL
Total/NA	Analysis	9320		1	273252	10/05/16 14:39	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273695	10/10/16 04:02	ALS	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-126934-1
SDG: Barry Ash Pond (4)

Client Sample ID: AW22370 MW-1

Lab Sample ID: 400-126934-21

Date Collected: 08/31/16 14:50

Matrix: Water

Date Received: 09/09/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			270101	09/15/16 20:29	MCJ	TAL SL
Total/NA	Analysis	9315		1	273575	10/07/16 10:40	RTM	TAL SL
Total/NA	Prep	PrecSep_0			270105	09/15/16 21:45	MCJ	TAL SL
Total/NA	Analysis	9320		1	273103	10/04/16 16:30	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	273695	10/10/16 04:02	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 Barry

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Rad

Prep Batch: 270093

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126934-1	AW22350 MW-8	Total/NA	Water	PrecSep-21	
400-126934-2	AW22351 MW-5	Total/NA	Water	PrecSep-21	
400-126934-3	AW22352 MW-5 DUP	Total/NA	Water	PrecSep-21	
400-126934-4	AW22353 MW-6	Total/NA	Water	PrecSep-21	
400-126934-5	AW22354 MW-7	Total/NA	Water	PrecSep-21	
400-126934-6	AW22355 MW-9	Total/NA	Water	PrecSep-21	
400-126934-7	AW22356 MW-10	Total/NA	Water	PrecSep-21	
400-126934-8	AW22357 MW-11	Total/NA	Water	PrecSep-21	
400-126934-9	AW22358 EB-1	Total/NA	Water	PrecSep-21	
400-126934-10	AW22359 MW-4	Total/NA	Water	PrecSep-21	
400-126934-11	AW22360 MW-16	Total/NA	Water	PrecSep-21	
400-126934-12	AW22361 FB-2	Total/NA	Water	PrecSep-21	
400-126934-13	AW22362 MW-15	Total/NA	Water	PrecSep-21	
400-126934-14	AW22363 MW-13	Total/NA	Water	PrecSep-21	
400-126934-15	AW22364 MW-12	Total/NA	Water	PrecSep-21	
400-126934-16	AW22365 MW-14	Total/NA	Water	PrecSep-21	
400-126934-17	AW22366 FB-1	Total/NA	Water	PrecSep-21	
400-126934-18	AW22367 MW-3	Total/NA	Water	PrecSep-21	
400-126934-19	AW22368 MW-3 DUP	Total/NA	Water	PrecSep-21	
400-126934-20	AW22369 MW-2	Total/NA	Water	PrecSep-21	
MB 160-270093/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-270093/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-126934-10 DU	AW22359 MW-4	Total/NA	Water	PrecSep-21	

Prep Batch: 270094

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126934-1	AW22350 MW-8	Total/NA	Water	PrecSep_0	
400-126934-2	AW22351 MW-5	Total/NA	Water	PrecSep_0	
400-126934-3	AW22352 MW-5 DUP	Total/NA	Water	PrecSep_0	
400-126934-4	AW22353 MW-6	Total/NA	Water	PrecSep_0	
400-126934-5	AW22354 MW-7	Total/NA	Water	PrecSep_0	
400-126934-6	AW22355 MW-9	Total/NA	Water	PrecSep_0	
400-126934-7	AW22356 MW-10	Total/NA	Water	PrecSep_0	
400-126934-8	AW22357 MW-11	Total/NA	Water	PrecSep_0	
400-126934-9	AW22358 EB-1	Total/NA	Water	PrecSep_0	
400-126934-10	AW22359 MW-4	Total/NA	Water	PrecSep_0	
400-126934-11	AW22360 MW-16	Total/NA	Water	PrecSep_0	
400-126934-12	AW22361 FB-2	Total/NA	Water	PrecSep_0	
400-126934-13	AW22362 MW-15	Total/NA	Water	PrecSep_0	
400-126934-14	AW22363 MW-13	Total/NA	Water	PrecSep_0	
400-126934-15	AW22364 MW-12	Total/NA	Water	PrecSep_0	
400-126934-16	AW22365 MW-14	Total/NA	Water	PrecSep_0	
400-126934-17	AW22366 FB-1	Total/NA	Water	PrecSep_0	
400-126934-18	AW22367 MW-3	Total/NA	Water	PrecSep_0	
400-126934-19	AW22368 MW-3 DUP	Total/NA	Water	PrecSep_0	
400-126934-20	AW22369 MW-2	Total/NA	Water	PrecSep_0	
MB 160-270094/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-270094/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-126934-10 DU	AW22359 MW-4	Total/NA	Water	PrecSep_0	

QC Association Summary

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

TestAmerica Job ID: 400-126934-1
SDG: Barry Ash Pond (4)

Rad (Continued)

Prep Batch: 270101

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126934-21	AW22370 MW-1	Total/NA	Water	PrecSep-21	
MB 160-270101/1-A	Method Blank	Total/NA	Water	PrecSep-21	

Prep Batch: 270105

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126934-21	AW22370 MW-1	Total/NA	Water	PrecSep_0	
MB 160-270105/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-270105/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
480-105752-B-1-E MS	Matrix Spike	Total/NA	Water	PrecSep_0	
480-105752-B-1-G MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-270093/1-A
Matrix: Water
Analysis Batch: 273592

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 270093

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.1147	U	0.156	0.156	1.00	0.261	pCi/L	09/15/16 17:43	10/07/16 07:17	1
Carrier	MB MB		Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	%Yield	Qualifier	Limits							
Ba Carrier	83.2		40 - 110		09/15/16 17:43	10/07/16 07:17	1			

Lab Sample ID: LCS 160-270093/2-A
Matrix: Water
Analysis Batch: 273592

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 270093

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	14.8	19.02		1.95	1.00	0.187	pCi/L	129	68 - 137
Carrier	LCS LCS		Limits		Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier	Limits						
Ba Carrier	82.3		40 - 110		09/15/16 17:43	10/07/16 07:17	1		

Lab Sample ID: 400-126934-10 DU
Matrix: Water
Analysis Batch: 273593

Client Sample ID: AW22359 MW-4
Prep Type: Total/NA
Prep Batch: 270093

Analyte	Sample Sample		DU	DU	Total	RL	MDC	Unit	RER	RER
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					Limit
Radium-226	0.315		0.3164		0.162	1.00	0.218	pCi/L	0	1
Carrier	DU DU		Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	%Yield	Qualifier	Limits							
Ba Carrier	95.7		40 - 110		09/15/16 20:29	10/07/16 07:29	1			

Lab Sample ID: MB 160-270101/1-A
Matrix: Water
Analysis Batch: 273593

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 270101

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.1389		0.0872	0.0881	1.00	0.118	pCi/L	09/15/16 20:29	10/07/16 07:29	1
Carrier	MB MB		Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	%Yield	Qualifier	Limits							
Ba Carrier	75.8		40 - 110		09/15/16 20:29	10/07/16 07:29	1			

QC Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-270094/1-A
Matrix: Water
Analysis Batch: 273263

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 270094

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.1754	U	0.336	0.336	1.00	0.632	pCi/L	09/15/16 18:07	10/05/16 14:43	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.2		40 - 110					09/15/16 18:07	10/05/16 14:43	1
Y Carrier	86.0		40 - 110					09/15/16 18:07	10/05/16 14:43	1

Lab Sample ID: LCS 160-270094/2-A
Matrix: Water
Analysis Batch: 273263

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 270094

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	19.3	18.38		2.05	1.00	0.650	pCi/L	95	56 - 140
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	82.3		40 - 110						
Y Carrier	89.7		40 - 110						

Lab Sample ID: 400-126934-10 DU
Matrix: Water
Analysis Batch: 273263

Client Sample ID: AW22359 MW-4
Prep Type: Total/NA
Prep Batch: 270094

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.270	U	-0.04529	U	0.268	1.00	0.491	pCi/L	0.51	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	95.7		40 - 110							
Y Carrier	89.7		40 - 110							

Lab Sample ID: MB 160-270105/1-A
Matrix: Water
Analysis Batch: 273101

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 270105

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.06502	U	0.293	0.293	1.00	0.536	pCi/L	09/15/16 21:45	10/04/16 16:33	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.8		40 - 110					09/15/16 21:45	10/04/16 16:33	1
Y Carrier	83.4		40 - 110					09/15/16 21:45	10/04/16 16:33	1

QC Sample Results

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

TestAmerica Job ID: 400-126934-1
 SDG: Barry Ash Pond (4)

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

Lab Sample ID: LCS 160-270105/2-A
Matrix: Water
Analysis Batch: 273101

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 270105

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	14.5	17.50		1.90	1.00	0.473	pCi/L	121	56 - 140
LCS LCS									
Carrier	%Yield	Qualifier	Limits						
Ba Carrier	82.6		40 - 110						
Y Carrier	83.4		40 - 110						

Lab Sample ID: 480-105752-B-1-E MS
Matrix: Water
Analysis Batch: 273103

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 270105

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	0.443	U	14.5	16.88		1.83	1.00	0.485	pCi/L	117	45 - 150
MS MS											
Carrier	%Yield	Qualifier	Limits								
Ba Carrier	87.5		40 - 110								
Y Carrier	83.4		40 - 110								

Lab Sample ID: 480-105752-B-1-G MSD
Matrix: Water
Analysis Batch: 273103

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 270105

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	0.443	U	14.5	14.23		1.63	1.00	0.531	pCi/L	98	45 - 150	0.77	1
MSD MSD													
Carrier	%Yield	Qualifier	Limits										
Ba Carrier	80.6		40 - 110										
Y Carrier	77.0		40 - 110										


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

Lab Sample ID: 400-126934-10 DU
Matrix: Water
Analysis Batch: 273695

Client Sample ID: AW22359 MW-4
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	0.585		0.2711	U	0.313	5.00	0.491	pCi/L	0.45	

Chain of Custody Record

Client Information		Sampler: Jason Rouss / Anthony Goggins		Lab PM: Whitmire, Cheyenne R		Carrier Tracking No(s): 400-56525-24537.1	
Client Contact: Sarah Copeland		Phone:		E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 1 of 2	
Company: Alabama Power General Test Laboratory		Due Date Requested:		Analysis Requested		Job #: 120934	
Address: 744 County Rd 87 GSC #8		TAT Requested (days):		 400-126934 COC		Preservation Codes: A - HCL B - NaOH N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
City: Calera		PO #:		Total Number of Containers:		Special Instructions/Note:	
State, Zip: AL, 35040		WO #:		Perform MS/MSD (Yes or No)		MW-8 MW-5 MW-5 Dup (Sample Duplicate) MW-6 MW-7 MW-9 MW-10 MW-11 EB-1 (Equipment Blank) MW-4 MW-16	
Phone: 205-664-6121(Tel)		Project #:		Field Filtered Sample (Yes or No)		MW-8 MW-5 MW-5 Dup (Sample Duplicate) MW-6 MW-7 MW-9 MW-10 MW-11 EB-1 (Equipment Blank) MW-4 MW-16	
Email: sgcopela@southernco.com		40007143		Preservation Code		MW-8 MW-5 MW-5 Dup (Sample Duplicate) MW-6 MW-7 MW-9 MW-10 MW-11 EB-1 (Equipment Blank) MW-4 MW-16	
CCR		SSOW#:		Matrix (W=water, S=solid, O=wastewater, BT=bioassess, A=Asst)		MW-8 MW-5 MW-5 Dup (Sample Duplicate) MW-6 MW-7 MW-9 MW-10 MW-11 EB-1 (Equipment Blank) MW-4 MW-16	
Site: Barry Ash Pond (4)		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
Sample Identification		Sample Date		Sample Time		Sample Type (C=Comp, G=grab)	
AW22350	8/30/16	1250	Water				
AW22351	8/30/16	1410	Water				
AW22352	8/30/16	1410	Water				
AW22353	8/30/16	1525	Water				
AW22354	8/31/16	1045	Water				
AW22355	8/31/16	1153	Water				
AW22356	8/31/16	1255	Water				
AW22357	8/31/16	1355	Water				
AW22358	8/31/16	1410	Water				
AW22359	8/30/16	1453	Water	Y			
AW22360	8/31/16	1044	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: 09/08/2016; 1050							
Relinquished by:							
Relinquished by:							
Relinquished by:							
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No							
Date/Time: 09/09/16 1530 Company: APC Company: Company Company: Company Date/Time: 09/09/16 1530 Company: TA							



Chain of Custody Record

Client Information		Sampler: Anthony Goggins / Nick Pitts		Lab PM: Whitmire, Cheyenne R		Carrier Tracking No(s): 400-56525-24537.1																																																																																																				
Client Contact: Sarah Copeland		Phone:		E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 2 of 2																																																																																																				
Company: Alabama Power General Test Laboratory		Due Date Requested:		Analysis Requested		Job #: <i>12/10/09</i>																																																																																																				
Address: 744 County Rd 87 GSC #8		TAT Requested (days):		<table border="1" style="width:100%; border-collapse: collapse;"> <tr> <th>Sample Identification</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=Comp, G=grab)</th> <th>Matrix (W=water, S=solid, O=waste/oil, BT=leachate, A=Asst)</th> <th>Field Filtered Sample (Yes or No)</th> <th>Perform MS/MSD (Yes or No)</th> <th>Total Number of Containers</th> <th>Special Instructions/Note:</th> </tr> <tr> <td>AW22361</td> <td>8/31/16</td> <td>1051</td> <td>G</td> <td>Water</td> <td>X</td> <td>X</td> <td>1</td> <td>FB-2 (Field Blank)</td> </tr> <tr> <td>AW22362</td> <td>8/31/16</td> <td>1144</td> <td>G</td> <td>Water</td> <td></td> <td>X</td> <td>1</td> <td>MW-15</td> </tr> <tr> <td>AW22363</td> <td>8/31/16</td> <td>1252</td> <td>G</td> <td>Water</td> <td></td> <td>X</td> <td>1</td> <td>MW-13</td> </tr> <tr> <td>AW22364</td> <td>8/31/16</td> <td>1355</td> <td>G</td> <td>Water</td> <td></td> <td>X</td> <td>1</td> <td>MW-12</td> </tr> <tr> <td>AW22365</td> <td>8/30/16</td> <td>1523</td> <td>G</td> <td>Water</td> <td></td> <td>X</td> <td>1</td> <td>MW-14</td> </tr> <tr> <td>AW22366</td> <td>8/30/16</td> <td>1540</td> <td>G</td> <td>Water</td> <td></td> <td>X</td> <td>1</td> <td>FB-1 (Field Blank)</td> </tr> <tr> <td>AW22367</td> <td>8/31/16</td> <td>1230</td> <td>G</td> <td>Water</td> <td></td> <td>X</td> <td>1</td> <td>MW-3</td> </tr> <tr> <td>AW22368</td> <td>8/31/16</td> <td>1230</td> <td>G</td> <td>Water</td> <td></td> <td>X</td> <td>1</td> <td>MW-3 Dup (Sample Duplicate)</td> </tr> <tr> <td>AW22369</td> <td>8/31/16</td> <td>1345</td> <td>G</td> <td>Water</td> <td></td> <td>X</td> <td>1</td> <td>MW-2</td> </tr> <tr> <td>AW22370</td> <td>8/31/16</td> <td>1450</td> <td>G</td> <td>Water</td> <td></td> <td>X</td> <td>1</td> <td>MW-1</td> </tr> </table>		Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=leachate, A=Asst)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of Containers	Special Instructions/Note:	AW22361	8/31/16	1051	G	Water	X	X	1	FB-2 (Field Blank)	AW22362	8/31/16	1144	G	Water		X	1	MW-15	AW22363	8/31/16	1252	G	Water		X	1	MW-13	AW22364	8/31/16	1355	G	Water		X	1	MW-12	AW22365	8/30/16	1523	G	Water		X	1	MW-14	AW22366	8/30/16	1540	G	Water		X	1	FB-1 (Field Blank)	AW22367	8/31/16	1230	G	Water		X	1	MW-3	AW22368	8/31/16	1230	G	Water		X	1	MW-3 Dup (Sample Duplicate)	AW22369	8/31/16	1345	G	Water		X	1	MW-2	AW22370	8/31/16	1450	G	Water		X	1	MW-1	COC No: 400-56525-24537.1	
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)			Matrix (W=water, S=solid, O=waste/oil, BT=leachate, A=Asst)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of Containers	Special Instructions/Note:																																																																																																
AW22361	8/31/16	1051	G			Water	X	X	1	FB-2 (Field Blank)																																																																																																
AW22362	8/31/16	1144	G			Water		X	1	MW-15																																																																																																
AW22363	8/31/16	1252	G			Water		X	1	MW-13																																																																																																
AW22364	8/31/16	1355	G			Water		X	1	MW-12																																																																																																
AW22365	8/30/16	1523	G	Water		X	1	MW-14																																																																																																		
AW22366	8/30/16	1540	G	Water		X	1	FB-1 (Field Blank)																																																																																																		
AW22367	8/31/16	1230	G	Water		X	1	MW-3																																																																																																		
AW22368	8/31/16	1230	G	Water		X	1	MW-3 Dup (Sample Duplicate)																																																																																																		
AW22369	8/31/16	1345	G	Water		X	1	MW-2																																																																																																		
AW22370	8/31/16	1450	G	Water		X	1	MW-1																																																																																																		
City: Callera		PO #:		Preservation Codes:		Other:																																																																																																				
State, Zip: AL, 35040		WO #:		A - HCL		M - Hexane																																																																																																				
Phone: 205-664-6121 (Tel)		Project #:		B - NaOH		N - None																																																																																																				
Email: sgcopela@southernco.com		SSOW #:		C - Zn Acetate		O - AsNaO2																																																																																																				
Project Name: CCR		Site: Barry Ash Pond (4)		D - Nitric Acid		P - Na2O4S																																																																																																				
				E - NaHSO4		Q - Na2SO3																																																																																																				
				F - MeOH		R - Na2SO4																																																																																																				
				G - Amchlor		S - H2SO4																																																																																																				
				H - Ascorbic Acid		T - TSP Dodecahydrate																																																																																																				
				I - Ice		U - Acetone																																																																																																				
				J - DI Water		V - MCAA																																																																																																				
				K - EDTA		W - ph 4-5																																																																																																				
				L - EDA		Z - other (specify)																																																																																																				

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
 Relinquished by: Sarah Copeland
 Relinquished by:
 Relinquished by:
 Custody Seals Intact: Yes No
 Custody Seal No.:
 Date: 09/08/2016; 1050
 Received by: Company APC
 Received by: Company
 Received by: Company
 Date/Time: 07/1/09
 Cooler Temperature(s) °C and Other Remarks: 15.14

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:



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-126934-1
SDG Number: Barry Ash Pond (4)

Login Number: 126934

List Number: 1

Creator: Whitmire, Cheyenne R

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	27.3°C, 25.4°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 <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 Barry

TestAmerica Job ID: 400-126934-1
 SDG: Barry 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	07-31-16 *
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 Barry

TestAmerica Job ID: 400-126934-1
SDG: Barry 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	06-30-16 *
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	08-31-17

* 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



Sample Group : WMWBARAP_1051

Project/Site : Barry Ash Pond
Bucks, AL 36512

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

Barry Ash Pond

WMWBARAP_1051

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>
AW26454	579667	579670	579673	WMWBARAP_1051
AW26455	579667	579670	579673	WMWBARAP_1051
AW26456	579667	579670	579673	WMWBARAP_1051
AW26457	579667	579670	579673	WMWBARAP_1051
AW26458	579667	579670	579673	WMWBARAP_1051
AW26459	579667	579670	579673	WMWBARAP_1051
AW26460	579667	579670	579673	WMWBARAP_1051
AW26461	579668	579671	579674	WMWBARAP_1051
AW26462	579668	579671	579674	WMWBARAP_1051
AW26463	579668	579671	579674	WMWBARAP_1051
AW26464	579668	579671	579674	WMWBARAP_1051
AW26465	579668	579671	579674	WMWBARAP_1051
AW26466	579668	579671	579674	WMWBARAP_1051
AW26467	579668	579671	579674	WMWBARAP_1051
AW26468	579668	579671	579674	WMWBARAP_1051
AW26469	579668	579671	579674	WMWBARAP_1051
AW26470	579668	579671	579674	WMWBARAP_1051
AW26471	580172	580176	580180	WMWBARAP_1051
AW26472	580172	580176	580180	WMWBARAP_1051
AW26473	580172	580176	580180	WMWBARAP_1051
AW26474	580172	580176	580180	WMWBARAP_1051

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. It is noted that the Instrument Performance Check standard analyzed after the initial calibration of 10/27/2016 was utilized as the opening LFB for the analysis sequence in batches 580172, 580176 and 580180.



- All laboratory reagent blanks were less than the method detection limits for the requested anions, with the following exception: the blank for anion sulfate in batch 580180 presented a negative concentration above the RL of 1.0, at -1.606 mg/L. Four batch samples (AW26471 - AW26474, inclusive) 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.
- All laboratory fortified blanks (LFB) were within acceptance criteria for the anions requested, with the following exception: the closing LFB for anion fluoride in batch 580176 recovered below the lower limit of 90% (at 82%). All batch samples for fluoride (AW26471 - AW26474, inclusive) should be considered as quantitatively estimated concentrations with indication of potential low bias on the reported result values.
- 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. All batch samples were analyzed without a dilution. It is noted that results for two batch samples (AW26461 and AW26463) exceeded the calibrated detector range for anion chloride of 25.0 mg/L (at 39.5 and 39.4 mg/L, respectively) and were not re-analyzed at dilution with batch 579668. The reported results for chloride for these two samples should be considered as quantitatively estimated with indeterminate bias direction and magnitude.
 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

Barry Ash Pond

WMWBARAP_1051

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>
AW26454	20161115B	WMWBARAP_1051
AW26455	20161115B	WMWBARAP_1051
AW26456	20161115B	WMWBARAP_1051
AW26457	20161115B	WMWBARAP_1051
AW26458	20161115B	WMWBARAP_1051
AW26459	20161115B	WMWBARAP_1051
AW26460	20161115B	WMWBARAP_1051
AW26461	20161115B	WMWBARAP_1051
AW26462	20161115B	WMWBARAP_1051
AW26463	20161115B	WMWBARAP_1051
AW26464	20161115A	WMWBARAP_1051
AW26465	20161115A	WMWBARAP_1051
AW26466	20161115A	WMWBARAP_1051
AW26467	20161115A	WMWBARAP_1051
AW26468	20161115A	WMWBARAP_1051
AW26469	20161115A	WMWBARAP_1051
AW26470	20161115A	WMWBARAP_1051
AW26471	20161115A	WMWBARAP_1051
AW26472	20161115A	WMWBARAP_1051
AW26473	20161115A	WMWBARAP_1051
AW26474	20161115C	WMWBARAP_1051

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



Metals ICPMS

Barry Ash Pond

WMWBARAP_1051

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>
AW26454	581114	WMWBARAP_1051
AW26455	581114	WMWBARAP_1051
AW26456	581114	WMWBARAP_1051
AW26457	581114	WMWBARAP_1051
AW26458	581114	WMWBARAP_1051
AW26459	581114	WMWBARAP_1051
AW26460	581114	WMWBARAP_1051
AW26461	581114	WMWBARAP_1051
AW26462	581114	WMWBARAP_1051
AW26463	581114	WMWBARAP_1051
AW26464	581115	WMWBARAP_1051
AW26465	581115	WMWBARAP_1051
AW26466	581115	WMWBARAP_1051
AW26467	581115	WMWBARAP_1051
AW26468	581115	WMWBARAP_1051
AW26469	581115	WMWBARAP_1051
AW26470	581115	WMWBARAP_1051
AW26471	581115	WMWBARAP_1051
AW26472	581115	WMWBARAP_1051
AW26473	581115	WMWBARAP_1051
AW26474	581116	WMWBARAP_1051

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. Sample AW26469 is now reported as Not Detected.

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

Barry Ash Pond

WMWBARAP_1051

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>
AW26454	580285	WMWBARAP_1051
AW26455	580285	WMWBARAP_1051
AW26456	580285	WMWBARAP_1051
AW26457	580285	WMWBARAP_1051
AW26458	580285	WMWBARAP_1051
AW26459	580285	WMWBARAP_1051
AW26460	580285	WMWBARAP_1051
AW26461	580285	WMWBARAP_1051
AW26462	580907	WMWBARAP_1051
AW26463	580907	WMWBARAP_1051
AW26464	580907	WMWBARAP_1051
AW26465	580907	WMWBARAP_1051
AW26466	580907	WMWBARAP_1051
AW26467	580907	WMWBARAP_1051
AW26468	580907	WMWBARAP_1051
AW26469	580907	WMWBARAP_1051
AW26470	580907	WMWBARAP_1051
AW26471	580907	WMWBARAP_1051
AW26472	580908	WMWBARAP_1051
AW26473	580908	WMWBARAP_1051
AW26474	580908	WMWBARAP_1051

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 except for the ending CCV after AX26461msd (batch 580285). The standard had run out, so it was refilled and the CCV was run again. The 2nd CCV passed and was reported in LabWorks.
- 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

Barry Ash Pond

WMWBARAP_1051

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>
AW26454	579853	WMWBARAP_1051
AW26455	579853	WMWBARAP_1051
AW26456	579853	WMWBARAP_1051
AW26457	579854	WMWBARAP_1051
AW26458	579854	WMWBARAP_1051
AW26459	579854	WMWBARAP_1051
AW26460	579854	WMWBARAP_1051
AW26461	579853	WMWBARAP_1051
AW26462	579854	WMWBARAP_1051
AW26463	579854	WMWBARAP_1051
AW26464	579854	WMWBARAP_1051
AW26465	579854	WMWBARAP_1051
AW26466	579854	WMWBARAP_1051
AW26467	579854	WMWBARAP_1051
AW26468	579855	WMWBARAP_1051
AW26469	579855	WMWBARAP_1051
AW26470	579855	WMWBARAP_1051
AW26471	579855	WMWBARAP_1051
AW26472	579855	WMWBARAP_1051
AW26473	579855	WMWBARAP_1051
AW26474	579855	WMWBARAP_1051

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. This has been corrected based on filter volume and project limits.

General Quality Control Procedures:

- A blank was analyzed with each batch. All criteria were met.

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



- 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 AW26460, AW26467, and AW26474 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: WMWBARAP
 Sample Date: 18-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AW26454

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
Radiological											
Total Radium, Test America	SGC	12/13/2016	EPA 9315/9320			1				Attached	
Metals, Cyanide, Total Phenols											
* Antimony, Total	TAS	11/9/2016	EPA 200.8			5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/9/2016	EPA 200.8			5	0.0010	0.005		0.0394	mg/L
* Barium, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010		0.140	mg/L
* Beryllium, Total	TAS	11/9/2016	EPA 200.8			5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	11/15/2016	EPA 200.7			1	0.02	0.1		1.40	mg/L
* Calcium, Total	HRG	11/15/2016	EPA 200.7			1	0.1	0.5		33.2	mg/L
* Cadmium, Total	TAS	11/9/2016	EPA 200.8			5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/31/2016	EPA 245.1			1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	11/15/2016	EPA 200.7			1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/9/2016	EPA 200.8			5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/9/2016	EPA 200.8			5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics											
* Solids, Dissolved	DLJ	10/26/2016	SM 2540C			1		25		295	mg/L
* Chloride, Total	SES	10/22/2016	EPA 300.0			1	0.04	0.25		20.2	mg/L
* Fluoride, Total	SES	10/22/2016	EPA 300.0			1	0.01	0.3	J	0.042	mg/L
* Sulfate, Total	SES	10/22/2016	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: 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: WMWBARAP
 Sample Date: 18-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AW26454

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW26463 Beryllium, Total	mg/L	0.0000229	0.00132	0.10	0.108	0.113	0.112	0.085 to 0.115		108	70 to 130	3.97	20
AW26463 Cadmium, Total	mg/L	0.00000498	0.00044	0.10	0.0940	0.0918	0.0920	0.085 to 0.115		94.0	70 to 130	2.41	20
AW26463 Calcium, Total	mg/L	-0.111	0.22	5.00	16.6	16.6	4.83	4.25 to 5.75		95.9	70 to 130	0.00	20
AW26463 Chromium, Total	mg/L	0.00000800	0.0044	0.10	0.105	0.106	0.105	0.085 to 0.115		98.1	70 to 130	0.183	20
AW26463 Cobalt, Total	mg/L	0.00000334	0.0044	0.10	0.0992	0.0990	0.104	0.085 to 0.115		99.2	70 to 130	0.152	20
AW26463 Antimony, Total	mg/L	0.000116	0.00132	0.10	0.0900	0.0902	0.0897	0.085 to 0.115		90.0	70 to 130	0.274	20
AW26463 Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0934	0.0926	0.104	0.085 to 0.115		93.4	70 to 130	0.828	20
AW26463 Arsenic, Total	mg/L	0.0000154	0.0022	0.10	0.111	0.112	0.106	0.085 to 0.115		98.2	70 to 130	0.239	20
AW26463 Barium, Total	mg/L	0.00000872	0.0044	0.10	0.164	0.163	0.0915	0.085 to 0.115		93.0	70 to 130	0.591	20
AW26463 Boron, Total	mg/L	0.0112	0.044	1.00	0.996	1.01	0.967	0.85 to 1.15		95.4	70 to 130	1.40	20
AW26463 Molybdenum, Total	mg/L	0.0000356	0.0044	0.10	0.100	0.100	0.0980	0.085 to 0.115		100	70 to 130	0.258	20
AW26463 Lead, Total	mg/L	0.00000892	0.0022	0.10	0.0959	0.0947	0.101	0.085 to 0.115		95.9	70 to 130	1.27	20
AW26463 Lithium, Total	mg/L	-0.00000135	0.022	0.20	0.206	0.209	0.203	0.17 to 0.23		103	70 to 130	1.45	20
AW26461 Mercury, Total by CVAA	mg/L	0.0000744	0.0005	0.004	0.00370	0.00375	0.00368	0.0034 to 0.0046		92.5	70 to 130	1.33	20
AW26463 Thallium, Total	mg/L	0.00000904	0.00044	0.10	0.0944	0.0929	0.0985	0.085 to 0.115		94.4	70 to 130	1.50	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: WMWBARAP
 Sample Date: 18-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AW26454

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
			Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW26460	Sulfate, Total	mg/L	-0.051	1.0	20.00	20.1	0.000	20.3	18 to 22	100	80 to 120	0	20
AW26455	Solids, Dissolved	mg/L	1.00	25			240	45.0	40 to 60			0.418	5
AW26460	Fluoride, Total	mg/L	0.000	0.3	2.00	2.03	0.000	2.08	1.8 to 2.2	102	80 to 120	0	20
AW26460	Chloride, Total	mg/L	0.000	0.25	10.00	9.92	0.000	9.86	9 to 11	99.2	80 to 120	0	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: WMWBARAP
 Sample Date: 18-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AW26455

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
Radiological											
Total Radium, Test America	SGC	12/13/2016	EPA 9315/9320			1				Attached	
Metals, Cyanide, Total Phenols											
* Antimony, Total	TAS	11/9/2016	EPA 200.8			5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/9/2016	EPA 200.8			5	0.0010	0.005		0.0296	mg/L
* Barium, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010		0.125	mg/L
* Beryllium, Total	TAS	11/9/2016	EPA 200.8			5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	11/15/2016	EPA 200.7			1	0.02	0.1	J	0.0699	mg/L
* Calcium, Total	HRG	11/15/2016	EPA 200.7			1	0.1	0.5		13.3	mg/L
* Cadmium, Total	TAS	11/9/2016	EPA 200.8			5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/31/2016	EPA 245.1			1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	11/15/2016	EPA 200.7			1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/9/2016	EPA 200.8			5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/9/2016	EPA 200.8			5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics											
* Solids, Dissolved	DLJ	10/26/2016	SM 2540C			1		25		238	mg/L
* Chloride, Total	SES	10/22/2016	EPA 300.0			1	0.04	0.25		18.2	mg/L
* Fluoride, Total	SES	10/22/2016	EPA 300.0			1	0.01	0.3	J	0.049	mg/L
* Sulfate, Total	SES	10/22/2016	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: WMWBARAP
 Sample Date: 18-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AW26455

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW26461 Mercury, Total by CVAA	mg/L	0.0000744	0.0005	0.004	0.00370	0.00375	0.00368	0.0034 to 0.0046	92.5	70 to 130	1.33	20	
AW26463 Thallium, Total	mg/L	0.00000904	0.00044	0.10	0.0944	0.0929	0.0985	0.085 to 0.115	94.4	70 to 130	1.50	20	
AW26463 Antimony, Total	mg/L	0.000116	0.00132	0.10	0.0900	0.0902	0.0897	0.085 to 0.115	90.0	70 to 130	0.274	20	
AW26463 Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0934	0.0926	0.104	0.085 to 0.115	93.4	70 to 130	0.828	20	
AW26463 Calcium, Total	mg/L	-0.111	0.22	5.00	16.6	16.6	4.83	4.25 to 5.75	95.9	70 to 130	0.00	20	
AW26463 Chromium, Total	mg/L	0.00000800	0.0044	0.10	0.105	0.106	0.105	0.085 to 0.115	98.1	70 to 130	0.183	20	
AW26463 Cobalt, Total	mg/L	0.00000334	0.0044	0.10	0.0992	0.0990	0.104	0.085 to 0.115	99.2	70 to 130	0.152	20	
AW26463 Beryllium, Total	mg/L	0.0000229	0.00132	0.10	0.108	0.113	0.112	0.085 to 0.115	108	70 to 130	3.97	20	
AW26463 Cadmium, Total	mg/L	0.00000498	0.00044	0.10	0.0940	0.0918	0.0920	0.085 to 0.115	94.0	70 to 130	2.41	20	
AW26463 Lead, Total	mg/L	0.00000892	0.0022	0.10	0.0959	0.0947	0.101	0.085 to 0.115	95.9	70 to 130	1.27	20	
AW26463 Lithium, Total	mg/L	-0.00000135	0.022	0.20	0.206	0.209	0.203	0.17 to 0.23	103	70 to 130	1.45	20	
AW26463 Arsenic, Total	mg/L	0.0000154	0.0022	0.10	0.111	0.112	0.106	0.085 to 0.115	98.2	70 to 130	0.239	20	
AW26463 Barium, Total	mg/L	0.00000872	0.0044	0.10	0.164	0.163	0.0915	0.085 to 0.115	93.0	70 to 130	0.591	20	
AW26463 Boron, Total	mg/L	0.0112	0.044	1.00	0.996	1.01	0.967	0.85 to 1.15	95.4	70 to 130	1.40	20	
AW26463 Molybdenum, Total	mg/L	0.0000356	0.0044	0.10	0.100	0.100	0.0980	0.085 to 0.115	100	70 to 130	0.258	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: WMWBARAP
 Sample Date: 18-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AW26455

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW26460	Fluoride, Total	mg/L	0.000	0.3	2.00	2.03	0.000	2.08	1.8 to 2.2	102	80 to 120	0	20
AW26460	Sulfate, Total	mg/L	-0.051	1.0	20.00	20.1	0.000	20.3	18 to 22	100	80 to 120	0	20
AW26455	Solids, Dissolved	mg/L	1.00	25			240	45.0	40 to 60			0.418	5
AW26460	Chloride, Total	mg/L	0.000	0.25	10.00	9.92	0.000	9.86	9 to 11	99.2	80 to 120	0	20

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 Calera, AL 35040
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 FAX (205) 257-1654

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AW26456

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/13/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	0.0240	mg/L
* Beryllium, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	11/15/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	11/15/2016	EPA 200.7		1	0.1	0.5	1.80	mg/L
* Cadmium, Total	TAS	11/9/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/31/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	11/15/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	TAS	11/9/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	10/26/2016	SM 2540C		1		25	37.3	mg/L
* Chloride, Total	SES	10/22/2016	EPA 300.0		1	0.04	0.25	5.55	mg/L
* Fluoride, Total	SES	10/22/2016	EPA 300.0		1	0.01	0.3	J 0.023	mg/L
* Sulfate, Total	SES	10/22/2016	EPA 300.0		1	0.3	1	1.01	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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AW26456

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW26463 Calcium, Total	mg/L	-0.111	0.22	5.00	16.6	16.6	4.83	4.25 to 5.75	95.9	70 to 130	0.00	20	
AW26463 Chromium, Total	mg/L	0.00000800	0.0044	0.10	0.105	0.106	0.105	0.085 to 0.115	98.1	70 to 130	0.183	20	
AW26463 Cobalt, Total	mg/L	0.00000334	0.0044	0.10	0.0992	0.0990	0.104	0.085 to 0.115	99.2	70 to 130	0.152	20	
AW26463 Antimony, Total	mg/L	0.000116	0.00132	0.10	0.0900	0.0902	0.0897	0.085 to 0.115	90.0	70 to 130	0.274	20	
AW26463 Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0934	0.0926	0.104	0.085 to 0.115	93.4	70 to 130	0.828	20	
AW26461 Mercury, Total by CVAA	mg/L	0.0000744	0.0005	0.004	0.00370	0.00375	0.00368	0.0034 to 0.0046	92.5	70 to 130	1.33	20	
AW26463 Thallium, Total	mg/L	0.00000904	0.00044	0.10	0.0944	0.0929	0.0985	0.085 to 0.115	94.4	70 to 130	1.50	20	
AW26463 Lead, Total	mg/L	0.00000892	0.0022	0.10	0.0959	0.0947	0.101	0.085 to 0.115	95.9	70 to 130	1.27	20	
AW26463 Lithium, Total	mg/L	-0.00000135	0.022	0.20	0.206	0.209	0.203	0.17 to 0.23	103	70 to 130	1.45	20	
AW26463 Beryllium, Total	mg/L	0.0000229	0.00132	0.10	0.108	0.113	0.112	0.085 to 0.115	108	70 to 130	3.97	20	
AW26463 Cadmium, Total	mg/L	0.00000498	0.00044	0.10	0.0940	0.0918	0.0920	0.085 to 0.115	94.0	70 to 130	2.41	20	
AW26463 Arsenic, Total	mg/L	0.0000154	0.0022	0.10	0.111	0.112	0.106	0.085 to 0.115	98.2	70 to 130	0.239	20	
AW26463 Barium, Total	mg/L	0.00000872	0.0044	0.10	0.164	0.163	0.0915	0.085 to 0.115	93.0	70 to 130	0.591	20	
AW26463 Boron, Total	mg/L	0.0112	0.044	1.00	0.996	1.01	0.967	0.85 to 1.15	95.4	70 to 130	1.40	20	
AW26463 Molybdenum, Total	mg/L	0.0000356	0.0044	0.10	0.100	0.100	0.0980	0.085 to 0.115	100	70 to 130	0.258	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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AW26456

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW26455	Solids, Dissolved	mg/L	1.00	25				240	45.0	40 to 60			0.418	5
AW26460	Fluoride, Total	mg/L	0.000	0.3	2.00	2.03		0.000	2.08	1.8 to 2.2	102	80 to 120	0	20
AW26460	Sulfate, Total	mg/L	-0.051	1.0	20.00	20.1		0.000	20.3	18 to 22	100	80 to 120	0	20
AW26460	Chloride, Total	mg/L	0.000	0.25	10.00	9.92		0.000	9.86	9 to 11	99.2	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

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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

Certificate Of Analysis  **Alabama Power**

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-6 Dup

Laboratory ID Number: AW26457

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/13/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	0.0238	mg/L
* Beryllium, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	11/15/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	11/15/2016	EPA 200.7		1	0.1	0.5	1.79	mg/L
* Cadmium, Total	TAS	11/9/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/31/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	11/15/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	TAS	11/9/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	10/26/2016	SM 2540C		1		25	40.0	mg/L
* Chloride, Total	SES	10/22/2016	EPA 300.0		1	0.04	0.25	5.55	mg/L
* Fluoride, Total	SES	10/22/2016	EPA 300.0		1	0.01	0.3	J 0.023	mg/L
* Sulfate, Total	SES	10/22/2016	EPA 300.0		1	0.3	1	1.06	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.
 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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-6 Dup

Laboratory ID Number: AW26457

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW26463 Arsenic, Total	mg/L	0.0000154	0.0022	0.10	0.111	0.112	0.106	0.085 to 0.115	98.2	70 to 130	0.239	20	
AW26463 Barium, Total	mg/L	0.00000872	0.0044	0.10	0.164	0.163	0.0915	0.085 to 0.115	93.0	70 to 130	0.591	20	
AW26463 Boron, Total	mg/L	0.0112	0.044	1.00	0.996	1.01	0.967	0.85 to 1.15	95.4	70 to 130	1.40	20	
AW26463 Molybdenum, Total	mg/L	0.0000356	0.0044	0.10	0.100	0.100	0.0980	0.085 to 0.115	100	70 to 130	0.258	20	
AW26461 Mercury, Total by CVAA	mg/L	0.0000744	0.0005	0.004	0.00370	0.00375	0.00368	0.0034 to 0.0046	92.5	70 to 130	1.33	20	
AW26463 Thallium, Total	mg/L	0.00000904	0.00044	0.10	0.0944	0.0929	0.0985	0.085 to 0.115	94.4	70 to 130	1.50	20	
AW26463 Beryllium, Total	mg/L	0.0000229	0.00132	0.10	0.108	0.113	0.112	0.085 to 0.115	108	70 to 130	3.97	20	
AW26463 Cadmium, Total	mg/L	0.00000498	0.00044	0.10	0.0940	0.0918	0.0920	0.085 to 0.115	94.0	70 to 130	2.41	20	
AW26463 Calcium, Total	mg/L	-0.111	0.22	5.00	16.6	16.6	4.83	4.25 to 5.75	95.9	70 to 130	0.00	20	
AW26463 Chromium, Total	mg/L	0.00000800	0.0044	0.10	0.105	0.106	0.105	0.085 to 0.115	98.1	70 to 130	0.183	20	
AW26463 Cobalt, Total	mg/L	0.00000334	0.0044	0.10	0.0992	0.0990	0.104	0.085 to 0.115	99.2	70 to 130	0.152	20	
AW26463 Antimony, Total	mg/L	0.000116	0.00132	0.10	0.0900	0.0902	0.0897	0.085 to 0.115	90.0	70 to 130	0.274	20	
AW26463 Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0934	0.0926	0.104	0.085 to 0.115	93.4	70 to 130	0.828	20	
AW26463 Lead, Total	mg/L	0.00000892	0.0022	0.10	0.0959	0.0947	0.101	0.085 to 0.115	95.9	70 to 130	1.27	20	
AW26463 Lithium, Total	mg/L	-0.00000135	0.022	0.20	0.206	0.209	0.203	0.17 to 0.23	103	70 to 130	1.45	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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-6 Dup

Laboratory ID Number: AW26457

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW26460	Fluoride, Total	mg/L	0.000	0.3	2.00	2.03	0.000	2.08	1.8 to 2.2	102	80 to 120	0	20
AW26460	Sulfate, Total	mg/L	-0.051	1.0	20.00	20.1	0.000	20.3	18 to 22	100	80 to 120	0	20
AW26466	Solids, Dissolved	mg/L	1.00	25			373	45.0	40 to 60			1.06	5
AW26460	Chloride, Total	mg/L	0.000	0.25	10.00	9.92	0.000	9.86	9 to 11	99.2	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: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected.
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CC:

Reported: 8/1/2017
 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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AW26458

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
Radiological											
Total Radium, Test America	SGC	12/13/2016	EPA 9315/9320			1				Attached	
Metals, Cyanide, Total Phenols											
* Antimony, Total	TAS	11/9/2016	EPA 200.8			5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/9/2016	EPA 200.8			5	0.0010	0.005		0.0244	mg/L
* Barium, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010		0.0618	mg/L
* Beryllium, Total	TAS	11/9/2016	EPA 200.8			5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	11/15/2016	EPA 200.7			1	0.02	0.1	J	0.0386	mg/L
* Calcium, Total	HRG	11/15/2016	EPA 200.7			1	0.1	0.5		8.59	mg/L
* Cadmium, Total	TAS	11/9/2016	EPA 200.8			5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010		0.0189	mg/L
* Chromium, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/31/2016	EPA 245.1			1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	11/15/2016	EPA 200.7			1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/9/2016	EPA 200.8			5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/9/2016	EPA 200.8			5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics											
* Solids, Dissolved	DLJ	10/26/2016	SM 2540C			1		25		134	mg/L
* Chloride, Total	SES	10/22/2016	EPA 300.0			1	0.04	0.25		10.8	mg/L
* Fluoride, Total	SES	10/22/2016	EPA 300.0			1	0.01	0.3	J	0.075	mg/L
* Sulfate, Total	SES	10/22/2016	EPA 300.0			1	0.3	1	J	0.366	mg/L

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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



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AW26458

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW26463 Beryllium, Total	mg/L	0.0000229	0.00132	0.10	0.108	0.113	0.112	0.085 to 0.115	108	70 to 130	3.97	20	
AW26463 Cadmium, Total	mg/L	0.00000498	0.00044	0.10	0.0940	0.0918	0.0920	0.085 to 0.115	94.0	70 to 130	2.41	20	
AW26463 Lead, Total	mg/L	0.00000892	0.0022	0.10	0.0959	0.0947	0.101	0.085 to 0.115	95.9	70 to 130	1.27	20	
AW26463 Lithium, Total	mg/L	-0.00000135	0.022	0.20	0.206	0.209	0.203	0.17 to 0.23	103	70 to 130	1.45	20	
AW26463 Arsenic, Total	mg/L	0.0000154	0.0022	0.10	0.111	0.112	0.106	0.085 to 0.115	98.2	70 to 130	0.239	20	
AW26463 Barium, Total	mg/L	0.00000872	0.0044	0.10	0.164	0.163	0.0915	0.085 to 0.115	93.0	70 to 130	0.591	20	
AW26463 Boron, Total	mg/L	0.0112	0.044	1.00	0.996	1.01	0.967	0.85 to 1.15	95.4	70 to 130	1.40	20	
AW26463 Molybdenum, Total	mg/L	0.0000356	0.0044	0.10	0.100	0.100	0.0980	0.085 to 0.115	100	70 to 130	0.258	20	
AW26463 Antimony, Total	mg/L	0.000116	0.00132	0.10	0.0900	0.0902	0.0897	0.085 to 0.115	90.0	70 to 130	0.274	20	
AW26463 Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0934	0.0926	0.104	0.085 to 0.115	93.4	70 to 130	0.828	20	
AW26463 Calcium, Total	mg/L	-0.111	0.22	5.00	16.6	16.6	4.83	4.25 to 5.75	95.9	70 to 130	0.00	20	
AW26463 Chromium, Total	mg/L	0.00000800	0.0044	0.10	0.105	0.106	0.105	0.085 to 0.115	98.1	70 to 130	0.183	20	
AW26463 Cobalt, Total	mg/L	0.00000334	0.0044	0.10	0.0992	0.0990	0.104	0.085 to 0.115	99.2	70 to 130	0.152	20	
AW26461 Mercury, Total by CVAA	mg/L	0.0000744	0.0005	0.004	0.00370	0.00375	0.00368	0.0034 to 0.0046	92.5	70 to 130	1.33	20	
AW26463 Thallium, Total	mg/L	0.00000904	0.00044	0.10	0.0944	0.0929	0.0985	0.085 to 0.115	94.4	70 to 130	1.50	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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AW26458

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW26460	Fluoride, Total	mg/L	0.000	0.3	2.00	2.03	0.000	2.08	1.8 to 2.2	102	80 to 120	0	20
AW26460	Sulfate, Total	mg/L	-0.051	1.0	20.00	20.1	0.000	20.3	18 to 22	100	80 to 120	0	20
AW26466	Solids, Dissolved	mg/L	1.00	25			373	45.0	40 to 60			1.06	5
AW26460	Chloride, Total	mg/L	0.000	0.25	10.00	9.92	0.000	9.86	9 to 11	99.2	80 to 120	0	20

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CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AW26459

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
Radiological											
Total Radium, Test America	SGC	12/13/2016	EPA 9315/9320			1				Attached	
Metals, Cyanide, Total Phenols											
* Antimony, Total	TAS	11/9/2016	EPA 200.8			5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/9/2016	EPA 200.8			5	0.0010	0.005		0.0412	mg/L
* Barium, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010		0.118	mg/L
* Beryllium, Total	TAS	11/9/2016	EPA 200.8			5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	11/15/2016	EPA 200.7			1	0.02	0.1		2.13	mg/L
* Calcium, Total	HRG	11/15/2016	EPA 200.7			1	0.1	0.5		38.7	mg/L
* Cadmium, Total	TAS	11/9/2016	EPA 200.8			5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/31/2016	EPA 245.1			1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	11/15/2016	EPA 200.7			1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/9/2016	EPA 200.8			5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/9/2016	EPA 200.8			5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics											
* Solids, Dissolved	DLJ	10/26/2016	SM 2540C			1		25		333	mg/L
* Chloride, Total	SES	10/22/2016	EPA 300.0			1	0.04	0.25		23.0	mg/L
* Fluoride, Total	SES	10/22/2016	EPA 300.0			1	0.01	0.3	J	0.045	mg/L
* Sulfate, Total	SES	10/22/2016	EPA 300.0			1	0.3	1	U	Not Detected	mg/L

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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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AW26459

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW26463 Antimony, Total	mg/L	0.000116	0.00132	0.10	0.0900	0.0902	0.0897	0.085 to 0.115	90.0	70 to 130	0.274	20	
AW26463 Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0934	0.0926	0.104	0.085 to 0.115	93.4	70 to 130	0.828	20	
AW26463 Calcium, Total	mg/L	-0.111	0.22	5.00	16.6	16.6	4.83	4.25 to 5.75	95.9	70 to 130	0.00	20	
AW26463 Chromium, Total	mg/L	0.00000800	0.0044	0.10	0.105	0.106	0.105	0.085 to 0.115	98.1	70 to 130	0.183	20	
AW26463 Cobalt, Total	mg/L	0.00000334	0.0044	0.10	0.0992	0.0990	0.104	0.085 to 0.115	99.2	70 to 130	0.152	20	
AW26463 Arsenic, Total	mg/L	0.0000154	0.0022	0.10	0.111	0.112	0.106	0.085 to 0.115	98.2	70 to 130	0.239	20	
AW26463 Barium, Total	mg/L	0.00000872	0.0044	0.10	0.164	0.163	0.0915	0.085 to 0.115	93.0	70 to 130	0.591	20	
AW26463 Boron, Total	mg/L	0.0112	0.044	1.00	0.996	1.01	0.967	0.85 to 1.15	95.4	70 to 130	1.40	20	
AW26463 Molybdenum, Total	mg/L	0.0000356	0.0044	0.10	0.100	0.100	0.0980	0.085 to 0.115	100	70 to 130	0.258	20	
AW26463 Beryllium, Total	mg/L	0.0000229	0.00132	0.10	0.108	0.113	0.112	0.085 to 0.115	108	70 to 130	3.97	20	
AW26463 Cadmium, Total	mg/L	0.00000498	0.00044	0.10	0.0940	0.0918	0.0920	0.085 to 0.115	94.0	70 to 130	2.41	20	
AW26463 Lead, Total	mg/L	0.00000892	0.0022	0.10	0.0959	0.0947	0.101	0.085 to 0.115	95.9	70 to 130	1.27	20	
AW26463 Lithium, Total	mg/L	-0.00000135	0.022	0.20	0.206	0.209	0.203	0.17 to 0.23	103	70 to 130	1.45	20	
AW26461 Mercury, Total by CVAA	mg/L	0.0000744	0.0005	0.004	0.00370	0.00375	0.00368	0.0034 to 0.0046	92.5	70 to 130	1.33	20	
AW26463 Thallium, Total	mg/L	0.00000904	0.00044	0.10	0.0944	0.0929	0.0985	0.085 to 0.115	94.4	70 to 130	1.50	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 3/20/17

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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AW26459

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW26460	Sulfate, Total	mg/L	-0.051	1.0	20.00	20.1	0.000	20.3	18 to 22	100	80 to 120	0	20
AW26460	Fluoride, Total	mg/L	0.000	0.3	2.00	2.03	0.000	2.08	1.8 to 2.2	102	80 to 120	0	20
AW26466	Solids, Dissolved	mg/L	1.00	25			373	45.0	40 to 60			1.06	5
AW26460	Chloride, Total	mg/L	0.000	0.25	10.00	9.92	0.000	9.86	9 to 11	99.2	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: 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

CC:

Reported: 8/1/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAPEB
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AW26460

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/13/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Beryllium, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	11/15/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	11/15/2016	EPA 200.7		1	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	TAS	11/9/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/31/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	11/15/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	TAS	11/9/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	10/26/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	10/22/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	10/22/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	10/22/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Laboratory certification ID: E571114

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAPEB
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AW26460

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW26463 Beryllium, Total	mg/L	0.0000229	0.00132	0.10	0.108	0.113	0.112	0.085 to 0.115	108	70 to 130	3.97	20	
AW26463 Cadmium, Total	mg/L	0.00000498	0.00044	0.10	0.0940	0.0918	0.0920	0.085 to 0.115	94.0	70 to 130	2.41	20	
AW26461 Mercury, Total by CVAA	mg/L	0.0000744	0.0005	0.004	0.00370	0.00375	0.00368	0.0034 to 0.0046	92.5	70 to 130	1.33	20	
AW26463 Thallium, Total	mg/L	0.00000904	0.00044	0.10	0.0944	0.0929	0.0985	0.085 to 0.115	94.4	70 to 130	1.50	20	
AW26463 Calcium, Total	mg/L	-0.111	0.22	5.00	16.6	16.6	4.83	4.25 to 5.75	95.9	70 to 130	0.00	20	
AW26463 Chromium, Total	mg/L	0.00000800	0.0044	0.10	0.105	0.106	0.105	0.085 to 0.115	98.1	70 to 130	0.183	20	
AW26463 Cobalt, Total	mg/L	0.00000334	0.0044	0.10	0.0992	0.0990	0.104	0.085 to 0.115	99.2	70 to 130	0.152	20	
AW26463 Arsenic, Total	mg/L	0.0000154	0.0022	0.10	0.111	0.112	0.106	0.085 to 0.115	98.2	70 to 130	0.239	20	
AW26463 Barium, Total	mg/L	0.00000872	0.0044	0.10	0.164	0.163	0.0915	0.085 to 0.115	93.0	70 to 130	0.591	20	
AW26463 Boron, Total	mg/L	0.0112	0.044	1.00	0.996	1.01	0.967	0.85 to 1.15	95.4	70 to 130	1.40	20	
AW26463 Molybdenum, Total	mg/L	0.0000356	0.0044	0.10	0.100	0.100	0.0980	0.085 to 0.115	100	70 to 130	0.258	20	
AW26463 Lead, Total	mg/L	0.00000892	0.0022	0.10	0.0959	0.0947	0.101	0.085 to 0.115	95.9	70 to 130	1.27	20	
AW26463 Lithium, Total	mg/L	-0.00000135	0.022	0.20	0.206	0.209	0.203	0.17 to 0.23	103	70 to 130	1.45	20	
AW26463 Antimony, Total	mg/L	0.000116	0.00132	0.10	0.0900	0.0902	0.0897	0.085 to 0.115	90.0	70 to 130	0.274	20	
AW26463 Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0934	0.0926	0.104	0.085 to 0.115	93.4	70 to 130	0.828	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: WMWBARAPEB
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AW26460

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW26460	Fluoride, Total	mg/L	0.000	0.3	2.00	2.03	0.000	2.08	1.8 to 2.2	102	80 to 120	0	20
AW26466	Solids, Dissolved	mg/L	1.00	25			373	45.0	40 to 60			1.06	5
AW26460	Sulfate, Total	mg/L	-0.051	1.0	20.00	20.1	0.000	20.3	18 to 22	100	80 to 120	0	20
AW26460	Chloride, Total	mg/L	0.000	0.25	10.00	9.92	0.000	9.86	9 to 11	99.2	80 to 120	0	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

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 18-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AW26461

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/13/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	0.0136	mg/L
* Barium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	0.0603	mg/L
* Beryllium, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	11/15/2016	EPA 200.7		1	0.02	0.1	J 0.0597	mg/L
* Calcium, Total	HRG	11/15/2016	EPA 200.7		1	0.1	0.5	11.4	mg/L
* Cadmium, Total	TAS	11/9/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	J 0.00556	mg/L
* Mercury, Total by CVAA	MCW	10/31/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	11/15/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	TAS	11/9/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	10/26/2016	SM 2540C		1		25	310	mg/L
* Chloride, Total	SES	10/22/2016	EPA 300.0		1	0.04	0.25	39.5	mg/L
* Fluoride, Total	SES	10/22/2016	EPA 300.0		1	0.01	0.3	J 0.067	mg/L
* Sulfate, Total	SES	10/22/2016	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: WMWBARAP
 Sample Date: 18-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AW26461

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW26463 Antimony, Total	mg/L	0.000116	0.00132	0.10	0.0900	0.0902	0.0897	0.085 to 0.115	90.0	70 to 130	0.274	20	
AW26463 Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0934	0.0926	0.104	0.085 to 0.115	93.4	70 to 130	0.828	20	
AW26463 Calcium, Total	mg/L	-0.111	0.22	5.00	16.6	16.6	4.83	4.25 to 5.75	95.9	70 to 130	0.00	20	
AW26463 Chromium, Total	mg/L	0.00000800	0.0044	0.10	0.105	0.106	0.105	0.085 to 0.115	98.1	70 to 130	0.183	20	
AW26463 Cobalt, Total	mg/L	0.00000334	0.0044	0.10	0.0992	0.0990	0.104	0.085 to 0.115	99.2	70 to 130	0.152	20	
AW26461 Mercury, Total by CVAA	mg/L	0.0000744	0.0005	0.004	0.00370	0.00375	0.00368	0.0034 to 0.0046	92.5	70 to 130	1.33	20	
AW26463 Thallium, Total	mg/L	0.00000904	0.00044	0.10	0.0944	0.0929	0.0985	0.085 to 0.115	94.4	70 to 130	1.50	20	
AW26463 Lead, Total	mg/L	0.00000892	0.0022	0.10	0.0959	0.0947	0.101	0.085 to 0.115	95.9	70 to 130	1.27	20	
AW26463 Lithium, Total	mg/L	-0.00000135	0.022	0.20	0.206	0.209	0.203	0.17 to 0.23	103	70 to 130	1.45	20	
AW26463 Beryllium, Total	mg/L	0.0000229	0.00132	0.10	0.108	0.113	0.112	0.085 to 0.115	108	70 to 130	3.97	20	
AW26463 Cadmium, Total	mg/L	0.00000498	0.00044	0.10	0.0940	0.0918	0.0920	0.085 to 0.115	94.0	70 to 130	2.41	20	
AW26463 Arsenic, Total	mg/L	0.0000154	0.0022	0.10	0.111	0.112	0.106	0.085 to 0.115	98.2	70 to 130	0.239	20	
AW26463 Barium, Total	mg/L	0.00000872	0.0044	0.10	0.164	0.163	0.0915	0.085 to 0.115	93.0	70 to 130	0.591	20	
AW26463 Boron, Total	mg/L	0.0112	0.044	1.00	0.996	1.01	0.967	0.85 to 1.15	95.4	70 to 130	1.40	20	
AW26463 Molybdenum, Total	mg/L	0.0000356	0.0044	0.10	0.100	0.100	0.0980	0.085 to 0.115	100	70 to 130	0.258	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: WMWBARAP
 Sample Date: 18-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AW26461

Sample	Analysis	Units MB	MB			Sample		LFB	Rec		Prec	
			Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW26470	Sulfate, Total	mg/L -0.052	1.0	20.00	20.4	0.661	20.0	18 to 22	98.3	80 to 120	11.1	20
AW26455	Solids, Dissolved	mg/L 1.00	25			240	45.0	40 to 60			0.418	5
AW26470	Chloride, Total	mg/L 0.000	0.25	10.00	17.6	7.73	9.86	9 to 11	98.7	80 to 120	0.00	20
AW26470	Fluoride, Total	mg/L 0.000	0.3	2.00	1.97	0.024	2.05	1.8 to 2.2	97.4	80 to 120	4.26	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 3/20/17

CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AW26462

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/13/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	0.0178	mg/L
* Barium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	0.0481	mg/L
* Beryllium, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	11/15/2016	EPA 200.7		1	0.02	0.1	J 0.0637	mg/L
* Calcium, Total	HRG	11/15/2016	EPA 200.7		1	0.1	0.5	6.57	mg/L
* Cadmium, Total	TAS	11/9/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	0.0285	mg/L
* Chromium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/7/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	11/15/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	TAS	11/9/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	10/26/2016	SM 2540C		1		25	180	mg/L
* Chloride, Total	SES	10/22/2016	EPA 300.0		1	0.04	0.25	21.3	mg/L
* Fluoride, Total	SES	10/22/2016	EPA 300.0		1	0.01	0.3	J 0.166	mg/L
* Sulfate, Total	SES	10/22/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Laboratory certification ID: E571114

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AW26462

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW26463 Thallium, Total	mg/L	0.00000904	0.00044	0.10	0.0944	0.0929	0.0985	0.085 to 0.115		94.4	70 to 130	1.50	20
AW26471 Mercury, Total by CVAA	mg/L	0.0000461	0.0005	0.004	0.00397	0.00394	0.00390	0.0034 to 0.0046		99.4	70 to 130	0.862	20
AW26463 Beryllium, Total	mg/L	0.0000229	0.00132	0.10	0.108	0.113	0.112	0.085 to 0.115		108	70 to 130	3.97	20
AW26463 Cadmium, Total	mg/L	0.00000498	0.00044	0.10	0.0940	0.0918	0.0920	0.085 to 0.115		94.0	70 to 130	2.41	20
AW26463 Calcium, Total	mg/L	-0.111	0.22	5.00	16.6	16.6	4.83	4.25 to 5.75		95.9	70 to 130	0.00	20
AW26463 Chromium, Total	mg/L	0.00000800	0.0044	0.10	0.105	0.106	0.105	0.085 to 0.115		98.1	70 to 130	0.183	20
AW26463 Cobalt, Total	mg/L	0.00000334	0.0044	0.10	0.0992	0.0990	0.104	0.085 to 0.115		99.2	70 to 130	0.152	20
AW26463 Arsenic, Total	mg/L	0.0000154	0.0022	0.10	0.111	0.112	0.106	0.085 to 0.115		98.2	70 to 130	0.239	20
AW26463 Barium, Total	mg/L	0.00000872	0.0044	0.10	0.164	0.163	0.0915	0.085 to 0.115		93.0	70 to 130	0.591	20
AW26463 Boron, Total	mg/L	0.0112	0.044	1.00	0.996	1.01	0.967	0.85 to 1.15		95.4	70 to 130	1.40	20
AW26463 Molybdenum, Total	mg/L	0.0000356	0.0044	0.10	0.100	0.100	0.0980	0.085 to 0.115		100	70 to 130	0.258	20
AW26463 Lead, Total	mg/L	0.00000892	0.0022	0.10	0.0959	0.0947	0.101	0.085 to 0.115		95.9	70 to 130	1.27	20
AW26463 Lithium, Total	mg/L	-0.00000135	0.022	0.20	0.206	0.209	0.203	0.17 to 0.23		103	70 to 130	1.45	20
AW26463 Antimony, Total	mg/L	0.000116	0.00132	0.10	0.0900	0.0902	0.0897	0.085 to 0.115		90.0	70 to 130	0.274	20
AW26463 Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0934	0.0926	0.104	0.085 to 0.115		93.4	70 to 130	0.828	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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AW26462

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW26470	Sulfate, Total	mg/L	-0.052	1.0	20.00	20.4		0.661	20.0	18 to 22	98.3	80 to 120	11.1	20
AW26470	Chloride, Total	mg/L	0.000	0.25	10.00	17.6		7.73	9.86	9 to 11	98.7	80 to 120	0.00	20
AW26466	Solids, Dissolved	mg/L	1.00	25				373	45.0	40 to 60			1.06	5
AW26470	Fluoride, Total	mg/L	0.000	0.3	2.00	1.97		0.024	2.05	1.8 to 2.2	97.4	80 to 120	4.26	20

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CC:

Reported: 8/1/2017
 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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AW26463

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/13/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	0.0131	mg/L
* Barium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	0.0707	mg/L
* Beryllium, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	11/15/2016	EPA 200.7		1	0.02	0.1	J 0.0427	mg/L
* Calcium, Total	HRG	11/15/2016	EPA 200.7		1	0.1	0.5	11.8	mg/L
* Cadmium, Total	TAS	11/9/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	J 0.00732	mg/L
* Mercury, Total by CVAA	MCW	11/7/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	11/15/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	TAS	11/9/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	10/26/2016	SM 2540C		1		25	305	mg/L
* Chloride, Total	SES	10/22/2016	EPA 300.0		1	0.04	0.25	39.4	mg/L
* Fluoride, Total	SES	10/22/2016	EPA 300.0		1	0.01	0.3	J 0.049	mg/L
* Sulfate, Total	SES	10/22/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Laboratory certification ID: E571114

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 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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AW26463

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW26463 Thallium, Total	mg/L	0.00000904	0.00044	0.10	0.0944	0.0929	0.0985	0.085 to 0.115		94.4	70 to 130	1.50	20
AW26471 Mercury, Total by CVAA	mg/L	0.0000461	0.0005	0.004	0.00397	0.00394	0.00390	0.0034 to 0.0046		99.4	70 to 130	0.862	20
AW26463 Calcium, Total	mg/L	-0.111	0.22	5.00	16.6	16.6	4.83	4.25 to 5.75		95.9	70 to 130	0.00	20
AW26463 Chromium, Total	mg/L	0.00000800	0.0044	0.10	0.105	0.106	0.105	0.085 to 0.115		98.1	70 to 130	0.183	20
AW26463 Cobalt, Total	mg/L	0.00000334	0.0044	0.10	0.0992	0.0990	0.104	0.085 to 0.115		99.2	70 to 130	0.152	20
AW26463 Lead, Total	mg/L	0.00000892	0.0022	0.10	0.0959	0.0947	0.101	0.085 to 0.115		95.9	70 to 130	1.27	20
AW26463 Lithium, Total	mg/L	-0.00000135	0.022	0.20	0.206	0.209	0.203	0.17 to 0.23		103	70 to 130	1.45	20
AW26463 Arsenic, Total	mg/L	0.0000154	0.0022	0.10	0.111	0.112	0.106	0.085 to 0.115		98.2	70 to 130	0.239	20
AW26463 Barium, Total	mg/L	0.00000872	0.0044	0.10	0.164	0.163	0.0915	0.085 to 0.115		93.0	70 to 130	0.591	20
AW26463 Boron, Total	mg/L	0.0112	0.044	1.00	0.996	1.01	0.967	0.85 to 1.15		95.4	70 to 130	1.40	20
AW26463 Molybdenum, Total	mg/L	0.0000356	0.0044	0.10	0.100	0.100	0.0980	0.085 to 0.115		100	70 to 130	0.258	20
AW26463 Beryllium, Total	mg/L	0.0000229	0.00132	0.10	0.108	0.113	0.112	0.085 to 0.115		108	70 to 130	3.97	20
AW26463 Cadmium, Total	mg/L	0.00000498	0.00044	0.10	0.0940	0.0918	0.0920	0.085 to 0.115		94.0	70 to 130	2.41	20
AW26463 Antimony, Total	mg/L	0.000116	0.00132	0.10	0.0900	0.0902	0.0897	0.085 to 0.115		90.0	70 to 130	0.274	20
AW26463 Selenium, Total	mg/L	0.0000374	0.0044	0.10	0.0934	0.0926	0.104	0.085 to 0.115		93.4	70 to 130	0.828	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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AW26463

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
			Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW26470	Sulfate, Total	mg/L	-0.052	1.0	20.00	20.4	0.661	20.0	18 to 22	98.3	80 to 120	11.1	20
AW26470	Chloride, Total	mg/L	0.000	0.25	10.00	17.6	7.73	9.86	9 to 11	98.7	80 to 120	0.00	20
AW26466	Solids, Dissolved	mg/L	1.00	25			373	45.0	40 to 60			1.06	5
AW26470	Fluoride, Total	mg/L	0.000	0.3	2.00	1.97	0.024	2.05	1.8 to 2.2	97.4	80 to 120	4.26	20

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CC:

Reported: 8/1/2017
 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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AW26464

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
Radiological											
Total Radium, Test America	SGC	12/13/2016	EPA 9315/9320			1				Attached	
Metals, Cyanide, Total Phenols											
* Antimony, Total	TAS	11/9/2016	EPA 200.8			5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/9/2016	EPA 200.8			5	0.0010	0.005		0.0227	mg/L
* Barium, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010		0.0727	mg/L
* Beryllium, Total	TAS	11/9/2016	EPA 200.8			5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	11/15/2016	EPA 200.7			1	0.02	0.1	J	0.0721	mg/L
* Calcium, Total	HRG	11/15/2016	EPA 200.7			1	0.1	0.5		20.4	mg/L
* Cadmium, Total	TAS	11/9/2016	EPA 200.8			5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010	J	0.00256	mg/L
* Chromium, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010	J	0.00350	mg/L
* Mercury, Total by CVAA	MCW	11/7/2016	EPA 245.1			1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	11/15/2016	EPA 200.7			1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/9/2016	EPA 200.8			5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/9/2016	EPA 200.8			5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/9/2016	EPA 200.8			5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics											
* Solids, Dissolved	DLJ	10/26/2016	SM 2540C			1		25		354	mg/L
* Chloride, Total	SES	10/22/2016	EPA 300.0			1	0.04	0.25		20.8	mg/L
* Fluoride, Total	SES	10/22/2016	EPA 300.0			1	0.01	0.3	J	0.045	mg/L
* Sulfate, Total	SES	10/22/2016	EPA 300.0			1	0.3	1	U	Not Detected	mg/L

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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AW26464

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW26473 Calcium, Total	mg/L	-0.111	0.22	5.00	17.7	17.8	4.76	4.25 to 5.75	96.2	70 to 130	0.563	20	
AW26473 Lithium, Total	mg/L	0.000141	0.022	0.20	0.207	0.210	0.201	0.17 to 0.23	104	70 to 130	1.44	20	
AW26473 Antimony, Total	mg/L	0.0000812	0.00132	0.10	0.0909	0.0908	0.0855	0.085 to 0.115	90.9	70 to 130	0.0710	20	
AW26473 Barium, Total	mg/L	0.00000542	0.0044	0.10	0.170	0.170	0.0964	0.085 to 0.115	93.2	70 to 130	0.315	20	
AW26473 Cadmium, Total	mg/L	0.00000836	0.00044	0.10	0.0955	0.0951	0.0975	0.085 to 0.115	95.5	70 to 130	0.475	20	
AW26473 Thallium, Total	mg/L	0.00000566	0.00044	0.10	0.0958	0.0958	0.102	0.085 to 0.115	95.8	70 to 130	0.0777	20	
AW26473 Beryllium, Total	mg/L	0.00000499	0.00132	0.10	0.114	0.115	0.109	0.085 to 0.115	114	70 to 130	0.732	20	
AW26473 Cobalt, Total	mg/L	0.00000376	0.0044	0.10	0.121	0.120	0.105	0.085 to 0.115	101	70 to 130	0.619	20	
AW26471 Mercury, Total by CVAA	mg/L	0.0000461	0.0005	0.004	0.00397	0.00394	0.00390	0.0034 to 0.0046	99.4	70 to 130	0.862	20	
AW26473 Chromium, Total	mg/L	0.0000129	0.0044	0.10	0.104	0.102	0.106	0.085 to 0.115	104	70 to 130	1.39	20	
AW26473 Lead, Total	mg/L	0.00000815	0.0022	0.10	0.0973	0.0969	0.103	0.085 to 0.115	97.3	70 to 130	0.431	20	
AW26473 Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0931	0.0978	0.100	0.085 to 0.115	93.1	70 to 130	4.94	20	
AW26473 Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.112	0.111	0.103	0.085 to 0.115	101	70 to 130	1.05	20	
AW26473 Boron, Total	mg/L	0.00840	0.044	1.00	2.51	2.52	0.952	0.85 to 1.15	97.6	70 to 130	0.398	20	
AW26473 Molybdenum, Total	mg/L	0.0000300	0.0044	0.10	0.100	0.100	0.0931	0.085 to 0.115	100	70 to 130	0.181	20	

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Alabama Power General Test Laboratory
 744 County Road 87, GSC#8
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 FAX (205) 257-1654

Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AW26464

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW26470	Sulfate, Total	mg/L	-0.052	1.0	20.00	20.4	0.661	20.0	18 to 22	98.3	80 to 120	11.1	20
AW26470	Chloride, Total	mg/L	0.000	0.25	10.00	17.6	7.73	9.86	9 to 11	98.7	80 to 120	0.00	20
AW26466	Solids, Dissolved	mg/L	1.00	25			373	45.0	40 to 60			1.06	5
AW26470	Fluoride, Total	mg/L	0.000	0.3	2.00	1.97	0.024	2.05	1.8 to 2.2	97.4	80 to 120	4.26	20

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CC:

Reported: 8/1/2017
 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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AW26465

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/13/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	0.0149	mg/L
* Barium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	0.0953	mg/L
* Beryllium, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	11/15/2016	EPA 200.7		1	0.02	0.1	J 0.0600	mg/L
* Calcium, Total	HRG	11/15/2016	EPA 200.7		1	0.1	0.5	25.7	mg/L
* Cadmium, Total	TAS	11/9/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	J 0.00213	mg/L
* Mercury, Total by CVAA	MCW	11/7/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	11/15/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	TAS	11/9/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	10/26/2016	SM 2540C		1		25	367	mg/L
* Chloride, Total	SES	10/22/2016	EPA 300.0		1	0.04	0.25	20.3	mg/L
* Fluoride, Total	SES	10/22/2016	EPA 300.0		1	0.01	0.3	J 0.050	mg/L
* Sulfate, Total	SES	10/22/2016	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.
 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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AW26465

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW26473 Lithium, Total	mg/L	0.000141	0.022	0.20	0.207	0.210	0.201	0.17 to 0.23	104	70 to 130	1.44	20	
AW26473 Calcium, Total	mg/L	-0.111	0.22	5.00	17.7	17.8	4.76	4.25 to 5.75	96.2	70 to 130	0.563	20	
AW26473 Beryllium, Total	mg/L	0.00000499	0.00132	0.10	0.114	0.115	0.109	0.085 to 0.115	114	70 to 130	0.732	20	
AW26473 Cobalt, Total	mg/L	0.00000376	0.0044	0.10	0.121	0.120	0.105	0.085 to 0.115	101	70 to 130	0.619	20	
AW26473 Antimony, Total	mg/L	0.0000812	0.00132	0.10	0.0909	0.0908	0.0855	0.085 to 0.115	90.9	70 to 130	0.0710	20	
AW26473 Barium, Total	mg/L	0.00000542	0.0044	0.10	0.170	0.170	0.0964	0.085 to 0.115	93.2	70 to 130	0.315	20	
AW26473 Cadmium, Total	mg/L	0.00000836	0.00044	0.10	0.0955	0.0951	0.0975	0.085 to 0.115	95.5	70 to 130	0.475	20	
AW26473 Thallium, Total	mg/L	0.00000566	0.00044	0.10	0.0958	0.0958	0.102	0.085 to 0.115	95.8	70 to 130	0.0777	20	
AW26471 Mercury, Total by CVAA	mg/L	0.0000461	0.0005	0.004	0.00397	0.00394	0.00390	0.0034 to 0.0046	99.4	70 to 130	0.862	20	
AW26473 Chromium, Total	mg/L	0.0000129	0.0044	0.10	0.104	0.102	0.106	0.085 to 0.115	104	70 to 130	1.39	20	
AW26473 Lead, Total	mg/L	0.00000815	0.0022	0.10	0.0973	0.0969	0.103	0.085 to 0.115	97.3	70 to 130	0.431	20	
AW26473 Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0931	0.0978	0.100	0.085 to 0.115	93.1	70 to 130	4.94	20	
AW26473 Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.112	0.111	0.103	0.085 to 0.115	101	70 to 130	1.05	20	
AW26473 Boron, Total	mg/L	0.00840	0.044	1.00	2.51	2.52	0.952	0.85 to 1.15	97.6	70 to 130	0.398	20	
AW26473 Molybdenum, Total	mg/L	0.0000300	0.0044	0.10	0.100	0.100	0.0931	0.085 to 0.115	100	70 to 130	0.181	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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AW26465

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
			Limit				Duplicate	LFB	Limit	Limit			
AW26470	Sulfate, Total	mg/L	-0.052	1.0	20.00	20.4	0.661	20.0	18 to 22	98.3	80 to 120	11.1	20
AW26470	Chloride, Total	mg/L	0.000	0.25	10.00	17.6	7.73	9.86	9 to 11	98.7	80 to 120	0.00	20
AW26466	Solids, Dissolved	mg/L	1.00	25			373	45.0	40 to 60			1.06	5
AW26470	Fluoride, Total	mg/L	0.000	0.3	2.00	1.97	0.024	2.05	1.8 to 2.2	97.4	80 to 120	4.26	20

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CC:

Reported: 8/1/2017
 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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AW26466

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/13/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	0.0314	mg/L
* Barium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	0.0577	mg/L
* Beryllium, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	11/15/2016	EPA 200.7		1	0.02	0.1	1.77	mg/L
* Calcium, Total	HRG	11/15/2016	EPA 200.7		10	1.0	5.0	52.2	mg/L
* Cadmium, Total	TAS	11/9/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/7/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	11/15/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	TAS	11/9/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	10/26/2016	SM 2540C		1		25	381	mg/L
* Chloride, Total	SES	10/22/2016	EPA 300.0		1	0.04	0.25	18.7	mg/L
* Fluoride, Total	SES	10/22/2016	EPA 300.0		1	0.01	0.3	J 0.030	mg/L
* Sulfate, Total	SES	10/22/2016	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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AW26466

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW26473 Lithium, Total	mg/L	0.000141	0.022	0.20	0.207	0.210	0.201	0.17 to 0.23	104	70 to 130	1.44	20	
AW26473 Calcium, Total	mg/L	-0.111	0.22	5.00	17.7	17.8	4.76	4.25 to 5.75	96.2	70 to 130	0.563	20	
AW26473 Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.112	0.111	0.103	0.085 to 0.115	101	70 to 130	1.05	20	
AW26473 Boron, Total	mg/L	0.00840	0.044	1.00	2.51	2.52	0.952	0.85 to 1.15	97.6	70 to 130	0.398	20	
AW26473 Molybdenum, Total	mg/L	0.0000300	0.0044	0.10	0.100	0.100	0.0931	0.085 to 0.115	100	70 to 130	0.181	20	
AW26473 Antimony, Total	mg/L	0.0000812	0.00132	0.10	0.0909	0.0908	0.0855	0.085 to 0.115	90.9	70 to 130	0.0710	20	
AW26473 Barium, Total	mg/L	0.00000542	0.0044	0.10	0.170	0.170	0.0964	0.085 to 0.115	93.2	70 to 130	0.315	20	
AW26473 Cadmium, Total	mg/L	0.00000836	0.00044	0.10	0.0955	0.0951	0.0975	0.085 to 0.115	95.5	70 to 130	0.475	20	
AW26473 Thallium, Total	mg/L	0.00000566	0.00044	0.10	0.0958	0.0958	0.102	0.085 to 0.115	95.8	70 to 130	0.0777	20	
AW26471 Mercury, Total by CVAA	mg/L	0.0000461	0.0005	0.004	0.00397	0.00394	0.00390	0.0034 to 0.0046	99.4	70 to 130	0.862	20	
AW26473 Chromium, Total	mg/L	0.0000129	0.0044	0.10	0.104	0.102	0.106	0.085 to 0.115	104	70 to 130	1.39	20	
AW26473 Lead, Total	mg/L	0.00000815	0.0022	0.10	0.0973	0.0969	0.103	0.085 to 0.115	97.3	70 to 130	0.431	20	
AW26473 Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0931	0.0978	0.100	0.085 to 0.115	93.1	70 to 130	4.94	20	
AW26473 Beryllium, Total	mg/L	0.00000499	0.00132	0.10	0.114	0.115	0.109	0.085 to 0.115	114	70 to 130	0.732	20	
AW26473 Cobalt, Total	mg/L	0.00000376	0.0044	0.10	0.121	0.120	0.105	0.085 to 0.115	101	70 to 130	0.619	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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AW26466

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW26470	Chloride, Total	mg/L	0.000	0.25	10.00	17.6	7.73	9.86	9 to 11	98.7	80 to 120	0.00	20
AW26470	Sulfate, Total	mg/L	-0.052	1.0	20.00	20.4	0.661	20.0	18 to 22	98.3	80 to 120	11.1	20
AW26466	Solids, Dissolved	mg/L	1.00	25			373	45.0	40 to 60			1.06	5
AW26470	Fluoride, Total	mg/L	0.000	0.3	2.00	1.97	0.024	2.05	1.8 to 2.2	97.4	80 to 120	4.26	20

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAPFB
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW26467

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/13/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Beryllium, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	11/15/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	11/15/2016	EPA 200.7		1	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	TAS	11/9/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/7/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	11/15/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	TAS	11/9/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	10/26/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	10/22/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	10/22/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	10/22/2016	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: WMWBARAPFB
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW26467

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW26473 Lithium, Total	mg/L	0.000141	0.022	0.20	0.207	0.210	0.201	0.17 to 0.23	104	70 to 130	1.44	20	
AW26473 Calcium, Total	mg/L	-0.111	0.22	5.00	17.7	17.8	4.76	4.25 to 5.75	96.2	70 to 130	0.563	20	
AW26473 Antimony, Total	mg/L	0.0000812	0.00132	0.10	0.0909	0.0908	0.0855	0.085 to 0.115	90.9	70 to 130	0.0710	20	
AW26473 Barium, Total	mg/L	0.00000542	0.0044	0.10	0.170	0.170	0.0964	0.085 to 0.115	93.2	70 to 130	0.315	20	
AW26473 Beryllium, Total	mg/L	0.00000499	0.00132	0.10	0.114	0.115	0.109	0.085 to 0.115	114	70 to 130	0.732	20	
AW26473 Cobalt, Total	mg/L	0.00000376	0.0044	0.10	0.121	0.120	0.105	0.085 to 0.115	101	70 to 130	0.619	20	
AW26473 Cadmium, Total	mg/L	0.00000836	0.00044	0.10	0.0955	0.0951	0.0975	0.085 to 0.115	95.5	70 to 130	0.475	20	
AW26473 Thallium, Total	mg/L	0.00000566	0.00044	0.10	0.0958	0.0958	0.102	0.085 to 0.115	95.8	70 to 130	0.0777	20	
AW26471 Mercury, Total by CVAA	mg/L	0.0000461	0.0005	0.004	0.00397	0.00394	0.00390	0.0034 to 0.0046	99.4	70 to 130	0.862	20	
AW26473 Chromium, Total	mg/L	0.0000129	0.0044	0.10	0.104	0.102	0.106	0.085 to 0.115	104	70 to 130	1.39	20	
AW26473 Lead, Total	mg/L	0.00000815	0.0022	0.10	0.0973	0.0969	0.103	0.085 to 0.115	97.3	70 to 130	0.431	20	
AW26473 Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0931	0.0978	0.100	0.085 to 0.115	93.1	70 to 130	4.94	20	
AW26473 Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.112	0.111	0.103	0.085 to 0.115	101	70 to 130	1.05	20	
AW26473 Boron, Total	mg/L	0.00840	0.044	1.00	2.51	2.52	0.952	0.85 to 1.15	97.6	70 to 130	0.398	20	
AW26473 Molybdenum, Total	mg/L	0.0000300	0.0044	0.10	0.100	0.100	0.0931	0.085 to 0.115	100	70 to 130	0.181	20	

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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAPFB
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW26467

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW26470	Sulfate, Total	mg/L	-0.052	1.0	20.00	20.4	0.661	20.0	18 to 22	98.3	80 to 120	11.1	20
AW26470	Chloride, Total	mg/L	0.000	0.25	10.00	17.6	7.73	9.86	9 to 11	98.7	80 to 120	0.00	20
AW26466	Solids, Dissolved	mg/L	1.00	25			373	45.0	40 to 60			1.06	5
AW26470	Fluoride, Total	mg/L	0.000	0.3	2.00	1.97	0.024	2.05	1.8 to 2.2	97.4	80 to 120	4.26	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.
 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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AW26468

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/13/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	0.0443	mg/L
* Beryllium, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	11/15/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	11/15/2016	EPA 200.7		1	0.1	0.5	1.17	mg/L
* Cadmium, Total	TAS	11/9/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	J 0.00469	mg/L
* Chromium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/7/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	11/15/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	TAS	11/9/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	10/26/2016	SM 2540C		1		25	36.0	mg/L
* Chloride, Total	SES	10/22/2016	EPA 300.0		1	0.04	0.25	11.1	mg/L
* Fluoride, Total	SES	10/22/2016	EPA 300.0		1	0.01	0.3	J 0.025	mg/L
* Sulfate, Total	SES	10/22/2016	EPA 300.0		1	0.3	1	5.06	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

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AW26468

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW26473 Lithium, Total	mg/L	0.000141	0.022	0.20	0.207	0.210	0.201	0.17 to 0.23	104	70 to 130	1.44	20	
AW26473 Calcium, Total	mg/L	-0.111	0.22	5.00	17.7	17.8	4.76	4.25 to 5.75	96.2	70 to 130	0.563	20	
AW26473 Antimony, Total	mg/L	0.0000812	0.00132	0.10	0.0909	0.0908	0.0855	0.085 to 0.115	90.9	70 to 130	0.0710	20	
AW26473 Barium, Total	mg/L	0.00000542	0.0044	0.10	0.170	0.170	0.0964	0.085 to 0.115	93.2	70 to 130	0.315	20	
AW26471 Mercury, Total by CVAA	mg/L	0.0000461	0.0005	0.004	0.00397	0.00394	0.00390	0.0034 to 0.0046	99.4	70 to 130	0.862	20	
AW26473 Chromium, Total	mg/L	0.0000129	0.0044	0.10	0.104	0.102	0.106	0.085 to 0.115	104	70 to 130	1.39	20	
AW26473 Lead, Total	mg/L	0.00000815	0.0022	0.10	0.0973	0.0969	0.103	0.085 to 0.115	97.3	70 to 130	0.431	20	
AW26473 Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0931	0.0978	0.100	0.085 to 0.115	93.1	70 to 130	4.94	20	
AW26473 Cadmium, Total	mg/L	0.00000836	0.00044	0.10	0.0955	0.0951	0.0975	0.085 to 0.115	95.5	70 to 130	0.475	20	
AW26473 Thallium, Total	mg/L	0.00000566	0.00044	0.10	0.0958	0.0958	0.102	0.085 to 0.115	95.8	70 to 130	0.0777	20	
AW26473 Beryllium, Total	mg/L	0.00000499	0.00132	0.10	0.114	0.115	0.109	0.085 to 0.115	114	70 to 130	0.732	20	
AW26473 Cobalt, Total	mg/L	0.00000376	0.0044	0.10	0.121	0.120	0.105	0.085 to 0.115	101	70 to 130	0.619	20	
AW26473 Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.112	0.111	0.103	0.085 to 0.115	101	70 to 130	1.05	20	
AW26473 Boron, Total	mg/L	0.00840	0.044	1.00	2.51	2.52	0.952	0.85 to 1.15	97.6	70 to 130	0.398	20	
AW26473 Molybdenum, Total	mg/L	0.0000300	0.0044	0.10	0.100	0.100	0.0931	0.085 to 0.115	100	70 to 130	0.181	20	

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Batch QC Summary



Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AW26468

Sample	Analysis	Units MB	MB			Sample		LFB	Rec		Prec	
			Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW26470	Sulfate, Total	mg/L -0.052	1.0	20.00	20.4	0.661	20.0	18 to 22	98.3	80 to 120	11.1	20
AW26473	Solids, Dissolved	mg/L 1.00	25			271	45.0	40 to 60			1.31	5
AW26470	Fluoride, Total	mg/L 0.000	0.3	2.00	1.97	0.024	2.05	1.8 to 2.2	97.4	80 to 120	4.26	20
AW26470	Chloride, Total	mg/L 0.000	0.25	10.00	17.6	7.73	9.86	9 to 11	98.7	80 to 120	0.00	20

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 Calera, AL 35040
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 FAX (205) 257-1654

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-4 Dup

Laboratory ID Number: AW26469

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/13/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	0.0445	mg/L
* Beryllium, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	11/15/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	11/15/2016	EPA 200.7		1	0.1	0.5	1.17	mg/L
* Cadmium, Total	TAS	11/9/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	J 0.00490	mg/L
* Chromium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/7/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	11/15/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	TAS	11/9/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	10/26/2016	SM 2540C		1		25	38.0	mg/L
* Chloride, Total	SES	10/22/2016	EPA 300.0		1	0.04	0.25	11.1	mg/L
* Fluoride, Total	SES	10/22/2016	EPA 300.0		1	0.01	0.3	J 0.027	mg/L
* Sulfate, Total	SES	10/22/2016	EPA 300.0		1	0.3	1	5.18	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-4 Dup

Laboratory ID Number: AW26469

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW26473 Lithium, Total	mg/L	0.000141	0.022	0.20	0.207	0.210	0.201	0.17 to 0.23	104	70 to 130	1.44	20	
AW26473 Calcium, Total	mg/L	-0.111	0.22	5.00	17.7	17.8	4.76	4.25 to 5.75	96.2	70 to 130	0.563	20	
AW26473 Antimony, Total	mg/L	0.0000812	0.00132	0.10	0.0909	0.0908	0.0855	0.085 to 0.115	90.9	70 to 130	0.0710	20	
AW26473 Barium, Total	mg/L	0.00000542	0.0044	0.10	0.170	0.170	0.0964	0.085 to 0.115	93.2	70 to 130	0.315	20	
AW26473 Beryllium, Total	mg/L	0.00000499	0.00132	0.10	0.114	0.115	0.109	0.085 to 0.115	114	70 to 130	0.732	20	
AW26473 Cobalt, Total	mg/L	0.00000376	0.0044	0.10	0.121	0.120	0.105	0.085 to 0.115	101	70 to 130	0.619	20	
AW26471 Mercury, Total by CVAA	mg/L	0.0000461	0.0005	0.004	0.00397	0.00394	0.00390	0.0034 to 0.0046	99.4	70 to 130	0.862	20	
AW26473 Chromium, Total	mg/L	0.0000129	0.0044	0.10	0.104	0.102	0.106	0.085 to 0.115	104	70 to 130	1.39	20	
AW26473 Lead, Total	mg/L	0.00000815	0.0022	0.10	0.0973	0.0969	0.103	0.085 to 0.115	97.3	70 to 130	0.431	20	
AW26473 Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0931	0.0978	0.100	0.085 to 0.115	93.1	70 to 130	4.94	20	
AW26473 Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.112	0.111	0.103	0.085 to 0.115	101	70 to 130	1.05	20	
AW26473 Boron, Total	mg/L	0.00840	0.044	1.00	2.51	2.52	0.952	0.85 to 1.15	97.6	70 to 130	0.398	20	
AW26473 Molybdenum, Total	mg/L	0.0000300	0.0044	0.10	0.100	0.100	0.0931	0.085 to 0.115	100	70 to 130	0.181	20	
AW26473 Cadmium, Total	mg/L	0.00000836	0.00044	0.10	0.0955	0.0951	0.0975	0.085 to 0.115	95.5	70 to 130	0.475	20	
AW26473 Thallium, Total	mg/L	0.00000566	0.00044	0.10	0.0958	0.0958	0.102	0.085 to 0.115	95.8	70 to 130	0.0777	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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-4 Dup

Laboratory ID Number: AW26469

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec			
			Limit	Limit			Duplicate	LFB	Limit	Limit			
AW26470	Sulfate, Total	mg/L	-0.052	1.0	20.00	20.4	0.661	20.0	18 to 22	98.3	80 to 120	11.1	20
AW26470	Fluoride, Total	mg/L	0.000	0.3	2.00	1.97	0.024	2.05	1.8 to 2.2	97.4	80 to 120	4.26	20
AW26473	Solids, Dissolved	mg/L	1.00	25			271	45.0	40 to 60			1.31	5
AW26470	Chloride, Total	mg/L	0.000	0.25	10.00	17.6	7.73	9.86	9 to 11	98.7	80 to 120	0.00	20

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 Cadmium MDL was increased from 0.0001 to 0.0002. The result for Cd has been correctly changed to Not Detected. SGC 3/20/17

CC:

Reported: 8/1/2017
 Version: 2.0

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AW26470

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/13/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	0.0313	mg/L
* Beryllium, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	11/15/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	11/15/2016	EPA 200.7		1	0.1	0.5	0.906	mg/L
* Cadmium, Total	TAS	11/9/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/7/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	11/15/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	TAS	11/9/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	10/26/2016	SM 2540C		1		25	29.3	mg/L
* Chloride, Total	SES	10/22/2016	EPA 300.0		1	0.04	0.25	7.73	mg/L
* Fluoride, Total	SES	10/22/2016	EPA 300.0		1	0.01	0.3	J 0.023	mg/L
* Sulfate, Total	SES	10/22/2016	EPA 300.0		1	0.3	1	J 0.739	mg/L

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AW26470

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW26473 Calcium, Total	mg/L	-0.111	0.22	5.00	17.7	17.8	4.76	4.25 to 5.75	96.2	70 to 130	0.563	20	
AW26473 Lithium, Total	mg/L	0.000141	0.022	0.20	0.207	0.210	0.201	0.17 to 0.23	104	70 to 130	1.44	20	
AW26473 Antimony, Total	mg/L	0.0000812	0.00132	0.10	0.0909	0.0908	0.0855	0.085 to 0.115	90.9	70 to 130	0.0710	20	
AW26473 Barium, Total	mg/L	0.00000542	0.0044	0.10	0.170	0.170	0.0964	0.085 to 0.115	93.2	70 to 130	0.315	20	
AW26473 Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.112	0.111	0.103	0.085 to 0.115	101	70 to 130	1.05	20	
AW26473 Boron, Total	mg/L	0.00840	0.044	1.00	2.51	2.52	0.952	0.85 to 1.15	97.6	70 to 130	0.398	20	
AW26473 Molybdenum, Total	mg/L	0.0000300	0.0044	0.10	0.100	0.100	0.0931	0.085 to 0.115	100	70 to 130	0.181	20	
AW26473 Cadmium, Total	mg/L	0.00000836	0.00044	0.10	0.0955	0.0951	0.0975	0.085 to 0.115	95.5	70 to 130	0.475	20	
AW26473 Thallium, Total	mg/L	0.00000566	0.00044	0.10	0.0958	0.0958	0.102	0.085 to 0.115	95.8	70 to 130	0.0777	20	
AW26471 Mercury, Total by CVAA	mg/L	0.0000461	0.0005	0.004	0.00397	0.00394	0.00390	0.0034 to 0.0046	99.4	70 to 130	0.862	20	
AW26473 Chromium, Total	mg/L	0.0000129	0.0044	0.10	0.104	0.102	0.106	0.085 to 0.115	104	70 to 130	1.39	20	
AW26473 Lead, Total	mg/L	0.00000815	0.0022	0.10	0.0973	0.0969	0.103	0.085 to 0.115	97.3	70 to 130	0.431	20	
AW26473 Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0931	0.0978	0.100	0.085 to 0.115	93.1	70 to 130	4.94	20	
AW26473 Beryllium, Total	mg/L	0.00000499	0.00132	0.10	0.114	0.115	0.109	0.085 to 0.115	114	70 to 130	0.732	20	
AW26473 Cobalt, Total	mg/L	0.00000376	0.0044	0.10	0.121	0.120	0.105	0.085 to 0.115	101	70 to 130	0.619	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 3/20/17

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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AW26470

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW26470	Fluoride, Total	mg/L	0.000	0.3	2.00	1.97	0.024	2.05	1.8 to 2.2	97.4	80 to 120	4.26	20
AW26473	Solids, Dissolved	mg/L	1.00	25			271	45.0	40 to 60			1.31	5
AW26470	Chloride, Total	mg/L	0.000	0.25	10.00	17.6	7.73	9.86	9 to 11	98.7	80 to 120	0.00	20
AW26470	Sulfate, Total	mg/L	-0.052	1.0	20.00	20.4	0.661	20.0	18 to 22	98.3	80 to 120	11.1	20

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CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AW26471

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/13/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	J 0.00241	mg/L
* Barium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	0.0247	mg/L
* Beryllium, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	11/15/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	11/15/2016	EPA 200.7		1	0.1	0.5	2.91	mg/L
* Cadmium, Total	TAS	11/9/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	J 0.00778	mg/L
* Chromium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/7/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	11/15/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	TAS	11/9/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	10/26/2016	SM 2540C		1		25	37.3	mg/L
* Chloride, Total	SES	10/27/2016	EPA 300.0		1	0.04	0.25	6.85	mg/L
* Fluoride, Total	SES	10/27/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	10/27/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AW26471

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW26473 Lithium, Total	mg/L	0.000141	0.022	0.20	0.207	0.210	0.201	0.17 to 0.23	104	70 to 130	1.44	20	
AW26473 Calcium, Total	mg/L	-0.111	0.22	5.00	17.7	17.8	4.76	4.25 to 5.75	96.2	70 to 130	0.563	20	
AW26473 Cadmium, Total	mg/L	0.00000836	0.00044	0.10	0.0955	0.0951	0.0975	0.085 to 0.115	95.5	70 to 130	0.475	20	
AW26473 Thallium, Total	mg/L	0.00000566	0.00044	0.10	0.0958	0.0958	0.102	0.085 to 0.115	95.8	70 to 130	0.0777	20	
AW26473 Beryllium, Total	mg/L	0.00000499	0.00132	0.10	0.114	0.115	0.109	0.085 to 0.115	114	70 to 130	0.732	20	
AW26473 Cobalt, Total	mg/L	0.00000376	0.0044	0.10	0.121	0.120	0.105	0.085 to 0.115	101	70 to 130	0.619	20	
AW26471 Mercury, Total by CVAA	mg/L	0.0000461	0.0005	0.004	0.00397	0.00394	0.00390	0.0034 to 0.0046	99.4	70 to 130	0.862	20	
AW26473 Chromium, Total	mg/L	0.0000129	0.0044	0.10	0.104	0.102	0.106	0.085 to 0.115	104	70 to 130	1.39	20	
AW26473 Lead, Total	mg/L	0.00000815	0.0022	0.10	0.0973	0.0969	0.103	0.085 to 0.115	97.3	70 to 130	0.431	20	
AW26473 Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0931	0.0978	0.100	0.085 to 0.115	93.1	70 to 130	4.94	20	
AW26473 Antimony, Total	mg/L	0.0000812	0.00132	0.10	0.0909	0.0908	0.0855	0.085 to 0.115	90.9	70 to 130	0.0710	20	
AW26473 Barium, Total	mg/L	0.00000542	0.0044	0.10	0.170	0.170	0.0964	0.085 to 0.115	93.2	70 to 130	0.315	20	
AW26473 Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.112	0.111	0.103	0.085 to 0.115	101	70 to 130	1.05	20	
AW26473 Boron, Total	mg/L	0.00840	0.044	1.00	2.51	2.52	0.952	0.85 to 1.15	97.6	70 to 130	0.398	20	
AW26473 Molybdenum, Total	mg/L	0.0000300	0.0044	0.10	0.100	0.100	0.0931	0.085 to 0.115	100	70 to 130	0.181	20	

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Alabama Power General Test Laboratory
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 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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AW26471

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW26473	Solids, Dissolved	mg/L	1.00	25			271	45.0	40 to 60			1.31	5
AW26917	Sulfate, Total	mg/L	-1.61	1.0	20.00	29.2	10.1	18.2	18 to 22	95.5	80 to 120	0.00	20
AW26917	Chloride, Total	mg/L	0.00	0.25	10.00	12.9	2.96	9.87	9 to 11	99.6	80 to 120	0.678	20
AW26917	Fluoride, Total	mg/L	0.00	0.3	2.00	1.69	0.052		1.8 to 2.2	81.6	80 to 120	10.9	20

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CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AW26472

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/13/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	0.0701	mg/L
* Barium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	0.281	mg/L
* Beryllium, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	11/15/2016	EPA 200.7		1	0.02	0.1	1.59	mg/L
* Calcium, Total	HRG	11/15/2016	EPA 200.7		1	0.1	0.5	35.1	mg/L
* Cadmium, Total	TAS	11/9/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	J 0.00248	mg/L
* Mercury, Total by CVAA	MCW	11/7/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	11/15/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	TAS	11/9/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	10/26/2016	SM 2540C		1		50	444	mg/L
* Chloride, Total	SES	10/27/2016	EPA 300.0		1	0.04	0.25	21.4	mg/L
* Fluoride, Total	SES	10/27/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	10/27/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AW26472

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW26473 Lithium, Total	mg/L	0.000141	0.022	0.20	0.207	0.210	0.201	0.17 to 0.23	104	70 to 130	1.44	20	
AW26473 Calcium, Total	mg/L	-0.111	0.22	5.00	17.7	17.8	4.76	4.25 to 5.75	96.2	70 to 130	0.563	20	
AW26473 Cadmium, Total	mg/L	0.00000836	0.00044	0.10	0.0955	0.0951	0.0975	0.085 to 0.115	95.5	70 to 130	0.475	20	
AW26473 Thallium, Total	mg/L	0.00000566	0.00044	0.10	0.0958	0.0958	0.102	0.085 to 0.115	95.8	70 to 130	0.0777	20	
AW26473 Beryllium, Total	mg/L	0.00000499	0.00132	0.10	0.114	0.115	0.109	0.085 to 0.115	114	70 to 130	0.732	20	
AW26473 Cobalt, Total	mg/L	0.00000376	0.0044	0.10	0.121	0.120	0.105	0.085 to 0.115	101	70 to 130	0.619	20	
AW26918 Mercury, Total by CVAA	mg/L	0.0000459	0.0005	0.004	0.00399	0.00391	0.00392	0.0034 to 0.0046	99.8	70 to 130	2.13	20	
AW26473 Chromium, Total	mg/L	0.0000129	0.0044	0.10	0.104	0.102	0.106	0.085 to 0.115	104	70 to 130	1.39	20	
AW26473 Lead, Total	mg/L	0.00000815	0.0022	0.10	0.0973	0.0969	0.103	0.085 to 0.115	97.3	70 to 130	0.431	20	
AW26473 Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0931	0.0978	0.100	0.085 to 0.115	93.1	70 to 130	4.94	20	
AW26473 Antimony, Total	mg/L	0.0000812	0.00132	0.10	0.0909	0.0908	0.0855	0.085 to 0.115	90.9	70 to 130	0.0710	20	
AW26473 Barium, Total	mg/L	0.00000542	0.0044	0.10	0.170	0.170	0.0964	0.085 to 0.115	93.2	70 to 130	0.315	20	
AW26473 Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.112	0.111	0.103	0.085 to 0.115	101	70 to 130	1.05	20	
AW26473 Boron, Total	mg/L	0.00840	0.044	1.00	2.51	2.52	0.952	0.85 to 1.15	97.6	70 to 130	0.398	20	
AW26473 Molybdenum, Total	mg/L	0.0000300	0.0044	0.10	0.100	0.100	0.0931	0.085 to 0.115	100	70 to 130	0.181	20	

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Alabama Power General Test Laboratory
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To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AW26472

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec		Prec	
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec Limit	Prec	Limit	
AW26917	Fluoride, Total	mg/L	0.00	0.3	2.00	1.69	0.052		1.8 to 2.2	81.6	80 to 120	10.9	20
AW26917	Sulfate, Total	mg/L	-1.61	1.0	20.00	29.2	10.1	18.2	18 to 22	95.5	80 to 120	0.00	20
AW26473	Solids, Dissolved	mg/L	1.00	25			271	45.0	40 to 60			1.31	5
AW26917	Chloride, Total	mg/L	0.00	0.25	10.00	12.9	2.96	9.87	9 to 11	99.6	80 to 120	0.678	20

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CC:

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AW26473

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/13/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	0.0108	mg/L
* Barium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	0.0766	mg/L
* Beryllium, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	11/15/2016	EPA 200.7		1	0.02	0.1	1.53	mg/L
* Calcium, Total	HRG	11/15/2016	EPA 200.7		1	0.1	0.5	12.9	mg/L
* Cadmium, Total	TAS	11/9/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	0.0193	mg/L
* Chromium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/7/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	11/15/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	TAS	11/9/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	10/26/2016	SM 2540C		1		25	264	mg/L
* Chloride, Total	SES	10/27/2016	EPA 300.0		1	0.04	0.25	15.3	mg/L
* Fluoride, Total	SES	10/27/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	10/27/2016	EPA 300.0		1	0.3	1	U Not Detected	mg/L

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Laboratory certification ID: E571114

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Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AW26473

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB	Rec		Prec	Limit
			Limit	Spike					Limit	Rec		
AW26473 Lithium, Total	mg/L	0.000141	0.022	0.20	0.207	0.210	0.201	0.17 to 0.23	104	70 to 130	1.44	20
AW26473 Calcium, Total	mg/L	-0.111	0.22	5.00	17.7	17.8	4.76	4.25 to 5.75	96.2	70 to 130	0.563	20
AW26473 Cadmium, Total	mg/L	0.00000836	0.00044	0.10	0.0955	0.0951	0.0975	0.085 to 0.115	95.5	70 to 130	0.475	20
AW26473 Thallium, Total	mg/L	0.00000566	0.00044	0.10	0.0958	0.0958	0.102	0.085 to 0.115	95.8	70 to 130	0.0777	20
AW26473 Antimony, Total	mg/L	0.0000812	0.00132	0.10	0.0909	0.0908	0.0855	0.085 to 0.115	90.9	70 to 130	0.0710	20
AW26473 Barium, Total	mg/L	0.00000542	0.0044	0.10	0.170	0.170	0.0964	0.085 to 0.115	93.2	70 to 130	0.315	20
AW26473 Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.112	0.111	0.103	0.085 to 0.115	101	70 to 130	1.05	20
AW26473 Boron, Total	mg/L	0.00840	0.044	1.00	2.51	2.52	0.952	0.85 to 1.15	97.6	70 to 130	0.398	20
AW26473 Molybdenum, Total	mg/L	0.0000300	0.0044	0.10	0.100	0.100	0.0931	0.085 to 0.115	100	70 to 130	0.181	20
AW26473 Beryllium, Total	mg/L	0.00000499	0.00132	0.10	0.114	0.115	0.109	0.085 to 0.115	114	70 to 130	0.732	20
AW26473 Cobalt, Total	mg/L	0.00000376	0.0044	0.10	0.121	0.120	0.105	0.085 to 0.115	101	70 to 130	0.619	20
AW26918 Mercury, Total by CVAA	mg/L	0.0000459	0.0005	0.004	0.00399	0.00391	0.00392	0.0034 to 0.0046	99.8	70 to 130	2.13	20
AW26473 Chromium, Total	mg/L	0.0000129	0.0044	0.10	0.104	0.102	0.106	0.085 to 0.115	104	70 to 130	1.39	20
AW26473 Lead, Total	mg/L	0.00000815	0.0022	0.10	0.0973	0.0969	0.103	0.085 to 0.115	97.3	70 to 130	0.431	20
AW26473 Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0931	0.0978	0.100	0.085 to 0.115	93.1	70 to 130	4.94	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.
 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: WMWBARAP
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AW26473

Sample	Analysis	Units	MB	MB			Sample		LFB	Rec			Prec
				Limit	Spike	LFM	Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW26917	Chloride, Total	mg/L	0.00	0.25	10.00	12.9	2.96	9.87	9 to 11	99.6	80 to 120	0.678	20
AW26917	Sulfate, Total	mg/L	-1.61	1.0	20.00	29.2	10.1	18.2	18 to 22	95.5	80 to 120	0.00	20
AW26917	Fluoride, Total	mg/L	0.00	0.3	2.00	1.69	0.052		1.8 to 2.2	81.6	80 to 120	10.9	20
AW26473	Solids, Dissolved	mg/L	1.00	25			271	45.0	40 to 60			1.31	5

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CC:

Reported: 8/1/2017
 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: WMWBARAPFB
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW26474

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	12/13/2016	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Arsenic, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Beryllium, Total	TAS	11/9/2016	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	11/15/2016	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	11/15/2016	EPA 200.7		1	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	TAS	11/9/2016	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/7/2016	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	11/15/2016	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	TAS	11/9/2016	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	TAS	11/9/2016	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	TAS	11/9/2016	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	DLJ	10/26/2016	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total	SES	10/27/2016	EPA 300.0		1	0.04	0.25	U Not Detected	mg/L
* Fluoride, Total	SES	10/27/2016	EPA 300.0		1	0.01	0.3	U Not Detected	mg/L
* Sulfate, Total	SES	10/27/2016	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 3/20/17

Corrected Copy



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAPFB
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW26474

Sample Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AW26957 Barium, Total	mg/L	0.00000542	0.0044	0.10	0.791	0.804	0.0964	0.085 to 0.115	80.4	70 to 130	1.62	20	
AW26957 Calcium, Total	mg/L	-0.0631	0.22	5.00	55.3	55.5	4.83	4.25 to 5.75	116	70 to 130	0.361	20	
AW26957 Lead, Total	mg/L	0.00000815	0.0022	0.10	0.0957	0.0970	0.103	0.085 to 0.115	95.7	70 to 130	1.33	20	
AW26957 Arsenic, Total	mg/L	0.0000160	0.0022	0.10	0.168	0.169	0.103	0.085 to 0.115	98.1	70 to 130	0.626	20	
AW26957 Boron, Total	mg/L	-0.0000619	0.044	1.00	2.04	2.05	0.952	0.85 to 1.15	95.9	70 to 130	0.489	20	
AW26957 Cadmium, Total	mg/L	0.00000836	0.00044	0.10	0.0964	0.0960	0.0975	0.085 to 0.115	96.4	70 to 130	0.409	20	
AW26957 Antimony, Total	mg/L	0.0000812	0.00132	0.10	0.0913	0.0920	0.0855	0.085 to 0.115	91.3	70 to 130	0.843	20	
AW26957 Beryllium, Total	mg/L	0.00000499	0.00132	0.10	0.109	0.111	0.109	0.085 to 0.115	109	70 to 130	1.82	20	
AW26918 Mercury, Total by CVAA	mg/L	0.0000459	0.0005	0.004	0.00399	0.00391	0.00392	0.0034 to 0.0046	99.8	70 to 130	2.13	20	
AW26957 Lithium, Total	mg/L	0.00000224	0.022	0.20	0.451	0.452	0.200	0.17 to 0.23	104	70 to 130	0.221	20	
AW26957 Selenium, Total	mg/L	0.0000284	0.0044	0.10	0.0566	0.0565	0.100	0.085 to 0.115	56.6	70 to 130	0.177	20	
AW26957 Thallium, Total	mg/L	0.00000566	0.00044	0.10	0.0946	0.0962	0.102	0.085 to 0.115	94.6	70 to 130	1.70	20	
AW26957 Chromium, Total	mg/L	0.0000129	0.0044	0.10	0.0974	0.0986	0.106	0.085 to 0.115	97.4	70 to 130	1.17	20	
AW26957 Cobalt, Total	mg/L	0.00000376	0.0044	0.10	0.0985	0.0994	0.105	0.085 to 0.115	98.5	70 to 130	0.886	20	
AW26957 Molybdenum, Total	mg/L	0.0000300	0.0044	0.10	0.105	0.107	0.0931	0.085 to 0.115	100	70 to 130	1.70	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: WMWBARAPFB
 Sample Date: 19-Oct-16
 Customer ID:
 Delivery Date: 20-Oct-16

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AW26474

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	LFB	Rec	Prec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AW26917	Sulfate, Total	mg/L	-1.61	1.0	20.00	29.2	10.1	18.2	18 to 22	95.5	80 to 120	0.00	20
AW26917	Fluoride, Total	mg/L	0.00	0.3	2.00	1.69	0.052		1.8 to 2.2	81.6	80 to 120	10.9	20
AW26473	Solids, Dissolved	mg/L	1.00	25			271	45.0	40 to 60			1.31	5
AW26917	Chloride, Total	mg/L	0.00	0.25	10.00	12.9	2.96	9.87	9 to 11	99.6	80 to 120	0.678	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

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="Angie Jimmerson"/>	Requested By	<input type="text" value="Greg Dyer"/>
Collector	<input type="text" value="Jason Rouss"/>	Location	<input type="text" value="Barry 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" value="Collected Radium duplicate at MW-9"/>		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-8	10/18/2016	12:45	3	Groundwater		AW26454
MW-5	10/18/2016	14:05	3	Groundwater		AW26455
MW-6	10/19/2016	10:15	3	Groundwater		AW26456
MW-6 Dup	10/19/2016	10:15	3	Sample Duplicate		AW26457
MW-7	10/19/2016	11:30	3	Groundwater		AW26458
MW-9	10/19/2016	12:35	5	Groundwater		AW26459
EB-1	10/19/2016	12:55	3	Equipment Blank		AW26460

Relinquished By	Received By	Date/Time
	Sarah Copeland <small>Digitally signed by Sarah Copeland Date: 2016.10.20 15:52:30 -05'00'</small>	10/20/2016 15:52

SmarTroll ID	<input type="text" value="5141-26150-1-1"/>	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="0.9 degrees C"/>	
Thermometer ID	<input type="text" value="5408-27568-2-2"/>	
pH Strip ID	<input type="text" value="5521-28274-20-18"/>	



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="Angie Jimmerson"/>	Requested By	<input type="text" value="Greg Dyer"/>
Collector	<input type="text" value="Anthony Goggins"/>	Location	<input type="text" value="Barry 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" value="Radium duplicate mW-15"/>		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-14	10/18/2016	14:23	3	Groundwater		AW26461
MW-15	10/19/2016	09:44	5	Groundwater		AW26462
MW-13	10/19/2016	10:41	3	Groundwater		AW26463
MW-12	10/19/2016	11:31	3	Groundwater		AW26464
MW-11	10/19/2016	12:15	3	Groundwater		AW26465
MW-10	10/19/2016	12:58	3	Groundwater		AW26466
FB-1	10/19/2016	13:03	3	Field Blank		AW26467

Relinquished By	Received By	Date/Time
		10/19/2016 14:05
	Sarah Copeland <small>Digitally signed by Sarah Copeland Date: 2016.10.20 15:57:48 -05'00'</small>	10/20/2016 15:57

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="5160-26211-1-1"/>	
Cooler Temp <input type="text" value="0.9 degrees C"/>	
Thermometer ID <input type="text" value="5408-27568-2-2"/>	
pH Strip ID <input type="text" value="5521-28274-20-18"/>	



Chain of Custody

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Field Complete
 Lab Complete

Lab ETA 10/20/2016 12:00

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Angie Jimmerson	Requested By	Greg Dyer
Collector	Ben Rothschild	Location	Barry 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
MW4	10/19/2016	09:40	3	Groundwater		AW26468
MW4 DUP	10/19/2016	09:40	3	Sample Duplicate		AW26469
MW3	10/19/2016	10:43	3	Groundwater		AW26470
MW2	10/19/2016	11:35	3	Groundwater		AW26471
MW1	10/19/2016	12:28	3	Groundwater		AW26472
MW16	10/19/2016	13:21	3	Groundwater		AW26473
FB2	10/19/2016	13:40	3	Field Blank		AW26474

Relinquished By	Received By	Date/Time
		10/19/2016 14:17
	Sarah Copeland <small>Digitally signed by Sarah Copeland Date: 2016.10.20 15:59:18 -05'00'</small>	10/20/2016 15:59

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
		0.9 degrees C
		Thermometer ID
		5408-27568-2-2
		pH Strip ID
		5521-28274-20-18

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: 400-129141-1

TestAmerica Sample Delivery Group: Barry Ash Pond (5)

Client Project/Site: CCR Plant Barry

For:

Alabama Power General Test Laboratory

744 County Rd 87

GSC #8

Calera, Alabama 35040

Attn: Sarah Copeland



Authorized for release by:

11/30/2016 5:51:42 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

LINKS

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

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

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

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Case Narrative

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

TestAmerica Job ID: 400-129141-1
SDG: Barry Ash Pond (5)

Job ID: 400-129141-1

Laboratory: TestAmerica Pensacola

Narrative

**Job Narrative
400-129141-1**

RAD

Method(s) PrecSep_0: Radium-228 Prep Batch 160-277045: The following samples were run at a reduced aliquot due to limited sample available: AW26454 MW-8 (400-129141-1), AW26455 MW-5 (400-129141-2), AW26456 MW-6 (400-129141-3), AW26457 MW-6 DUP (400-129141-4) and AW26458 MW-7 (400-129141-5).

Method(s) PrecSep-21: Radium-226 Prep Batch 160-277036: The following samples were run at a reduced aliquot due to limited sample available: AW26454 MW-8 (400-129141-1), AW26455 MW-5 (400-129141-2), AW26456 MW-6 (400-129141-3), AW26457 MW-6 DUP (400-129141-4) and AW26458 MW-7 (400-129141-5).



Method Summary

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

TestAmerica Job ID: 400-129141-1
SDG: Barry Ash Pond (5)

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 Barry

TestAmerica Job ID: 400-129141-1
SDG: Barry Ash Pond (5)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-129141-1	AW26454 MW-8	Water	10/18/16 12:45	10/25/16 15:30
400-129141-2	AW26455 MW-5	Water	10/18/16 14:05	10/25/16 15:30
400-129141-3	AW26456 MW-6	Water	10/19/16 10:15	10/25/16 15:30
400-129141-4	AW26457 MW-6 DUP	Water	10/19/16 10:15	10/25/16 15:30
400-129141-5	AW26458 MW-7	Water	10/19/16 11:30	10/25/16 15:30
400-129141-6	AW26459 MW-9	Water	10/19/16 12:35	10/25/16 15:30
400-129141-7	AW26460 EB-1	Water	10/19/16 12:55	10/25/16 15:30
400-129141-8	AW26461 MW-14	Water	10/18/16 14:23	10/25/16 15:30
400-129141-9	AW26462 MW-15	Water	10/19/16 09:44	10/25/16 15:30
400-129141-10	AW26463 MW-13	Water	10/19/16 10:41	10/25/16 15:30
400-129141-11	AW26464 MW-12	Water	10/19/16 11:31	10/25/16 15:30
400-129141-12	AW26465 MW-11	Water	10/19/16 12:15	10/25/16 15:30
400-129141-13	AW26466 MW-10	Water	10/19/16 12:58	10/25/16 15:30
400-129141-14	AW26467 FB-1	Water	10/19/16 13:03	10/25/16 15:30
400-129141-15	AW26468 MW-4	Water	10/19/16 09:40	10/25/16 15:30
400-129141-16	AW26469 MW-4 DUP	Water	10/19/16 09:40	10/25/16 15:30
400-129141-17	AW26470 MW-3	Water	10/19/16 10:43	10/25/16 15:30
400-129141-18	AW26471 MW-2	Water	10/19/16 11:35	10/25/16 15:30
400-129141-19	AW26472 MW-10	Water	10/19/16 12:28	10/25/16 15:30
400-129141-20	AW26473 MW-16	Water	10/19/16 13:21	10/25/16 15:30
400-129141-21	AW26474 FB-2	Water	10/19/16 13:40	10/25/16 15:30

Client Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26454 MW-8

Lab Sample ID: 400-129141-1

Date Collected: 10/18/16 12:45

Matrix: Water

Date Received: 10/25/16 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	0.687		0.425	0.429	1.00	0.589	pCi/L	11/01/16 14:40	11/28/16 19:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		40 - 110					11/01/16 14:40	11/28/16 19:09	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.630		0.352	0.356	1.00	0.530	pCi/L	11/01/16 15:15	11/28/16 14:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		40 - 110					11/01/16 15:15	11/28/16 14:41	1
Y Carrier	91.2		40 - 110					11/01/16 15:15	11/28/16 14:41	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	1.32		0.551	0.558	5.00	0.589	pCi/L		11/30/16 11:17	1

Client Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26455 MW-5

Lab Sample ID: 400-129141-2

Date Collected: 10/18/16 14:05

Matrix: Water

Date Received: 10/25/16 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	0.473	U	0.417	0.419	1.00	0.644	pCi/L	11/01/16 14:40	11/28/16 19:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.5		40 - 110					11/01/16 14:40	11/28/16 19:09	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.46		0.421	0.442	1.00	0.530	pCi/L	11/01/16 15:15	11/28/16 14:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.5		40 - 110					11/01/16 15:15	11/28/16 14:41	1
Y Carrier	90.1		40 - 110					11/01/16 15:15	11/28/16 14:41	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	1.93		0.592	0.609	5.00	0.644	pCi/L		11/30/16 11:17	1

Client Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26456 MW-6

Lab Sample ID: 400-129141-3

Date Collected: 10/19/16 10:15

Matrix: Water

Date Received: 10/25/16 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	0.251	U	0.331	0.331	1.00	0.553	pCi/L	11/01/16 14:40	11/28/16 19:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.6		40 - 110					11/01/16 14:40	11/28/16 19:09	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.198	U	0.285	0.286	1.00	0.478	pCi/L	11/01/16 15:15	11/28/16 14:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.6		40 - 110					11/01/16 15:15	11/28/16 14:41	1
Y Carrier	90.8		40 - 110					11/01/16 15:15	11/28/16 14:41	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	0.449	U	0.437	0.438	5.00	0.553	pCi/L		11/30/16 11:17	1

Client Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26457 MW-6 DUP

Lab Sample ID: 400-129141-4

Date Collected: 10/19/16 10:15

Matrix: Water

Date Received: 10/25/16 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	0.342	U	0.344	0.346	1.00	0.543	pCi/L	11/01/16 14:40	11/28/16 19:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.5		40 - 110					11/01/16 14:40	11/28/16 19:10	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.371	U	0.293	0.295	1.00	0.462	pCi/L	11/01/16 15:15	11/28/16 14:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.5		40 - 110					11/01/16 15:15	11/28/16 14:41	1
Y Carrier	95.0		40 - 110					11/01/16 15:15	11/28/16 14:41	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	0.713		0.452	0.454	5.00	0.543	pCi/L		11/30/16 11:17	1

Client Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26458 MW-7

Lab Sample ID: 400-129141-5

Date Collected: 10/19/16 11:30

Matrix: Water

Date Received: 10/25/16 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	0.414	U	0.370	0.372	1.00	0.567	pCi/L	11/01/16 14:40	11/28/16 19:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					11/01/16 14:40	11/28/16 19:10	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.143	U	0.286	0.287	1.00	0.489	pCi/L	11/01/16 15:15	11/28/16 14:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					11/01/16 15:15	11/28/16 14:41	1
Y Carrier	94.6		40 - 110					11/01/16 15:15	11/28/16 14:41	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	0.557	U	0.468	0.470	5.00	0.567	pCi/L		11/30/16 11:17	1

Client Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26459 MW-9

Lab Sample ID: 400-129141-6

Date Collected: 10/19/16 12:35

Matrix: Water

Date Received: 10/25/16 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	0.647		0.326	0.331	1.00	0.397	pCi/L	11/01/16 10:59	11/28/16 19:13	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.6		40 - 110					11/01/16 10:59	11/28/16 19:13	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.762		0.294	0.303	1.00	0.413	pCi/L	11/01/16 11:41	11/28/16 14:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.6		40 - 110					11/01/16 11:41	11/28/16 14:44	1
Y Carrier	91.6		40 - 110					11/01/16 11:41	11/28/16 14:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.41		0.439	0.448	5.00	0.413	pCi/L		11/30/16 11:17	1

Client Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26460 EB-1

Lab Sample ID: 400-129141-7

Date Collected: 10/19/16 12:55

Matrix: Water

Date Received: 10/25/16 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	0.163	U	0.209	0.210	1.00	0.348	pCi/L	11/01/16 10:59	11/28/16 19:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.5		40 - 110					11/01/16 10:59	11/28/16 19:14	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0698	U	0.243	0.243	1.00	0.423	pCi/L	11/01/16 11:41	11/28/16 14:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.5		40 - 110					11/01/16 11:41	11/28/16 14:44	1
Y Carrier	87.5		40 - 110					11/01/16 11:41	11/28/16 14:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.233	U	0.321	0.321	5.00	0.423	pCi/L		11/30/16 11:17	1

Client Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26461 MW-14

Lab Sample ID: 400-129141-8

Date Collected: 10/18/16 14:23

Matrix: Water

Date Received: 10/25/16 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	0.348		0.239	0.241	1.00	0.317	pCi/L	11/01/16 10:59	11/28/16 19:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					11/01/16 10:59	11/28/16 19:14	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.278	U	0.232	0.233	1.00	0.369	pCi/L	11/01/16 11:41	11/28/16 14:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					11/01/16 11:41	11/28/16 14:44	1
Y Carrier	93.5		40 - 110					11/01/16 11:41	11/28/16 14:44	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.626		0.333	0.335	5.00	0.369	pCi/L		11/30/16 11:17	1

Client Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26462 MW-15

Lab Sample ID: 400-129141-9

Date Collected: 10/19/16 09:44

Matrix: Water

Date Received: 10/25/16 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	0.295	U	0.242	0.244	1.00	0.354	pCi/L	11/01/16 10:59	11/28/16 19:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					11/01/16 10:59	11/28/16 19:14	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.360	U	0.260	0.263	1.00	0.410	pCi/L	11/01/16 11:41	11/28/16 14:44	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					11/01/16 11:41	11/28/16 14:44	1
Y Carrier	94.6		40 - 110					11/01/16 11:41	11/28/16 14:44	1

Method: Ra226_Ra228 - Combined Radium-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		0.356	0.358	5.00	0.410	pCi/L		11/30/16 11:17	1

Client Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26463 MW-13

Lab Sample ID: 400-129141-10

Date Collected: 10/19/16 10:41

Matrix: Water

Date Received: 10/25/16 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	0.337	U	0.274	0.276	1.00	0.408	pCi/L	11/01/16 10:59	11/28/16 19:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					11/01/16 10:59	11/28/16 19:14	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.264	U	0.247	0.248	1.00	0.399	pCi/L	11/01/16 11:41	11/28/16 14:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					11/01/16 11:41	11/28/16 14:45	1
Y Carrier	94.6		40 - 110					11/01/16 11:41	11/28/16 14:45	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.601		0.369	0.371	5.00	0.408	pCi/L		11/30/16 11:17	1

Client Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26464 MW-12

Lab Sample ID: 400-129141-11

Date Collected: 10/19/16 11:31

Matrix: Water

Date Received: 10/25/16 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	0.396		0.257	0.260	1.00	0.349	pCi/L	11/01/16 10:59	11/28/16 19:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		40 - 110					11/01/16 10:59	11/28/16 19:14	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.414		0.255	0.258	1.00	0.389	pCi/L	11/01/16 11:41	11/28/16 14:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.2		40 - 110					11/01/16 11:41	11/28/16 14:45	1
Y Carrier	89.3		40 - 110					11/01/16 11:41	11/28/16 14:45	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.810		0.362	0.366	5.00	0.389	pCi/L		11/30/16 11:17	1

Client Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26465 MW-11

Lab Sample ID: 400-129141-12

Date Collected: 10/19/16 12:15

Matrix: Water

Date Received: 10/25/16 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	0.626		0.329	0.334	1.00	0.418	pCi/L	11/01/16 10:59	11/28/16 19:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.9		40 - 110					11/01/16 10:59	11/28/16 19:17	1

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	0.221	0.222	1.00	0.378	pCi/L	11/01/16 11:41	11/28/16 14:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.9		40 - 110					11/01/16 11:41	11/28/16 14:45	1
Y Carrier	94.2		40 - 110					11/01/16 11:41	11/28/16 14:45	1

Method: Ra226_Ra228 - Combined Radium-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		0.396	0.401	5.00	0.418	pCi/L		11/30/16 11:17	1

Client Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26466 MW-10

Lab Sample ID: 400-129141-13

Date Collected: 10/19/16 12:58

Matrix: Water

Date Received: 10/25/16 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	0.814		0.388	0.395	1.00	0.490	pCi/L	11/01/16 10:59	11/28/16 19:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		40 - 110					11/01/16 10:59	11/28/16 19:18	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.435		0.228	0.231	1.00	0.335	pCi/L	11/01/16 11:41	11/28/16 14:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		40 - 110					11/01/16 11:41	11/28/16 14:45	1
Y Carrier	95.0		40 - 110					11/01/16 11:41	11/28/16 14:45	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.25		0.450	0.458	5.00	0.490	pCi/L		11/30/16 11:17	1

Client Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26467 FB-1

Lab Sample ID: 400-129141-14

Date Collected: 10/19/16 13:03

Matrix: Water

Date Received: 10/25/16 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	0.109	U	0.210	0.211	1.00	0.378	pCi/L	11/01/16 10:59	11/28/16 19:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					11/01/16 10:59	11/28/16 19:18	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0450	U	0.233	0.233	1.00	0.408	pCi/L	11/01/16 11:41	11/28/16 14:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					11/01/16 11:41	11/28/16 14:45	1
Y Carrier	90.1		40 - 110					11/01/16 11:41	11/28/16 14:45	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.154	U	0.314	0.314	5.00	0.408	pCi/L		11/30/16 11:17	1

Client Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26468 MW-4

Lab Sample ID: 400-129141-15

Date Collected: 10/19/16 09:40

Matrix: Water

Date Received: 10/25/16 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	1.19		0.406	0.420	1.00	0.394	pCi/L	11/01/16 10:59	11/28/16 19:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		40 - 110					11/01/16 10:59	11/28/16 19:18	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.666		0.269	0.276	1.00	0.377	pCi/L	11/01/16 11:41	11/28/16 14:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		40 - 110					11/01/16 11:41	11/28/16 14:45	1
Y Carrier	91.6		40 - 110					11/01/16 11:41	11/28/16 14:45	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.85		0.487	0.502	5.00	0.394	pCi/L		11/30/16 11:17	1

Client Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26469 MW-4 DUP

Lab Sample ID: 400-129141-16

Date Collected: 10/19/16 09:40

Matrix: Water

Date Received: 10/25/16 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	0.274	U	0.240	0.241	1.00	0.356	pCi/L	11/01/16 10:59	11/28/16 19:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.5		40 - 110					11/01/16 10:59	11/28/16 19:18	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.286	U	0.217	0.219	1.00	0.340	pCi/L	11/01/16 11:41	11/28/16 14:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.5		40 - 110					11/01/16 11:41	11/28/16 14:45	1
Y Carrier	92.7		40 - 110					11/01/16 11:41	11/28/16 14:45	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.560		0.323	0.326	5.00	0.356	pCi/L		11/30/16 11:17	1

Client Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26470 MW-3

Lab Sample ID: 400-129141-17

Date Collected: 10/19/16 10:43

Matrix: Water

Date Received: 10/25/16 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	0.207	U	0.285	0.286	1.00	0.481	pCi/L	11/01/16 10:59	11/28/16 19:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.9		40 - 110					11/01/16 10:59	11/28/16 19:18	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.329	U	0.255	0.256	1.00	0.402	pCi/L	11/01/16 11:41	11/28/16 14:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.9		40 - 110					11/01/16 11:41	11/28/16 14:46	1
Y Carrier	91.6		40 - 110					11/01/16 11:41	11/28/16 14:46	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.536		0.382	0.384	5.00	0.481	pCi/L		11/30/16 11:17	1

Client Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26471 MW-2

Lab Sample ID: 400-129141-18

Date Collected: 10/19/16 11:35

Matrix: Water

Date Received: 10/25/16 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	0.169	U	0.253	0.254	1.00	0.434	pCi/L	11/01/16 10:59	11/28/16 19:18	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.3		40 - 110					11/01/16 10:59	11/28/16 19:18	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.312	U	0.256	0.258	1.00	0.408	pCi/L	11/01/16 11:41	11/28/16 14:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.3		40 - 110					11/01/16 11:41	11/28/16 14:46	1
Y Carrier	93.8		40 - 110					11/01/16 11:41	11/28/16 14:46	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.480		0.360	0.362	5.00	0.434	pCi/L		11/30/16 11:17	1

Client Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26472 MW-10

Lab Sample ID: 400-129141-19

Date Collected: 10/19/16 12:28

Matrix: Water

Date Received: 10/25/16 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	0.765		0.340	0.347	1.00	0.389	pCi/L	11/01/16 10:59	11/28/16 21:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.5		40 - 110					11/01/16 10:59	11/28/16 21:06	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.13		0.310	0.327	1.00	0.371	pCi/L	11/01/16 11:41	11/28/16 14:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.3		40 - 110					11/01/16 11:41	11/28/16 14:46	1
Y Carrier	91.6		40 - 110					11/01/16 11:41	11/28/16 14:46	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.90		0.460	0.477	5.00	0.389	pCi/L		11/30/16 11:17	1

Client Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26473 MW-16

Lab Sample ID: 400-129141-20

Date Collected: 10/19/16 13:21

Matrix: Water

Date Received: 10/25/16 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	0.184	U	0.222	0.222	1.00	0.362	pCi/L	11/01/16 10:59	11/28/16 21:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.5		40 - 110					11/01/16 10:59	11/28/16 21:06	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.265	U	0.247	0.248	1.00	0.397	pCi/L	11/01/16 11:41	11/28/16 14:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.5		40 - 110					11/01/16 11:41	11/28/16 14:46	1
Y Carrier	91.6		40 - 110					11/01/16 11:41	11/28/16 14:46	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.448		0.332	0.333	5.00	0.397	pCi/L		11/30/16 11:17	1

Client Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26474 FB-2

Lab Sample ID: 400-129141-21

Date Collected: 10/19/16 13:40

Matrix: Water

Date Received: 10/25/16 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	0.138	U	0.205	0.206	1.00	0.352	pCi/L	11/01/16 10:59	11/28/16 21:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.2		40 - 110					11/01/16 10:59	11/28/16 21:06	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.433		0.269	0.271	1.00	0.410	pCi/L	11/01/16 11:41	11/28/16 14:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.2		40 - 110					11/01/16 11:41	11/28/16 14:46	1
Y Carrier	91.2		40 - 110					11/01/16 11:41	11/28/16 14:46	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.572		0.338	0.341	5.00	0.410	pCi/L		11/30/16 11:17	1

Definitions/Glossary

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

TestAmerica Job ID: 400-129141-1
SDG: Barry Ash Pond (5)

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 Barry

TestAmerica Job ID: 400-129141-1
SDG: Barry Ash Pond (5)

Client Sample ID: AW26454 MW-8

Date Collected: 10/18/16 12:45

Date Received: 10/25/16 15:30

Lab Sample ID: 400-129141-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			277036	11/01/16 14:40	AS	TAL SL
Total/NA	Analysis	9315		1	281192	11/28/16 19:09	RTM	TAL SL
Total/NA	Prep	PrecSep_0			277045	11/01/16 15:15	AS	TAL SL
Total/NA	Analysis	9320		1	280986	11/28/16 14:41	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	281646	11/30/16 11:17	RTM	TAL SL

Client Sample ID: AW26455 MW-5

Date Collected: 10/18/16 14:05

Date Received: 10/25/16 15:30

Lab Sample ID: 400-129141-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			277036	11/01/16 14:40	AS	TAL SL
Total/NA	Analysis	9315		1	281192	11/28/16 19:09	RTM	TAL SL
Total/NA	Prep	PrecSep_0			277045	11/01/16 15:15	AS	TAL SL
Total/NA	Analysis	9320		1	280986	11/28/16 14:41	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	281646	11/30/16 11:17	RTM	TAL SL

Client Sample ID: AW26456 MW-6

Date Collected: 10/19/16 10:15

Date Received: 10/25/16 15:30

Lab Sample ID: 400-129141-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			277036	11/01/16 14:40	AS	TAL SL
Total/NA	Analysis	9315		1	281192	11/28/16 19:09	RTM	TAL SL
Total/NA	Prep	PrecSep_0			277045	11/01/16 15:15	AS	TAL SL
Total/NA	Analysis	9320		1	280986	11/28/16 14:41	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	281646	11/30/16 11:17	RTM	TAL SL

Client Sample ID: AW26457 MW-6 DUP

Date Collected: 10/19/16 10:15

Date Received: 10/25/16 15:30

Lab Sample ID: 400-129141-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			277036	11/01/16 14:40	AS	TAL SL
Total/NA	Analysis	9315		1	281192	11/28/16 19:10	RTM	TAL SL
Total/NA	Prep	PrecSep_0			277045	11/01/16 15:15	AS	TAL SL
Total/NA	Analysis	9320		1	280986	11/28/16 14:41	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	281646	11/30/16 11:17	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-129141-1
SDG: Barry Ash Pond (5)

Client Sample ID: AW26458 MW-7

Lab Sample ID: 400-129141-5

Date Collected: 10/19/16 11:30

Matrix: Water

Date Received: 10/25/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			277036	11/01/16 14:40	AS	TAL SL
Total/NA	Analysis	9315		1	281192	11/28/16 19:10	RTM	TAL SL
Total/NA	Prep	PrecSep_0			277045	11/01/16 15:15	AS	TAL SL
Total/NA	Analysis	9320		1	280986	11/28/16 14:41	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	281646	11/30/16 11:17	RTM	TAL SL

Client Sample ID: AW26459 MW-9

Lab Sample ID: 400-129141-6

Date Collected: 10/19/16 12:35

Matrix: Water

Date Received: 10/25/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			277008	11/01/16 10:59	AS	TAL SL
Total/NA	Analysis	9315		1	281192	11/28/16 19:13	RTM	TAL SL
Total/NA	Prep	PrecSep_0			277013	11/01/16 11:41	AS	TAL SL
Total/NA	Analysis	9320		1	281192	11/28/16 14:44	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	281646	11/30/16 11:17	RTM	TAL SL

Client Sample ID: AW26460 EB-1

Lab Sample ID: 400-129141-7

Date Collected: 10/19/16 12:55

Matrix: Water

Date Received: 10/25/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			277008	11/01/16 10:59	AS	TAL SL
Total/NA	Analysis	9315		1	281192	11/28/16 19:14	RTM	TAL SL
Total/NA	Prep	PrecSep_0			277013	11/01/16 11:41	AS	TAL SL
Total/NA	Analysis	9320		1	281192	11/28/16 14:44	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	281646	11/30/16 11:17	RTM	TAL SL

Client Sample ID: AW26461 MW-14

Lab Sample ID: 400-129141-8

Date Collected: 10/18/16 14:23

Matrix: Water

Date Received: 10/25/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			277008	11/01/16 10:59	AS	TAL SL
Total/NA	Analysis	9315		1	281192	11/28/16 19:14	RTM	TAL SL
Total/NA	Prep	PrecSep_0			277013	11/01/16 11:41	AS	TAL SL
Total/NA	Analysis	9320		1	281192	11/28/16 14:44	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	281646	11/30/16 11:17	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26462 MW-15

Lab Sample ID: 400-129141-9

Date Collected: 10/19/16 09:44

Matrix: Water

Date Received: 10/25/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			277008	11/01/16 10:59	AS	TAL SL
Total/NA	Analysis	9315		1	281192	11/28/16 19:14	RTM	TAL SL
Total/NA	Prep	PrecSep_0			277013	11/01/16 11:41	AS	TAL SL
Total/NA	Analysis	9320		1	281192	11/28/16 14:44	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	281646	11/30/16 11:17	RTM	TAL SL

Client Sample ID: AW26463 MW-13

Lab Sample ID: 400-129141-10

Date Collected: 10/19/16 10:41

Matrix: Water

Date Received: 10/25/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			277008	11/01/16 10:59	AS	TAL SL
Total/NA	Analysis	9315		1	281192	11/28/16 19:14	RTM	TAL SL
Total/NA	Prep	PrecSep_0			277013	11/01/16 11:41	AS	TAL SL
Total/NA	Analysis	9320		1	281192	11/28/16 14:45	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	281646	11/30/16 11:17	RTM	TAL SL

Client Sample ID: AW26464 MW-12

Lab Sample ID: 400-129141-11

Date Collected: 10/19/16 11:31

Matrix: Water

Date Received: 10/25/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			277008	11/01/16 10:59	AS	TAL SL
Total/NA	Analysis	9315		1	281192	11/28/16 19:14	RTM	TAL SL
Total/NA	Prep	PrecSep_0			277013	11/01/16 11:41	AS	TAL SL
Total/NA	Analysis	9320		1	281192	11/28/16 14:45	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	281646	11/30/16 11:17	RTM	TAL SL

Client Sample ID: AW26465 MW-11

Lab Sample ID: 400-129141-12

Date Collected: 10/19/16 12:15

Matrix: Water

Date Received: 10/25/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			277008	11/01/16 10:59	AS	TAL SL
Total/NA	Analysis	9315		1	280975	11/28/16 19:17	MLK	TAL SL
Total/NA	Prep	PrecSep_0			277013	11/01/16 11:41	AS	TAL SL
Total/NA	Analysis	9320		1	281192	11/28/16 14:45	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	281646	11/30/16 11:17	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Client Sample ID: AW26466 MW-10

Lab Sample ID: 400-129141-13

Date Collected: 10/19/16 12:58

Matrix: Water

Date Received: 10/25/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			277008	11/01/16 10:59	AS	TAL SL
Total/NA	Analysis	9315		1	280975	11/28/16 19:18	MLK	TAL SL
Total/NA	Prep	PrecSep_0			277013	11/01/16 11:41	AS	TAL SL
Total/NA	Analysis	9320		1	281192	11/28/16 14:45	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	281646	11/30/16 11:17	RTM	TAL SL

Client Sample ID: AW26467 FB-1

Lab Sample ID: 400-129141-14

Date Collected: 10/19/16 13:03

Matrix: Water

Date Received: 10/25/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			277008	11/01/16 10:59	AS	TAL SL
Total/NA	Analysis	9315		1	280975	11/28/16 19:18	MLK	TAL SL
Total/NA	Prep	PrecSep_0			277013	11/01/16 11:41	AS	TAL SL
Total/NA	Analysis	9320		1	281192	11/28/16 14:45	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	281646	11/30/16 11:17	RTM	TAL SL

Client Sample ID: AW26468 MW-4

Lab Sample ID: 400-129141-15

Date Collected: 10/19/16 09:40

Matrix: Water

Date Received: 10/25/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			277008	11/01/16 10:59	AS	TAL SL
Total/NA	Analysis	9315		1	280975	11/28/16 19:18	MLK	TAL SL
Total/NA	Prep	PrecSep_0			277013	11/01/16 11:41	AS	TAL SL
Total/NA	Analysis	9320		1	281192	11/28/16 14:45	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	281646	11/30/16 11:17	RTM	TAL SL

Client Sample ID: AW26469 MW-4 DUP

Lab Sample ID: 400-129141-16

Date Collected: 10/19/16 09:40

Matrix: Water

Date Received: 10/25/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			277008	11/01/16 10:59	AS	TAL SL
Total/NA	Analysis	9315		1	280975	11/28/16 19:18	MLK	TAL SL
Total/NA	Prep	PrecSep_0			277013	11/01/16 11:41	AS	TAL SL
Total/NA	Analysis	9320		1	281192	11/28/16 14:45	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	281646	11/30/16 11:17	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-129141-1
SDG: Barry Ash Pond (5)

Client Sample ID: AW26470 MW-3

Lab Sample ID: 400-129141-17

Date Collected: 10/19/16 10:43

Matrix: Water

Date Received: 10/25/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			277008	11/01/16 10:59	AS	TAL SL
Total/NA	Analysis	9315		1	280975	11/28/16 19:18	MLK	TAL SL
Total/NA	Prep	PrecSep_0			277013	11/01/16 11:41	AS	TAL SL
Total/NA	Analysis	9320		1	281192	11/28/16 14:46	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	281646	11/30/16 11:17	RTM	TAL SL

Client Sample ID: AW26471 MW-2

Lab Sample ID: 400-129141-18

Date Collected: 10/19/16 11:35

Matrix: Water

Date Received: 10/25/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			277008	11/01/16 10:59	AS	TAL SL
Total/NA	Analysis	9315		1	280975	11/28/16 19:18	MLK	TAL SL
Total/NA	Prep	PrecSep_0			277013	11/01/16 11:41	AS	TAL SL
Total/NA	Analysis	9320		1	281192	11/28/16 14:46	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	281646	11/30/16 11:17	RTM	TAL SL

Client Sample ID: AW26472 MW-10

Lab Sample ID: 400-129141-19

Date Collected: 10/19/16 12:28

Matrix: Water

Date Received: 10/25/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			277008	11/01/16 10:59	AS	TAL SL
Total/NA	Analysis	9315		1	281192	11/28/16 21:06	RTM	TAL SL
Total/NA	Prep	PrecSep_0			277013	11/01/16 11:41	AS	TAL SL
Total/NA	Analysis	9320		1	281192	11/28/16 14:46	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	281646	11/30/16 11:17	RTM	TAL SL

Client Sample ID: AW26473 MW-16

Lab Sample ID: 400-129141-20

Date Collected: 10/19/16 13:21

Matrix: Water

Date Received: 10/25/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			277008	11/01/16 10:59	AS	TAL SL
Total/NA	Analysis	9315		1	281192	11/28/16 21:06	RTM	TAL SL
Total/NA	Prep	PrecSep_0			277013	11/01/16 11:41	AS	TAL SL
Total/NA	Analysis	9320		1	281192	11/28/16 14:46	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	281646	11/30/16 11:17	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-129141-1
SDG: Barry Ash Pond (5)

Client Sample ID: AW26474 FB-2

Lab Sample ID: 400-129141-21

Date Collected: 10/19/16 13:40

Matrix: Water

Date Received: 10/25/16 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			277008	11/01/16 10:59	AS	TAL SL
Total/NA	Analysis	9315		1	281192	11/28/16 21:06	RTM	TAL SL
Total/NA	Prep	PrecSep_0			277013	11/01/16 11:41	AS	TAL SL
Total/NA	Analysis	9320		1	281192	11/28/16 14:46	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	281646	11/30/16 11:17	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 Barry

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Rad

Prep Batch: 277008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-129141-6	AW26459 MW-9	Total/NA	Water	PrecSep-21	
400-129141-7	AW26460 EB-1	Total/NA	Water	PrecSep-21	
400-129141-8	AW26461 MW-14	Total/NA	Water	PrecSep-21	
400-129141-9	AW26462 MW-15	Total/NA	Water	PrecSep-21	
400-129141-10	AW26463 MW-13	Total/NA	Water	PrecSep-21	
400-129141-11	AW26464 MW-12	Total/NA	Water	PrecSep-21	
400-129141-12	AW26465 MW-11	Total/NA	Water	PrecSep-21	
400-129141-13	AW26466 MW-10	Total/NA	Water	PrecSep-21	
400-129141-14	AW26467 FB-1	Total/NA	Water	PrecSep-21	
400-129141-15	AW26468 MW-4	Total/NA	Water	PrecSep-21	
400-129141-16	AW26469 MW-4 DUP	Total/NA	Water	PrecSep-21	
400-129141-17	AW26470 MW-3	Total/NA	Water	PrecSep-21	
400-129141-18	AW26471 MW-2	Total/NA	Water	PrecSep-21	
400-129141-19	AW26472 MW-10	Total/NA	Water	PrecSep-21	
400-129141-20	AW26473 MW-16	Total/NA	Water	PrecSep-21	
400-129141-21	AW26474 FB-2	Total/NA	Water	PrecSep-21	
MB 160-277008/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-277008/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-129141-6 DU	AW26459 MW-9	Total/NA	Water	PrecSep-21	

Prep Batch: 277013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-129141-6	AW26459 MW-9	Total/NA	Water	PrecSep_0	
400-129141-7	AW26460 EB-1	Total/NA	Water	PrecSep_0	
400-129141-8	AW26461 MW-14	Total/NA	Water	PrecSep_0	
400-129141-9	AW26462 MW-15	Total/NA	Water	PrecSep_0	
400-129141-10	AW26463 MW-13	Total/NA	Water	PrecSep_0	
400-129141-11	AW26464 MW-12	Total/NA	Water	PrecSep_0	
400-129141-12	AW26465 MW-11	Total/NA	Water	PrecSep_0	
400-129141-13	AW26466 MW-10	Total/NA	Water	PrecSep_0	
400-129141-14	AW26467 FB-1	Total/NA	Water	PrecSep_0	
400-129141-15	AW26468 MW-4	Total/NA	Water	PrecSep_0	
400-129141-16	AW26469 MW-4 DUP	Total/NA	Water	PrecSep_0	
400-129141-17	AW26470 MW-3	Total/NA	Water	PrecSep_0	
400-129141-18	AW26471 MW-2	Total/NA	Water	PrecSep_0	
400-129141-19	AW26472 MW-10	Total/NA	Water	PrecSep_0	
400-129141-20	AW26473 MW-16	Total/NA	Water	PrecSep_0	
400-129141-21	AW26474 FB-2	Total/NA	Water	PrecSep_0	
MB 160-277013/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-277013/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-129141-6 DU	AW26459 MW-9	Total/NA	Water	PrecSep_0	

Prep Batch: 277036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-129141-1	AW26454 MW-8	Total/NA	Water	PrecSep-21	
400-129141-2	AW26455 MW-5	Total/NA	Water	PrecSep-21	
400-129141-3	AW26456 MW-6	Total/NA	Water	PrecSep-21	
400-129141-4	AW26457 MW-6 DUP	Total/NA	Water	PrecSep-21	
400-129141-5	AW26458 MW-7	Total/NA	Water	PrecSep-21	
MB 160-277036/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-277036/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-129141-1
SDG: Barry Ash Pond (5)

Rad (Continued)

Prep Batch: 277036 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-129138-A-9-B DU	Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 277045

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-129141-1	AW26454 MW-8	Total/NA	Water	PrecSep_0	
400-129141-2	AW26455 MW-5	Total/NA	Water	PrecSep_0	
400-129141-3	AW26456 MW-6	Total/NA	Water	PrecSep_0	
400-129141-4	AW26457 MW-6 DUP	Total/NA	Water	PrecSep_0	
400-129141-5	AW26458 MW-7	Total/NA	Water	PrecSep_0	
MB 160-277045/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-277045/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-129138-A-9-D DU	Duplicate	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-277008/1-A
Matrix: Water
Analysis Batch: 281192

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277008

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.08092	U	0.158	0.158	1.00	0.378	pCi/L	11/01/16 10:59	11/28/16 19:13	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		11/01/16 10:59	11/28/16 19:13				1	
	88.3		40 - 110							

Lab Sample ID: LCS 160-277008/2-A
Matrix: Water
Analysis Batch: 281192

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277008

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.1	13.73		1.72	1.00	0.347	pCi/L	124	68 - 137
Carrier	LCS LCS		Limits			Prepared	Analyzed	Dil Fac	
Ba Carrier	%Yield	Qualifier		11/01/16 10:59	11/28/16 19:13				1
	88.6		40 - 110						

Lab Sample ID: 400-129141-6 DU
Matrix: Water
Analysis Batch: 281192

Client Sample ID: AW26459 MW-9
Prep Type: Total/NA
Prep Batch: 277008

Analyte	Sample Sample		DU	DU	Total	RL	MDC	Unit	RER	RER Limit
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					
Radium-226	0.647		0.3158	U	0.250	1.00	0.354	pCi/L	0.57	1
Carrier	DU DU		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		11/01/16 10:59	11/28/16 19:13				1	
	88.9		40 - 110							

Lab Sample ID: MB 160-277036/1-A
Matrix: Water
Analysis Batch: 280986

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277036

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	-0.07182	U	0.176	0.176	1.00	0.408	pCi/L	11/01/16 14:40	11/28/16 19:06	1
Carrier	MB MB		Limits			Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier		11/01/16 14:40	11/28/16 19:06				1	
	83.5		40 - 110							

Lab Sample ID: LCS 160-277036/2-A
Matrix: Water
Analysis Batch: 280986

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277036

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	11.1	14.23		1.81	1.00	0.378	pCi/L	128	68 - 137

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

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

Lab Sample ID: LCS 160-277036/2-A
Matrix: Water
Analysis Batch: 280986

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277036

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	85.2		40 - 110

Lab Sample ID: 400-129138-A-9-B DU
Matrix: Water
Analysis Batch: 280986

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 277036

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.591		0.8216		0.374	1.00	0.430	pCi/L	0.32	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	83.8		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-277013/1-A
Matrix: Water
Analysis Batch: 281192

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277013

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1257	U	0.255	0.255	1.00	0.434	pCi/L	11/01/16 11:41	11/28/16 14:43	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	88.3		40 - 110	11/01/16 11:41	11/28/16 14:43	1
Y Carrier	87.5		40 - 110	11/01/16 11:41	11/28/16 14:43	1

Lab Sample ID: LCS 160-277013/2-A
Matrix: Water
Analysis Batch: 281192

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277013

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	14.2	14.79		1.59	1.00	0.399	pCi/L	104	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	88.6		40 - 110
Y Carrier	94.6		40 - 110

Lab Sample ID: 400-129141-6 DU
Matrix: Water
Analysis Batch: 281192

Client Sample ID: AW26459 MW-9
Prep Type: Total/NA
Prep Batch: 277013

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.762		0.5287		0.292	1.00	0.437	pCi/L	0.39	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

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

Lab Sample ID: 400-129141-6 DU
Matrix: Water
Analysis Batch: 281192

Client Sample ID: AW26459 MW-9
Prep Type: Total/NA
Prep Batch: 277013

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	88.9		40 - 110
Y Carrier	92.0		40 - 110

Lab Sample ID: MB 160-277045/1-A
Matrix: Water
Analysis Batch: 280986

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 277045

Analyte	MB	MB	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert.	Uncert.						
Radium-228	0.02773	U	0.234	0.234	1.00	0.415	pCi/L	11/01/16 15:15	11/28/16 14:39	1

Carrier	MB	MB	Limits	Prepared	Analyzed	Dil Fac
	%Yield	Qualifier				
Ba Carrier	83.5		40 - 110	11/01/16 15:15	11/28/16 14:39	1
Y Carrier	89.3		40 - 110	11/01/16 15:15	11/28/16 14:39	1

Lab Sample ID: LCS 160-277045/2-A
Matrix: Water
Analysis Batch: 280986

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 277045

Analyte	Spike	LCS	LCS	Total	RL	MDC	Unit	%Rec	%Rec.	Limits
	Added	Result	Qual	Uncert.					Limits	
Radium-228	14.2	13.63		1.49	1.00	0.380	pCi/L	96	56 - 140	

Carrier	LCS	LCS	Limits
	%Yield	Qualifier	
Ba Carrier	85.2		40 - 110
Y Carrier	93.1		40 - 110

Lab Sample ID: 400-129138-A-9-D DU
Matrix: Water
Analysis Batch: 280986

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 277045

Analyte	Sample	Sample	DU	DU	Total	RL	MDC	Unit	RER	RER	Limit
	Result	Qual	Result	Qual	Uncert.						
Radium-228	0.375	U	0.5613		0.273	1.00	0.387	pCi/L	0.33		1

Carrier	DU	DU	Limits
	%Yield	Qualifier	
Ba Carrier	83.8		40 - 110
Y Carrier	92.3		40 - 110



400-129141 COC



THE LEADER IN ENVIRONMENTAL TESTING

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: Callera
 State, Zip: AL, 35040
 Phone: 205-664-6121 (Tel)
 Email: sgcoppella@southerncco.com
 Project Name: CCR
 Site: Barry Ash Pond (5)

Lab Pmt: Whitmire, Cheyenne R
 E-Mail: cheyenne.whitmire@testamericainc.com
 Sampler: Jason Rouss
 Phone:

Carrier Tracking No(s):

COC No: 400-56525-24537.1
 Page: Page 1 of 3
 Job #: 400-129141

Analysis Requested

Due Date Requested: **Routine**

TAT Requested (days):

PO #:

WC #:

Project #: 40007143

SSOW#:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=oil, L=liquid, T=tissue, A=air)	Field Filled Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315, Ra228, 9320, Ra228, Ra228Ra228, GFCP	Special Instructions/Note:
AW26454	10/18/16	1245	G	Water	X	X		MW-8
AW26455	10/18/16	1405	G	Water	X	X		MW-5
AW26456	10/19/16	1015	G	Water	X	X		MW-6
AW26457	10/19/16	1015	G	Water	X	X		MW-6 Dup (Sample Duplicate)
AW26458	10/19/16	1130	G	Water	X	X		MW-7
AW26459	10/19/16	1235	G	Water	X	X		MW-9
AW26460	10/19/16	1255	G	Water	X	X		EB-1 (Equipment 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: _____ Date: _____
 Relinquished by: Sarah Copeland Date/Time: 10/25/16; 0950 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:



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: Anthony Goggins		E-Mail: cheyenne.whitmire@testamericainc.com		Page: 2 of 3	
Company: Alabama Power General Test Laboratory		Address: 744 County Rd 87 GSC #8		City: Calera		Job #: 400-129191	
State, Zip: AL, 35040		TAT Requested (days): Routine		PO #: 40007143		Preservation Codes: M - Hexane A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Ancillor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Phone: 205-664-6121 (Tel)		Due Date Requested:		WO #: sgcopela@southemco.com		Matrix: W-Water, S-Solid, O-Oil/Solvent, EP-EPSA, A-Air	
Email: sgcopela@southemco.com		Project #: 40007143		CCR		Sample Date	
Site: Barry Ash Pond (5)		SSOW#:		Sample Time		Sample Type (C=Comp, G=grab)	
Sample Identification		Field Filled Sample (Yes or No)		Return MS/MSD (Yes or No)		Special Instructions/Note:	
AW26461	10/18/16	1423	G	Water	X	1	MW-14
AW26462	10/19/16	0944	G	Water	X	3	MW-15
AW26463	10/19/16	1041	G	Water	X	1	MW-13
AW26464	10/19/16	1131	G	Water	X	1	MW-12
AW26465	10/19/16	1215	G	Water	X	1	MW-11
AW26466	10/19/16	1258	G	Water	X	1	MW-10
AW26467	10/19/16	1303	G	Water	X	1	FB-1 (Field 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)							
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/OC Requirements: Empty Kit Relinquished by: _____ Date: _____ Relinquished by: Sarah Copeland Date/Time: 10/25/16; 0950 Relinquished by: _____ Date/Time: _____ Relinquished by: _____ Date/Time: _____ Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Δ <input type="checkbox"/> Δ <input type="checkbox"/> No Cooler Temperature(s) °C and Other Remarks:							

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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		Lab PIV: Whitmire, Cheyenne R		Carrier Tracking No(s):						
Client Contact: Ben Rothschild		E-Mail: cheyenne.whitmire@testamericainc.com		COC No: 400-56525-24537.1						
Company: Alabama Power General Test Laboratory		Due Date Requested:		Page: Page 3 of 3						
Address: 744 County Rd 87 GSC #8		TAT Requested (days): Routine		Job #: 400-129141						
City: Callera		PO #:		Preservation Codes:						
State, Zip: AL, 35040		W/O #:		M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecalhydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA Y - EDA Z - other (specify)						
Phone: 205-664-6121 (Tel)		Project #:		Other:						
Email: sgcopella@southernco.com		CCR:								
Site: Barry Ash Pond (5)		SSOW#:								
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (Newwater, Sewer, On-wastewater, Effluent, Acid)	Field Filtered Sample (Yes or No)	Field Perform (MS/MSD) (Yes or No)	9316, Ra226, 9320, Ra228, Ra228Ra228, GPC	Total Number of Containers	Special Instructions/Note:
AW26468		10/19/16	0940	G	Water			X	1	MMW-4
AW26469		10/19/16	0940	G	Water			X	1	MMW-4 Dup (Sample Duplicate)
AW26470		10/19/16	1043	G	Water			X	1	MMW-3
AW26471		10/19/16	1135	G	Water			X	1	MMW-2
AW26472		10/19/16	1228	G	Water			X	1	MMW-10
AW26473		10/19/16	1321	G	Water			X	1	MMW-16
AW26474		10/19/16	1340	G	Water			X	1	FB-2 (Field 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)										
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:		Received by:		Date/Time:		Company
Relinquished by: Sarah Copeland		Date: 10/25/16; 0650		APC		Received by: [Signature]		Date/Time: 10/25/16 1530		Company
Relinquished by:		Date/Time:		Company		Relinquished by:		Date/Time:		Company
Relinquished by:		Date/Time:		Company		Relinquished by:		Date/Time:		Company
Custody Seals Intact:		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:						
Δ Yes Δ No										



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-129141-1
SDG Number: Barry Ash Pond (5)

Login Number: 129141

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 Barry

TestAmerica Job ID: 400-129141-1
 SDG: Barry Ash Pond (5)

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
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	12-31-16
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	06-30-17
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	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

* Certification renewal pending - certification considered valid.

Certification Summary

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

TestAmerica Job ID: 400-129141-1
SDG: Barry Ash Pond (5)

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 : WMWBARAP_1073

Project/Site : Barry Ash Pond
Bucks, AL 36512

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:

Case Narrative



Anions

Barry Ash Pond

WMWBARAP_1073

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. There are no anion results reported for this project due to instrumentation issues and hold time exceedance. All samples were re-sampled and outsourced to Test America, Pensacola for analysis. All results will be reported in project WMWBARAP_1083.



Metals ICP

Barry Ash Pond

WMWBARAP_1073

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>
AX02658	20170329C	WMWBARAP_1073
AX02659	20170329C	WMWBARAP_1073
AX02660	20170329C	WMWBARAP_1073
AX02661	20170329C	WMWBARAP_1073
AX02662	20170329C	WMWBARAP_1073
AX02663	20170329C	WMWBARAP_1073
AX02664	20170303B	WMWBARAP_1073
AX02665	20170303B	WMWBARAP_1073
AX02666	20170303B	WMWBARAP_1073
AX02667	20170303B	WMWBARAP_1073
AX02668	20170303B	WMWBARAP_1073
AX02669	20170303B	WMWBARAP_1073
AX02670	20170303B	WMWBARAP_1073
AX02706	20170303B	WMWBARAP_1073
AX02707	20170303B	WMWBARAP_1073
AX02708	20170303B	WMWBARAP_1073
AX02709	20170329B	WMWBARAP_1073
AX02710	20170329B	WMWBARAP_1073
AX02711	20170329B	WMWBARAP_1073
AX02712	20170329B	WMWBARAP_1073
AX02713	20170329B	WMWBARAP_1073

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 set to 0.2ppm in batches 20170329C and 20170329B.
- 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 set to 0.2ppm in batches 20170329C and 20170329B.
- 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 read backs 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:

<u>Analyte</u>	<u>Sample ID</u>
Calcium	AX02713

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 straight 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. Batch 20170303B was analyzed at a 2x dilution to compensate for potential matrix effects.

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



Sample ID	Analyte	Dilution Factor
AX02713	Calcium	x10
AX02713MS	Calcium	x10
AX02731MSD	Calcium	x10

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



Metals ICPMS

Barry Ash Pond

WMWBARAP_1073

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>
AX02658	587253	WMWBARAP_1073
AX02659	587254	WMWBARAP_1073
AX02660	587254	WMWBARAP_1073
AX02661	587254	WMWBARAP_1073
AX02662	587254	WMWBARAP_1073
AX02663	587254	WMWBARAP_1073
AX02664	587254	WMWBARAP_1073
AX02665	587254	WMWBARAP_1073
AX02666	587254	WMWBARAP_1073
AX02667	587254	WMWBARAP_1073
AX02668	587254	WMWBARAP_1073
AX02669	587255	WMWBARAP_1073
AX02670	587255	WMWBARAP_1073
AX02706	587255	WMWBARAP_1073
AX02707	587255	WMWBARAP_1073
AX02708	587255	WMWBARAP_1073
AX02709	587255	WMWBARAP_1073
AX02710	587255	WMWBARAP_1073
AX02711	587255	WMWBARAP_1073
AX02712	587255	WMWBARAP_1073
AX02713	587255	WMWBARAP_1073

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, and 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

Barry Ash Pond

WMWBARAP_1073

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>
AX02658	586866	WMWBARAP_1073
AX02659	586866	WMWBARAP_1073
AX02660	586866	WMWBARAP_1073
AX02661	586866	WMWBARAP_1073
AX02662	586866	WMWBARAP_1073
AX02663	586866	WMWBARAP_1073
AX02664	586866	WMWBARAP_1073
AX02665	586867	WMWBARAP_1073
AX02666	586867	WMWBARAP_1073
AX02667	586867	WMWBARAP_1073
AX02668	586867	WMWBARAP_1073
AX02669	586867	WMWBARAP_1073
AX02670	586867	WMWBARAP_1073
AX02706	586867	WMWBARAP_1073
AX02707	586867	WMWBARAP_1073
AX02708	586867	WMWBARAP_1073
AX02709	586867	WMWBARAP_1073
AX02710	586868	WMWBARAP_1073
AX02711	586868	WMWBARAP_1073
AX02712	586868	WMWBARAP_1073
AX02713	586868	WMWBARAP_1073

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

Barry Ash Pond

WMWBARAP_1073

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>
AX02658	586589	WMWBARAP_1073
AX02659	586589	WMWBARAP_1073
AX02660	586589	WMWBARAP_1073
AX02661	586589	WMWBARAP_1073
AX02662	586589	WMWBARAP_1073
AX02663	586589	WMWBARAP_1073
AX02664	586589	WMWBARAP_1073
AX02665	586616	WMWBARAP_1073
AX02666	586616	WMWBARAP_1073
AX02667	586616	WMWBARAP_1073
AX02668	586616	WMWBARAP_1073
AX02669	586616	WMWBARAP_1073
AX02670	586616	WMWBARAP_1073
AX02706	586616	WMWBARAP_1073
AX02707	586616	WMWBARAP_1073
AX02708	586616	WMWBARAP_1073
AX02709	586616	WMWBARAP_1073
AX02710	586617	WMWBARAP_1073
AX02711	586617	WMWBARAP_1073
AX02712	586617	WMWBARAP_1073
AX02713	586617	WMWBARAP_1073

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.

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 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 AX02661, AX02666 & AX02712 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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AX02658

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/20/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	J 0.000860	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	0.0231	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	3/29/2017	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	3/29/2017	EPA 200.7		1	0.1	0.5	0.946	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	0.0127	mg/L
* Chromium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/9/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/29/2017	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	2/15/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	2/6/2017	SM 2540C		1		25	40.7	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AX02658

Sample	Analysis	Units	MB				LFB			Rec		Prec	
			MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	
AX02658	Thallium, Total	mg/L	0.0000468	0.00044	0.100	0.106	0.103	0.101	0.085 to 0.115	106	70 to 130	2.87	20
AX02658	Beryllium, Total	mg/L	0.0000418	0.00132	0.100	0.104	0.100	0.108	0.085 to 0.115	104	70 to 130	3.92	20
AX02658	Chromium, Total	mg/L	0.0000258	0.0044	0.100	0.0990	0.0963	0.0978	0.085 to 0.115	99.0	70 to 130	2.76	20
AX02663	Boron, Total	mg/L	-0.000684	0.044	1.00	0.980	0.981	0.963	0.85 to 1.15	98.0	70 to 130	0.117	20
AX02658	Lead, Total	mg/L	0.0000118	0.0022	0.100	0.104	0.102	0.104	0.085 to 0.115	104	70 to 130	1.94	20
AX02658	Molybdenum, Total	mg/L	0.0000185	0.0044	0.100	0.0905	0.0889	0.0914	0.085 to 0.115	90.5	70 to 130	1.78	20
AX02663	Lithium, Total	mg/L	-0.00000824	0.022	0.20	0.216	0.216	0.202	0.17 to 0.23	108	70 to 130	0.247	20
AX02658	Antimony, Total	mg/L	0.000144	0.00132	0.100	0.0892	0.0872	0.0926	0.085 to 0.115	88.3	70 to 130	2.27	20
AX02658	Arsenic, Total	mg/L	0.0000218	0.0022	0.100	0.0959	0.0932	0.0989	0.085 to 0.115	95.9	70 to 130	2.86	20
AX02664	Mercury, Total by CVAA	mg/L	0.000157	0.0005	0.004	0.00382	0.00372	0.00390	0.0034 to 0.0046	95.5	70 to 130	2.64	20
AX02658	Cadmium, Total	mg/L	0.00000945	0.00044	0.100	0.0929	0.0903	0.0960	0.085 to 0.115	92.9	70 to 130	2.84	20
AX02663	Calcium, Total	mg/L	-0.00712	0.22	5.00	7.90	7.89	4.95	4.25 to 5.75	99.2	70 to 130	0.138	20
AX02658	Barium, Total	mg/L	0.00000530	0.0044	0.100	0.114	0.111	0.0937	0.085 to 0.115	90.9	70 to 130	2.67	20
AX02658	Cobalt, Total	mg/L	0.00000652	0.0044	0.100	0.111	0.109	0.0963	0.085 to 0.115	98.3	70 to 130	1.82	20
AX02658	Selenium, Total	mg/L	0.0000549	0.0044	0.100	0.0941	0.0908	0.0984	0.085 to 0.115	94.1	70 to 130	3.57	20

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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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AX02658

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX02664	Solids, Dissolved	mg/L	-4.0	25			272	52.0	40 to 60		0.369 5

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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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 (205) 664-6032 or 6171
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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AX02659

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/20/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	J 0.000637	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	0.0306	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	3/29/2017	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	3/29/2017	EPA 200.7		1	0.1	0.5	1.04	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/9/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/29/2017	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	2/15/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	2/6/2017	SM 2540C		1		25	36.7	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AX02659

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX02668	Antimony, Total	mg/L	0.000144	0.00132	0.100	0.0888	0.0848	0.0926	0.085 to 0.115		88.1	70 to 130	4.61	20
AX02668	Arsenic, Total	mg/L	0.0000218	0.0022	0.100	0.136	0.130	0.0989	0.085 to 0.115		95.2	70 to 130	4.51	20
AX02663	Calcium, Total	mg/L	-0.00712	0.22	5.00	7.90	7.89	4.95	4.25 to 5.75		99.2	70 to 130	0.138	20
AX02668	Selenium, Total	mg/L	0.0000549	0.0044	0.100	0.0948	0.0895	0.0984	0.085 to 0.115		94.8	70 to 130	5.75	20
AX02664	Mercury, Total by CVAA	mg/L	0.000157	0.0005	0.004	0.00382	0.00372	0.00390	0.0034 to 0.0046		95.5	70 to 130	2.64	20
AX02668	Cobalt, Total	mg/L	0.00000652	0.0044	0.100	0.0986	0.0942	0.0963	0.085 to 0.115		98.6	70 to 130	4.56	20
AX02668	Thallium, Total	mg/L	0.0000468	0.00044	0.100	0.104	0.0984	0.101	0.085 to 0.115		104	70 to 130	5.53	20
AX02663	Boron, Total	mg/L	-0.000684	0.044	1.00	0.980	0.981	0.963	0.85 to 1.15		98.0	70 to 130	0.117	20
AX02668	Barium, Total	mg/L	0.00000530	0.0044	0.100	0.219	0.214	0.0937	0.085 to 0.115		85.0	70 to 130	2.31	20
AX02668	Cadmium, Total	mg/L	0.00000945	0.00044	0.100	0.0916	0.0876	0.0960	0.085 to 0.115		91.6	70 to 130	4.46	20
AX02668	Lead, Total	mg/L	0.0000118	0.0022	0.100	0.103	0.0984	0.104	0.085 to 0.115		103	70 to 130	4.57	20
AX02668	Molybdenum, Total	mg/L	0.0000185	0.0044	0.100	0.0911	0.0863	0.0914	0.085 to 0.115		91.1	70 to 130	5.41	20
AX02663	Lithium, Total	mg/L	-0.00000824	0.022	0.20	0.216	0.216	0.202	0.17 to 0.23		108	70 to 130	0.247	20
AX02668	Beryllium, Total	mg/L	0.0000418	0.00132	0.100	0.0999	0.0937	0.108	0.085 to 0.115		99.9	70 to 130	6.40	20
AX02668	Chromium, Total	mg/L	0.0000258	0.0044	0.100	0.100	0.0954	0.0978	0.085 to 0.115		100	70 to 130	4.71	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AX02659

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX02664	Solids, Dissolved	mg/L	-4.0	25			272	52.0	40 to 60		0.369 5

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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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AX02660

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/20/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	J 0.000687	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	0.0669	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	0.211	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	3/29/2017	EPA 200.7		1	0.02	0.1	1.84	mg/L
* Calcium, Total	HRG	3/29/2017	EPA 200.7		1	0.1	0.5	38.5	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	J 0.00556	mg/L
* Mercury, Total by CVAA	ABB	2/9/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/29/2017	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	2/15/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	2/6/2017	SM 2540C		1		50	422	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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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AX02660

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX02668	Antimony, Total	mg/L	0.000144	0.00132	0.100	0.0888	0.0848	0.0926	0.085 to 0.115	88.1	70 to 130	4.61	20	
AX02663	Calcium, Total	mg/L	-0.00712	0.22	5.00	7.90	7.89	4.95	4.25 to 5.75	99.2	70 to 130	0.138	20	
AX02668	Arsenic, Total	mg/L	0.0000218	0.0022	0.100	0.136	0.130	0.0989	0.085 to 0.115	95.2	70 to 130	4.51	20	
AX02668	Selenium, Total	mg/L	0.0000549	0.0044	0.100	0.0948	0.0895	0.0984	0.085 to 0.115	94.8	70 to 130	5.75	20	
AX02664	Mercury, Total by CVAA	mg/L	0.000157	0.0005	0.004	0.00382	0.00372	0.00390	0.0034 to 0.0046	95.5	70 to 130	2.64	20	
AX02668	Cobalt, Total	mg/L	0.00000652	0.0044	0.100	0.0986	0.0942	0.0963	0.085 to 0.115	98.6	70 to 130	4.56	20	
AX02668	Thallium, Total	mg/L	0.0000468	0.00044	0.100	0.104	0.0984	0.101	0.085 to 0.115	104	70 to 130	5.53	20	
AX02663	Lithium, Total	mg/L	-0.00000824	0.022	0.20	0.216	0.216	0.202	0.17 to 0.23	108	70 to 130	0.247	20	
AX02668	Beryllium, Total	mg/L	0.0000418	0.00132	0.100	0.0999	0.0937	0.108	0.085 to 0.115	99.9	70 to 130	6.40	20	
AX02668	Chromium, Total	mg/L	0.0000258	0.0044	0.100	0.100	0.0954	0.0978	0.085 to 0.115	100	70 to 130	4.71	20	
AX02663	Boron, Total	mg/L	-0.000684	0.044	1.00	0.980	0.981	0.963	0.85 to 1.15	98.0	70 to 130	0.117	20	
AX02668	Barium, Total	mg/L	0.00000530	0.0044	0.100	0.219	0.214	0.0937	0.085 to 0.115	85.0	70 to 130	2.31	20	
AX02668	Cadmium, Total	mg/L	0.00000945	0.00044	0.100	0.0916	0.0876	0.0960	0.085 to 0.115	91.6	70 to 130	4.46	20	
AX02668	Lead, Total	mg/L	0.0000118	0.0022	0.100	0.103	0.0984	0.104	0.085 to 0.115	103	70 to 130	4.57	20	
AX02668	Molybdenum, Total	mg/L	0.0000185	0.0044	0.100	0.0911	0.0863	0.0914	0.085 to 0.115	91.1	70 to 130	5.41	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AX02660

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX02664	Solids, Dissolved	mg/L	-4.0	25			272	52.0	40 to 60	0.369	5

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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: WMWBARAPFB
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX02661

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/20/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	J 0.000799	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	3/29/2017	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	3/29/2017	EPA 200.7		1	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/9/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/29/2017	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	2/15/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	2/6/2017	SM 2540C		1		25	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: WMWBARAPFB
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX02661

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX02668	Antimony, Total	mg/L	0.000144	0.00132	0.100	0.0888	0.0848	0.0926	0.085 to 0.115		88.1	70 to 130	4.61	20
AX02668	Arsenic, Total	mg/L	0.0000218	0.0022	0.100	0.136	0.130	0.0989	0.085 to 0.115		95.2	70 to 130	4.51	20
AX02663	Calcium, Total	mg/L	-0.00712	0.22	5.00	7.90	7.89	4.95	4.25 to 5.75		99.2	70 to 130	0.138	20
AX02668	Selenium, Total	mg/L	0.0000549	0.0044	0.100	0.0948	0.0895	0.0984	0.085 to 0.115		94.8	70 to 130	5.75	20
AX02664	Mercury, Total by CVAA	mg/L	0.000157	0.0005	0.004	0.00382	0.00372	0.00390	0.0034 to 0.0046		95.5	70 to 130	2.64	20
AX02668	Cobalt, Total	mg/L	0.00000652	0.0044	0.100	0.0986	0.0942	0.0963	0.085 to 0.115		98.6	70 to 130	4.56	20
AX02668	Thallium, Total	mg/L	0.0000468	0.00044	0.100	0.104	0.0984	0.101	0.085 to 0.115		104	70 to 130	5.53	20
AX02663	Boron, Total	mg/L	-0.000684	0.044	1.00	0.980	0.981	0.963	0.85 to 1.15		98.0	70 to 130	0.117	20
AX02668	Barium, Total	mg/L	0.00000530	0.0044	0.100	0.219	0.214	0.0937	0.085 to 0.115		85.0	70 to 130	2.31	20
AX02668	Cadmium, Total	mg/L	0.00000945	0.00044	0.100	0.0916	0.0876	0.0960	0.085 to 0.115		91.6	70 to 130	4.46	20
AX02668	Lead, Total	mg/L	0.0000118	0.0022	0.100	0.103	0.0984	0.104	0.085 to 0.115		103	70 to 130	4.57	20
AX02668	Molybdenum, Total	mg/L	0.0000185	0.0044	0.100	0.0911	0.0863	0.0914	0.085 to 0.115		91.1	70 to 130	5.41	20
AX02663	Lithium, Total	mg/L	-0.00000824	0.022	0.20	0.216	0.216	0.202	0.17 to 0.23		108	70 to 130	0.247	20
AX02668	Beryllium, Total	mg/L	0.0000418	0.00132	0.100	0.0999	0.0937	0.108	0.085 to 0.115		99.9	70 to 130	6.40	20
AX02668	Chromium, Total	mg/L	0.0000258	0.0044	0.100	0.100	0.0954	0.0978	0.085 to 0.115		100	70 to 130	4.71	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: WMWBARAPFB
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX02661

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec		
			Limit	Limit			Duplicate	LFB	Limit	Limit		
AX02664	Solids, Dissolved	mg/L	-4.0	25			272	52.0	40 to 60		0.369	5

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Laboratory certification ID: E571114

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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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AX02662

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/20/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	J 0.000739	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	J 0.00185	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	0.0228	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	3/29/2017	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	3/29/2017	EPA 200.7		1	0.1	0.5	2.94	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	J 0.00647	mg/L
* Chromium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/9/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/29/2017	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	2/15/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	2/6/2017	SM 2540C		1		25	47.3	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AX02662

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX02668	Antimony, Total	mg/L	0.000144	0.00132	0.100	0.0888	0.0848	0.0926	0.085 to 0.115	88.1	70 to 130	4.61	20
AX02668	Arsenic, Total	mg/L	0.0000218	0.0022	0.100	0.136	0.130	0.0989	0.085 to 0.115	95.2	70 to 130	4.51	20
AX02663	Calcium, Total	mg/L	-0.00712	0.22	5.00	7.90	7.89	4.95	4.25 to 5.75	99.2	70 to 130	0.138	20
AX02668	Selenium, Total	mg/L	0.0000549	0.0044	0.100	0.0948	0.0895	0.0984	0.085 to 0.115	94.8	70 to 130	5.75	20
AX02664	Mercury, Total by CVAA	mg/L	0.000157	0.0005	0.004	0.00382	0.00372	0.00390	0.0034 to 0.0046	95.5	70 to 130	2.64	20
AX02668	Cobalt, Total	mg/L	0.00000652	0.0044	0.100	0.0986	0.0942	0.0963	0.085 to 0.115	98.6	70 to 130	4.56	20
AX02668	Thallium, Total	mg/L	0.0000468	0.00044	0.100	0.104	0.0984	0.101	0.085 to 0.115	104	70 to 130	5.53	20
AX02663	Boron, Total	mg/L	-0.000684	0.044	1.00	0.980	0.981	0.963	0.85 to 1.15	98.0	70 to 130	0.117	20
AX02668	Barium, Total	mg/L	0.00000530	0.0044	0.100	0.219	0.214	0.0937	0.085 to 0.115	85.0	70 to 130	2.31	20
AX02668	Cadmium, Total	mg/L	0.00000945	0.00044	0.100	0.0916	0.0876	0.0960	0.085 to 0.115	91.6	70 to 130	4.46	20
AX02668	Lead, Total	mg/L	0.0000118	0.0022	0.100	0.103	0.0984	0.104	0.085 to 0.115	103	70 to 130	4.57	20
AX02668	Molybdenum, Total	mg/L	0.0000185	0.0044	0.100	0.0911	0.0863	0.0914	0.085 to 0.115	91.1	70 to 130	5.41	20
AX02663	Lithium, Total	mg/L	-0.00000824	0.022	0.20	0.216	0.216	0.202	0.17 to 0.23	108	70 to 130	0.247	20
AX02668	Beryllium, Total	mg/L	0.0000418	0.00132	0.100	0.0999	0.0937	0.108	0.085 to 0.115	99.9	70 to 130	6.40	20
AX02668	Chromium, Total	mg/L	0.0000258	0.0044	0.100	0.100	0.0954	0.0978	0.085 to 0.115	100	70 to 130	4.71	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AX02662

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX02664	Solids, Dissolved	mg/L	-4.0	25			272	52.0	40 to 60		0.369 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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-2 Dup

Laboratory ID Number: AX02663

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/20/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	J 0.000771	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	J 0.00186	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	0.0215	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	3/29/2017	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	3/29/2017	EPA 200.7		1	0.1	0.5	2.95	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	J 0.00633	mg/L
* Chromium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/9/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/29/2017	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	2/15/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	2/6/2017	SM 2540C		1		25	44.0	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-2 Dup

Laboratory ID Number: AX02663

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX02668	Antimony, Total	mg/L	0.000144	0.00132	0.100	0.0888	0.0848	0.0926	0.085 to 0.115	88.1	70 to 130	4.61	20
AX02668	Arsenic, Total	mg/L	0.0000218	0.0022	0.100	0.136	0.130	0.0989	0.085 to 0.115	95.2	70 to 130	4.51	20
AX02663	Calcium, Total	mg/L	-0.00712	0.22	5.00	7.90	7.89	4.95	4.25 to 5.75	99.2	70 to 130	0.138	20
AX02668	Selenium, Total	mg/L	0.0000549	0.0044	0.100	0.0948	0.0895	0.0984	0.085 to 0.115	94.8	70 to 130	5.75	20
AX02664	Mercury, Total by CVAA	mg/L	0.000157	0.0005	0.004	0.00382	0.00372	0.00390	0.0034 to 0.0046	95.5	70 to 130	2.64	20
AX02668	Cobalt, Total	mg/L	0.00000652	0.0044	0.100	0.0986	0.0942	0.0963	0.085 to 0.115	98.6	70 to 130	4.56	20
AX02668	Thallium, Total	mg/L	0.0000468	0.00044	0.100	0.104	0.0984	0.101	0.085 to 0.115	104	70 to 130	5.53	20
AX02663	Boron, Total	mg/L	-0.000684	0.044	1.00	0.980	0.981	0.963	0.85 to 1.15	98.0	70 to 130	0.117	20
AX02668	Barium, Total	mg/L	0.00000530	0.0044	0.100	0.219	0.214	0.0937	0.085 to 0.115	85.0	70 to 130	2.31	20
AX02668	Cadmium, Total	mg/L	0.00000945	0.00044	0.100	0.0916	0.0876	0.0960	0.085 to 0.115	91.6	70 to 130	4.46	20
AX02668	Lead, Total	mg/L	0.0000118	0.0022	0.100	0.103	0.0984	0.104	0.085 to 0.115	103	70 to 130	4.57	20
AX02668	Molybdenum, Total	mg/L	0.0000185	0.0044	0.100	0.0911	0.0863	0.0914	0.085 to 0.115	91.1	70 to 130	5.41	20
AX02663	Lithium, Total	mg/L	-0.00000824	0.022	0.20	0.216	0.216	0.202	0.17 to 0.23	108	70 to 130	0.247	20
AX02668	Beryllium, Total	mg/L	0.0000418	0.00132	0.100	0.0999	0.0937	0.108	0.085 to 0.115	99.9	70 to 130	6.40	20
AX02668	Chromium, Total	mg/L	0.0000258	0.0044	0.100	0.100	0.0954	0.0978	0.085 to 0.115	100	70 to 130	4.71	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-2 Dup

Laboratory ID Number: AX02663

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX02664	Solids, Dissolved	mg/L	-4.0	25			272	52.0	40 to 60	0.369	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AX02664

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/20/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	J 0.000769	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	0.0102	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	0.0750	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	3/3/2017	EPA 200.7		2	0.02	0.10	1.51	mg/L
* Calcium, Total	HRG	3/3/2017	EPA 200.7		2	0.1	0.50	13.5	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	0.0170	mg/L
* Chromium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/9/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/3/2017	EPA 200.7		2	0.01	0.050	U Not Detected	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	2/15/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	2/6/2017	SM 2540C		1		25	270	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AX02664

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX02668	Antimony, Total	mg/L	0.000144	0.00132	0.100	0.0888	0.0848	0.0926	0.085 to 0.115	88.1	70 to 130	4.61	20	
AX02708	Boron, Total	mg/L	0.000147	0.044	1.00	1.02	1.04	0.970	0.85 to 1.15	95.9	70 to 130	2.46	20	
AX02668	Arsenic, Total	mg/L	0.0000218	0.0022	0.100	0.136	0.130	0.0989	0.085 to 0.115	95.2	70 to 130	4.51	20	
AX02668	Selenium, Total	mg/L	0.0000549	0.0044	0.100	0.0948	0.0895	0.0984	0.085 to 0.115	94.8	70 to 130	5.75	20	
AX02664	Mercury, Total by CVAA	mg/L	0.000157	0.0005	0.004	0.00382	0.00372	0.00390	0.0034 to 0.0046	95.5	70 to 130	2.64	20	
AX02668	Cobalt, Total	mg/L	0.00000652	0.0044	0.100	0.0986	0.0942	0.0963	0.085 to 0.115	98.6	70 to 130	4.56	20	
AX02668	Thallium, Total	mg/L	0.0000468	0.00044	0.100	0.104	0.0984	0.101	0.085 to 0.115	104	70 to 130	5.53	20	
AX02668	Barium, Total	mg/L	0.00000530	0.0044	0.100	0.219	0.214	0.0937	0.085 to 0.115	85.0	70 to 130	2.31	20	
AX02668	Cadmium, Total	mg/L	0.00000945	0.00044	0.100	0.0916	0.0876	0.0960	0.085 to 0.115	91.6	70 to 130	4.46	20	
AX02668	Lead, Total	mg/L	0.0000118	0.0022	0.100	0.103	0.0984	0.104	0.085 to 0.115	103	70 to 130	4.57	20	
AX02668	Molybdenum, Total	mg/L	0.0000185	0.0044	0.100	0.0911	0.0863	0.0914	0.085 to 0.115	91.1	70 to 130	5.41	20	
AX02708	Calcium, Total	mg/L	-0.000906	0.22	5.00	25.3	25.5	4.83	4.25 to 5.75	87.3	70 to 130	1.04	20	
AX02708	Lithium, Total	mg/L	-0.0000533	0.022	0.20	0.204	0.207	0.188	0.17 to 0.23	102	70 to 130	1.53	20	
AX02668	Beryllium, Total	mg/L	0.0000418	0.00132	0.100	0.0999	0.0937	0.108	0.085 to 0.115	99.9	70 to 130	6.40	20	
AX02668	Chromium, Total	mg/L	0.0000258	0.0044	0.100	0.100	0.0954	0.0978	0.085 to 0.115	100	70 to 130	4.71	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AX02664

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec		
			Limit	Limit			Duplicate	LFB	Limit	Limit		
AX02664	Solids, Dissolved	mg/L	-4.0	25			272	52.0	40 to 60		0.369	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AX02665

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/20/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	J 0.000746	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	0.0164	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	0.0427	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	3/3/2017	EPA 200.7		2	0.02	0.10	J 0.0536	mg/L
* Calcium, Total	HRG	3/3/2017	EPA 200.7		2	0.1	0.50	6.77	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	0.0250	mg/L
* Chromium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/9/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/3/2017	EPA 200.7		2	0.01	0.050	U Not Detected	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	2/15/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	2/6/2017	SM 2540C		1		25	166	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AX02665

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX02668	Antimony, Total	mg/L	0.000144	0.00132	0.100	0.0888	0.0848	0.0926	0.085 to 0.115	88.1	70 to 130	4.61	20	
AX02708	Boron, Total	mg/L	0.000147	0.044	1.00	1.02	1.04	0.970	0.85 to 1.15	95.9	70 to 130	2.46	20	
AX02668	Arsenic, Total	mg/L	0.0000218	0.0022	0.100	0.136	0.130	0.0989	0.085 to 0.115	95.2	70 to 130	4.51	20	
AX02709	Mercury, Total by CVAA	mg/L	0.000154	0.0005	0.004	0.00384	0.00375	0.00395	0.0034 to 0.0046	96.0	70 to 130	2.51	20	
AX02668	Selenium, Total	mg/L	0.0000549	0.0044	0.100	0.0948	0.0895	0.0984	0.085 to 0.115	94.8	70 to 130	5.75	20	
AX02668	Cobalt, Total	mg/L	0.00000652	0.0044	0.100	0.0986	0.0942	0.0963	0.085 to 0.115	98.6	70 to 130	4.56	20	
AX02668	Thallium, Total	mg/L	0.0000468	0.00044	0.100	0.104	0.0984	0.101	0.085 to 0.115	104	70 to 130	5.53	20	
AX02668	Beryllium, Total	mg/L	0.0000418	0.00132	0.100	0.0999	0.0937	0.108	0.085 to 0.115	99.9	70 to 130	6.40	20	
AX02668	Chromium, Total	mg/L	0.0000258	0.0044	0.100	0.100	0.0954	0.0978	0.085 to 0.115	100	70 to 130	4.71	20	
AX02668	Barium, Total	mg/L	0.00000530	0.0044	0.100	0.219	0.214	0.0937	0.085 to 0.115	85.0	70 to 130	2.31	20	
AX02668	Cadmium, Total	mg/L	0.00000945	0.00044	0.100	0.0916	0.0876	0.0960	0.085 to 0.115	91.6	70 to 130	4.46	20	
AX02668	Lead, Total	mg/L	0.0000118	0.0022	0.100	0.103	0.0984	0.104	0.085 to 0.115	103	70 to 130	4.57	20	
AX02668	Molybdenum, Total	mg/L	0.0000185	0.0044	0.100	0.0911	0.0863	0.0914	0.085 to 0.115	91.1	70 to 130	5.41	20	
AX02708	Calcium, Total	mg/L	-0.000906	0.22	5.00	25.3	25.5	4.83	4.25 to 5.75	87.3	70 to 130	1.04	20	
AX02708	Lithium, Total	mg/L	-0.0000533	0.022	0.20	0.204	0.207	0.188	0.17 to 0.23	102	70 to 130	1.53	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AX02665

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX02709	Solids, Dissolved	mg/L	7.00	25			387	50.0	40 to 60	0.514	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
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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: WMWBARAPEB
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AX02666

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/20/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	J 0.000736	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	3/3/2017	EPA 200.7		2	0.02	0.10	U Not Detected	mg/L
* Calcium, Total	HRG	3/3/2017	EPA 200.7		2	0.1	0.50	U Not Detected	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/9/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/3/2017	EPA 200.7		2	0.01	0.050	U Not Detected	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	2/15/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	2/6/2017	SM 2540C		1		25	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: WMWBARAPEB
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AX02666

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	MB					Limit	Rec	Limit	Prec		
AX02668	Antimony, Total	mg/L	0.000144	0.00132	0.100	0.0888	0.0848	0.0926	0.085 to 0.115	88.1	70 to 130	4.61	20	
AX02708	Boron, Total	mg/L	0.000147	0.044	1.00	1.02	1.04	0.970	0.85 to 1.15	95.9	70 to 130	2.46	20	
AX02668	Arsenic, Total	mg/L	0.0000218	0.0022	0.100	0.136	0.130	0.0989	0.085 to 0.115	95.2	70 to 130	4.51	20	
AX02709	Mercury, Total by CVAA	mg/L	0.000154	0.0005	0.004	0.00384	0.00375	0.00395	0.0034 to 0.0046	96.0	70 to 130	2.51	20	
AX02668	Selenium, Total	mg/L	0.0000549	0.0044	0.100	0.0948	0.0895	0.0984	0.085 to 0.115	94.8	70 to 130	5.75	20	
AX02668	Cobalt, Total	mg/L	0.00000652	0.0044	0.100	0.0986	0.0942	0.0963	0.085 to 0.115	98.6	70 to 130	4.56	20	
AX02668	Thallium, Total	mg/L	0.0000468	0.00044	0.100	0.104	0.0984	0.101	0.085 to 0.115	104	70 to 130	5.53	20	
AX02668	Beryllium, Total	mg/L	0.0000418	0.00132	0.100	0.0999	0.0937	0.108	0.085 to 0.115	99.9	70 to 130	6.40	20	
AX02668	Chromium, Total	mg/L	0.0000258	0.0044	0.100	0.100	0.0954	0.0978	0.085 to 0.115	100	70 to 130	4.71	20	
AX02668	Barium, Total	mg/L	0.00000530	0.0044	0.100	0.219	0.214	0.0937	0.085 to 0.115	85.0	70 to 130	2.31	20	
AX02668	Cadmium, Total	mg/L	0.00000945	0.00044	0.100	0.0916	0.0876	0.0960	0.085 to 0.115	91.6	70 to 130	4.46	20	
AX02668	Lead, Total	mg/L	0.0000118	0.0022	0.100	0.103	0.0984	0.104	0.085 to 0.115	103	70 to 130	4.57	20	
AX02668	Molybdenum, Total	mg/L	0.0000185	0.0044	0.100	0.0911	0.0863	0.0914	0.085 to 0.115	91.1	70 to 130	5.41	20	
AX02708	Calcium, Total	mg/L	-0.000906	0.22	5.00	25.3	25.5	4.83	4.25 to 5.75	87.3	70 to 130	1.04	20	
AX02708	Lithium, Total	mg/L	-0.0000533	0.022	0.20	0.204	0.207	0.188	0.17 to 0.23	102	70 to 130	1.53	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: WMWBARAPEB
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AX02666

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX02709	Solids, Dissolved	mg/L	7.00	25			387	50.0	40 to 60	0.514	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AX02667

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/20/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	J 0.000765	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	0.0264	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	0.125	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	3/3/2017	EPA 200.7		2	0.02	0.10	J 0.0518	mg/L
* Calcium, Total	HRG	3/3/2017	EPA 200.7		2	0.1	0.50	13.7	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/9/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/3/2017	EPA 200.7		2	0.01	0.050	U Not Detected	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	2/15/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	2/6/2017	SM 2540C		1		25	266	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AX02667

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX02668	Antimony, Total	mg/L	0.000144	0.00132	0.100	0.0888	0.0848	0.0926	0.085 to 0.115	88.1	70 to 130	4.61	20	
AX02668	Arsenic, Total	mg/L	0.0000218	0.0022	0.100	0.136	0.130	0.0989	0.085 to 0.115	95.2	70 to 130	4.51	20	
AX02708	Boron, Total	mg/L	0.000147	0.044	1.00	1.02	1.04	0.970	0.85 to 1.15	95.9	70 to 130	2.46	20	
AX02709	Mercury, Total by CVAA	mg/L	0.000154	0.0005	0.004	0.00384	0.00375	0.00395	0.0034 to 0.0046	96.0	70 to 130	2.51	20	
AX02668	Selenium, Total	mg/L	0.0000549	0.0044	0.100	0.0948	0.0895	0.0984	0.085 to 0.115	94.8	70 to 130	5.75	20	
AX02668	Cobalt, Total	mg/L	0.00000652	0.0044	0.100	0.0986	0.0942	0.0963	0.085 to 0.115	98.6	70 to 130	4.56	20	
AX02668	Thallium, Total	mg/L	0.0000468	0.00044	0.100	0.104	0.0984	0.101	0.085 to 0.115	104	70 to 130	5.53	20	
AX02668	Beryllium, Total	mg/L	0.0000418	0.00132	0.100	0.0999	0.0937	0.108	0.085 to 0.115	99.9	70 to 130	6.40	20	
AX02668	Chromium, Total	mg/L	0.0000258	0.0044	0.100	0.100	0.0954	0.0978	0.085 to 0.115	100	70 to 130	4.71	20	
AX02668	Barium, Total	mg/L	0.00000530	0.0044	0.100	0.219	0.214	0.0937	0.085 to 0.115	85.0	70 to 130	2.31	20	
AX02668	Cadmium, Total	mg/L	0.00000945	0.00044	0.100	0.0916	0.0876	0.0960	0.085 to 0.115	91.6	70 to 130	4.46	20	
AX02668	Lead, Total	mg/L	0.0000118	0.0022	0.100	0.103	0.0984	0.104	0.085 to 0.115	103	70 to 130	4.57	20	
AX02668	Molybdenum, Total	mg/L	0.0000185	0.0044	0.100	0.0911	0.0863	0.0914	0.085 to 0.115	91.1	70 to 130	5.41	20	
AX02708	Calcium, Total	mg/L	-0.000906	0.22	5.00	25.3	25.5	4.83	4.25 to 5.75	87.3	70 to 130	1.04	20	
AX02708	Lithium, Total	mg/L	-0.0000533	0.022	0.20	0.204	0.207	0.188	0.17 to 0.23	102	70 to 130	1.53	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AX02667

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX02709	Solids, Dissolved	mg/L	7.00	25			387	50.0	40 to 60		0.514 5

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

Comments:

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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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AX02668

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/20/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	J 0.000740	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	0.0408	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	0.134	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	3/3/2017	EPA 200.7		2	0.02	0.10	1.46	mg/L
* Calcium, Total	HRG	3/3/2017	EPA 200.7		2	0.1	0.50	32.3	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/9/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/3/2017	EPA 200.7		2	0.01	0.050	U Not Detected	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	2/15/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	2/6/2017	SM 2540C		1		25	303	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AX02668

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX02668	Antimony, Total	mg/L	0.000144	0.00132	0.100	0.0888	0.0848	0.0926	0.085 to 0.115		88.1	70 to 130	4.61	20
AX02668	Arsenic, Total	mg/L	0.0000218	0.0022	0.100	0.136	0.130	0.0989	0.085 to 0.115		95.2	70 to 130	4.51	20
AX02708	Boron, Total	mg/L	0.000147	0.044	1.00	1.02	1.04	0.970	0.85 to 1.15		95.9	70 to 130	2.46	20
AX02709	Mercury, Total by CVAA	mg/L	0.000154	0.0005	0.004	0.00384	0.00375	0.00395	0.0034 to 0.0046		96.0	70 to 130	2.51	20
AX02668	Selenium, Total	mg/L	0.0000549	0.0044	0.100	0.0948	0.0895	0.0984	0.085 to 0.115		94.8	70 to 130	5.75	20
AX02668	Cobalt, Total	mg/L	0.00000652	0.0044	0.100	0.0986	0.0942	0.0963	0.085 to 0.115		98.6	70 to 130	4.56	20
AX02668	Thallium, Total	mg/L	0.0000468	0.00044	0.100	0.104	0.0984	0.101	0.085 to 0.115		104	70 to 130	5.53	20
AX02668	Beryllium, Total	mg/L	0.0000418	0.00132	0.100	0.0999	0.0937	0.108	0.085 to 0.115		99.9	70 to 130	6.40	20
AX02668	Chromium, Total	mg/L	0.0000258	0.0044	0.100	0.100	0.0954	0.0978	0.085 to 0.115		100	70 to 130	4.71	20
AX02668	Barium, Total	mg/L	0.00000530	0.0044	0.100	0.219	0.214	0.0937	0.085 to 0.115		85.0	70 to 130	2.31	20
AX02668	Cadmium, Total	mg/L	0.00000945	0.00044	0.100	0.0916	0.0876	0.0960	0.085 to 0.115		91.6	70 to 130	4.46	20
AX02668	Lead, Total	mg/L	0.0000118	0.0022	0.100	0.103	0.0984	0.104	0.085 to 0.115		103	70 to 130	4.57	20
AX02668	Molybdenum, Total	mg/L	0.0000185	0.0044	0.100	0.0911	0.0863	0.0914	0.085 to 0.115		91.1	70 to 130	5.41	20
AX02708	Calcium, Total	mg/L	-0.000906	0.22	5.00	25.3	25.5	4.83	4.25 to 5.75		87.3	70 to 130	1.04	20
AX02708	Lithium, Total	mg/L	-0.0000533	0.022	0.20	0.204	0.207	0.188	0.17 to 0.23		102	70 to 130	1.53	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AX02668

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX02709	Solids, Dissolved	mg/L	7.00	25			387	50.0	40 to 60		0.514 5

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Laboratory certification ID: E571114

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Comments:

CC:

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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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AX02669

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/20/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	J	0.00107	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005		0.0197	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.0576	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	3/3/2017	EPA 200.7		2	0.02	0.10	J	0.0343	mg/L
* Calcium, Total	HRG	3/3/2017	EPA 200.7		2	0.1	0.50		8.78	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.0165	mg/L
* Chromium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/9/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	3/3/2017	EPA 200.7		2	0.01	0.050	U	Not Detected	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	2/15/2017	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	2/6/2017	SM 2540C		1		25		134	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AX02669

Sample	Analysis	Units	MB	MB			LFB			Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	
AX02713	Molybdenum, Total	mg/L	0.0000186	0.0044	0.100	0.0901	0.0922	0.0914	0.085 to 0.115	90.1	70 to 130	2.30	20
AX02709	Mercury, Total by CVAA	mg/L	0.000154	0.0005	0.004	0.00384	0.00375	0.00395	0.0034 to 0.0046	96.0	70 to 130	2.51	20
AX02708	Boron, Total	mg/L	0.000147	0.044	1.00	1.02	1.04	0.970	0.85 to 1.15	95.9	70 to 130	2.46	20
AX02713	Selenium, Total	mg/L	0.0000239	0.0044	0.100	0.0907	0.0933	0.0967	0.085 to 0.115	90.7	70 to 130	2.83	20
AX02708	Calcium, Total	mg/L	-0.000906	0.22	5.00	25.3	25.5	4.83	4.25 to 5.75	87.3	70 to 130	1.04	20
AX02708	Lithium, Total	mg/L	-0.0000533	0.022	0.20	0.204	0.207	0.188	0.17 to 0.23	102	70 to 130	1.53	20
AX02713	Arsenic, Total	mg/L	0.0000201	0.0022	0.100	0.124	0.126	0.0979	0.085 to 0.115	96.6	70 to 130	1.60	20
AX02713	Barium, Total	mg/L	0.00000591	0.0044	0.100	0.153	0.157	0.0920	0.085 to 0.115	92.3	70 to 130	2.58	20
AX02713	Cadmium, Total	mg/L	0.0000192	0.00044	0.100	0.0895	0.0906	0.0949	0.085 to 0.115	89.5	70 to 130	1.22	20
AX02713	Cobalt, Total	mg/L	0.00000756	0.0044	0.100	0.0999	0.101	0.0955	0.085 to 0.115	99.9	70 to 130	1.10	20
AX02713	Lead, Total	mg/L	0.0000158	0.0022	0.100	0.101	0.104	0.104	0.085 to 0.115	101	70 to 130	2.93	20
AX02713	Thallium, Total	mg/L	0.0000430	0.00044	0.100	0.102	0.104	0.100	0.085 to 0.115	102	70 to 130	1.94	20
AX02713	Antimony, Total	mg/L	0.000136	0.00132	0.100	0.0865	0.0869	0.0916	0.085 to 0.115	85.8	70 to 130	0.461	20
AX02713	Beryllium, Total	mg/L	0.0000391	0.00132	0.100	0.0951	0.0992	0.105	0.085 to 0.115	95.1	70 to 130	4.22	20
AX02713	Chromium, Total	mg/L	0.0000137	0.0044	0.100	0.0986	0.100	0.0977	0.085 to 0.115	98.6	70 to 130	1.41	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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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AX02669

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX02709	Solids, Dissolved	mg/L	7.00	25			387	50.0	40 to 60	0.514	5

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Expiration: June 30, 2018

Comments:

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 FAX (205) 257-1654

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AX02670

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/20/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	J 0.000852	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	0.0248	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	3/3/2017	EPA 200.7		2	0.02	0.10	U Not Detected	mg/L
* Calcium, Total	HRG	3/3/2017	EPA 200.7		2	0.1	0.50	1.98	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/9/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/3/2017	EPA 200.7		2	0.01	0.050	U Not Detected	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	2/15/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	2/6/2017	SM 2540C		1		25	43.3	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AX02670

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX02713	Molybdenum, Total	mg/L	0.0000186	0.0044	0.100	0.0901	0.0922	0.0914	0.085 to 0.115		90.1	70 to 130	2.30	20
AX02709	Mercury, Total by CVAA	mg/L	0.000154	0.0005	0.004	0.00384	0.00375	0.00395	0.0034 to 0.0046		96.0	70 to 130	2.51	20
AX02708	Boron, Total	mg/L	0.000147	0.044	1.00	1.02	1.04	0.970	0.85 to 1.15		95.9	70 to 130	2.46	20
AX02713	Selenium, Total	mg/L	0.0000239	0.0044	0.100	0.0907	0.0933	0.0967	0.085 to 0.115		90.7	70 to 130	2.83	20
AX02708	Calcium, Total	mg/L	-0.000906	0.22	5.00	25.3	25.5	4.83	4.25 to 5.75		87.3	70 to 130	1.04	20
AX02708	Lithium, Total	mg/L	-0.0000533	0.022	0.20	0.204	0.207	0.188	0.17 to 0.23		102	70 to 130	1.53	20
AX02713	Arsenic, Total	mg/L	0.0000201	0.0022	0.100	0.124	0.126	0.0979	0.085 to 0.115		96.6	70 to 130	1.60	20
AX02713	Barium, Total	mg/L	0.00000591	0.0044	0.100	0.153	0.157	0.0920	0.085 to 0.115		92.3	70 to 130	2.58	20
AX02713	Cadmium, Total	mg/L	0.0000192	0.00044	0.100	0.0895	0.0906	0.0949	0.085 to 0.115		89.5	70 to 130	1.22	20
AX02713	Cobalt, Total	mg/L	0.00000756	0.0044	0.100	0.0999	0.101	0.0955	0.085 to 0.115		99.9	70 to 130	1.10	20
AX02713	Lead, Total	mg/L	0.0000158	0.0022	0.100	0.101	0.104	0.104	0.085 to 0.115		101	70 to 130	2.93	20
AX02713	Thallium, Total	mg/L	0.0000430	0.00044	0.100	0.102	0.104	0.100	0.085 to 0.115		102	70 to 130	1.94	20
AX02713	Antimony, Total	mg/L	0.000136	0.00132	0.100	0.0865	0.0869	0.0916	0.085 to 0.115		85.8	70 to 130	0.461	20
AX02713	Beryllium, Total	mg/L	0.0000391	0.00132	0.100	0.0951	0.0992	0.105	0.085 to 0.115		95.1	70 to 130	4.22	20
AX02713	Chromium, Total	mg/L	0.0000137	0.0044	0.100	0.0986	0.100	0.0977	0.085 to 0.115		98.6	70 to 130	1.41	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
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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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 01-Feb-17

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AX02670

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX02709	Solids, Dissolved	mg/L	7.00	25			387	50.0	40 to 60	0.514	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
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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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AX02706

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/20/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	J	0.000860	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005		0.0124	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.0533	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	3/3/2017	EPA 200.7		2	0.02	0.10	J	0.0479	mg/L
* Calcium, Total	HRG	3/3/2017	EPA 200.7		2	0.1	0.50		10.8	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	J	0.00514	mg/L
* Mercury, Total by CVAA	ABB	2/9/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	3/3/2017	EPA 200.7		2	0.01	0.050	U	Not Detected	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	2/15/2017	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	2/6/2017	SM 2540C		1		25		312	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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Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AX02706

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX02713	Molybdenum, Total	mg/L	0.0000186	0.0044	0.100	0.0901	0.0922	0.0914	0.085 to 0.115		90.1	70 to 130	2.30	20
AX02709	Mercury, Total by CVAA	mg/L	0.000154	0.0005	0.004	0.00384	0.00375	0.00395	0.0034 to 0.0046		96.0	70 to 130	2.51	20
AX02708	Boron, Total	mg/L	0.000147	0.044	1.00	1.02	1.04	0.970	0.85 to 1.15		95.9	70 to 130	2.46	20
AX02713	Selenium, Total	mg/L	0.0000239	0.0044	0.100	0.0907	0.0933	0.0967	0.085 to 0.115		90.7	70 to 130	2.83	20
AX02708	Calcium, Total	mg/L	-0.000906	0.22	5.00	25.3	25.5	4.83	4.25 to 5.75		87.3	70 to 130	1.04	20
AX02708	Lithium, Total	mg/L	-0.0000533	0.022	0.20	0.204	0.207	0.188	0.17 to 0.23		102	70 to 130	1.53	20
AX02713	Arsenic, Total	mg/L	0.0000201	0.0022	0.100	0.124	0.126	0.0979	0.085 to 0.115		96.6	70 to 130	1.60	20
AX02713	Barium, Total	mg/L	0.00000591	0.0044	0.100	0.153	0.157	0.0920	0.085 to 0.115		92.3	70 to 130	2.58	20
AX02713	Cadmium, Total	mg/L	0.0000192	0.00044	0.100	0.0895	0.0906	0.0949	0.085 to 0.115		89.5	70 to 130	1.22	20
AX02713	Cobalt, Total	mg/L	0.00000756	0.0044	0.100	0.0999	0.101	0.0955	0.085 to 0.115		99.9	70 to 130	1.10	20
AX02713	Lead, Total	mg/L	0.0000158	0.0022	0.100	0.101	0.104	0.104	0.085 to 0.115		101	70 to 130	2.93	20
AX02713	Thallium, Total	mg/L	0.0000430	0.00044	0.100	0.102	0.104	0.100	0.085 to 0.115		102	70 to 130	1.94	20
AX02713	Antimony, Total	mg/L	0.000136	0.00132	0.100	0.0865	0.0869	0.0916	0.085 to 0.115		85.8	70 to 130	0.461	20
AX02713	Beryllium, Total	mg/L	0.0000391	0.00132	0.100	0.0951	0.0992	0.105	0.085 to 0.115		95.1	70 to 130	4.22	20
AX02713	Chromium, Total	mg/L	0.0000137	0.0044	0.100	0.0986	0.100	0.0977	0.085 to 0.115		98.6	70 to 130	1.41	20

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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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AX02706

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX02709	Solids, Dissolved	mg/L	7.00	25			387	50.0	40 to 60	0.514	5

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AX02707

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/20/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	J 0.000834	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	0.0131	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	0.0686	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	3/3/2017	EPA 200.7		2	0.02	0.10	J 0.0340	mg/L
* Calcium, Total	HRG	3/3/2017	EPA 200.7		2	0.1	0.50	12.5	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	J 0.00699	mg/L
* Mercury, Total by CVAA	ABB	2/9/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/3/2017	EPA 200.7		2	0.01	0.050	U Not Detected	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	2/15/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	2/6/2017	SM 2540C		1		25	325	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AX02707

Sample	Analysis	Units	MB	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
				Limit	Spike				Limit	Rec	Limit	Prec		
AX02713	Molybdenum, Total	mg/L	0.0000186	0.0044	0.100	0.0901	0.0922	0.0914	0.085 to 0.115	90.1	70 to 130	2.30	20	
AX02709	Mercury, Total by CVAA	mg/L	0.000154	0.0005	0.004	0.00384	0.00375	0.00395	0.0034 to 0.0046	96.0	70 to 130	2.51	20	
AX02708	Boron, Total	mg/L	0.000147	0.044	1.00	1.02	1.04	0.970	0.85 to 1.15	95.9	70 to 130	2.46	20	
AX02713	Selenium, Total	mg/L	0.0000239	0.0044	0.100	0.0907	0.0933	0.0967	0.085 to 0.115	90.7	70 to 130	2.83	20	
AX02708	Calcium, Total	mg/L	-0.000906	0.22	5.00	25.3	25.5	4.83	4.25 to 5.75	87.3	70 to 130	1.04	20	
AX02708	Lithium, Total	mg/L	-0.0000533	0.022	0.20	0.204	0.207	0.188	0.17 to 0.23	102	70 to 130	1.53	20	
AX02713	Arsenic, Total	mg/L	0.0000201	0.0022	0.100	0.124	0.126	0.0979	0.085 to 0.115	96.6	70 to 130	1.60	20	
AX02713	Barium, Total	mg/L	0.00000591	0.0044	0.100	0.153	0.157	0.0920	0.085 to 0.115	92.3	70 to 130	2.58	20	
AX02713	Cadmium, Total	mg/L	0.0000192	0.00044	0.100	0.0895	0.0906	0.0949	0.085 to 0.115	89.5	70 to 130	1.22	20	
AX02713	Cobalt, Total	mg/L	0.00000756	0.0044	0.100	0.0999	0.101	0.0955	0.085 to 0.115	99.9	70 to 130	1.10	20	
AX02713	Lead, Total	mg/L	0.0000158	0.0022	0.100	0.101	0.104	0.104	0.085 to 0.115	101	70 to 130	2.93	20	
AX02713	Thallium, Total	mg/L	0.0000430	0.00044	0.100	0.102	0.104	0.100	0.085 to 0.115	102	70 to 130	1.94	20	
AX02713	Antimony, Total	mg/L	0.000136	0.00132	0.100	0.0865	0.0869	0.0916	0.085 to 0.115	85.8	70 to 130	0.461	20	
AX02713	Beryllium, Total	mg/L	0.0000391	0.00132	0.100	0.0951	0.0992	0.105	0.085 to 0.115	95.1	70 to 130	4.22	20	
AX02713	Chromium, Total	mg/L	0.0000137	0.0044	0.100	0.0986	0.100	0.0977	0.085 to 0.115	98.6	70 to 130	1.41	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: WMWBARAP
 Sample Date: 31-Jan-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AX02707

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX02709	Solids, Dissolved	mg/L	7.00	25			387	50.0	40 to 60		0.514 5

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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: WMWBARAP
 Sample Date: 01-Feb-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AX02708

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/20/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	J 0.000838	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	0.0215	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	0.0701	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	3/3/2017	EPA 200.7		2	0.02	0.10	J 0.0600	mg/L
* Calcium, Total	HRG	3/3/2017	EPA 200.7		2	0.1	0.50	20.9	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	J 0.00231	mg/L
* Chromium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	J 0.00371	mg/L
* Mercury, Total by CVAA	ABB	2/9/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/3/2017	EPA 200.7		2	0.01	0.050	U Not Detected	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	2/15/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	2/6/2017	SM 2540C		1		25	360	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: WMWBARAP
 Sample Date: 01-Feb-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AX02708

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	
AX02713	Molybdenum, Total	mg/L	0.0000186	0.0044	0.100	0.0901	0.0922	0.0914	0.085 to 0.115	90.1	70 to 130	2.30	20
AX02709	Mercury, Total by CVAA	mg/L	0.000154	0.0005	0.004	0.00384	0.00375	0.00395	0.0034 to 0.0046	96.0	70 to 130	2.51	20
AX02708	Boron, Total	mg/L	0.000147	0.044	1.00	1.02	1.04	0.970	0.85 to 1.15	95.9	70 to 130	2.46	20
AX02713	Selenium, Total	mg/L	0.0000239	0.0044	0.100	0.0907	0.0933	0.0967	0.085 to 0.115	90.7	70 to 130	2.83	20
AX02708	Calcium, Total	mg/L	-0.000906	0.22	5.00	25.3	25.5	4.83	4.25 to 5.75	87.3	70 to 130	1.04	20
AX02708	Lithium, Total	mg/L	-0.0000533	0.022	0.20	0.204	0.207	0.188	0.17 to 0.23	102	70 to 130	1.53	20
AX02713	Arsenic, Total	mg/L	0.0000201	0.0022	0.100	0.124	0.126	0.0979	0.085 to 0.115	96.6	70 to 130	1.60	20
AX02713	Barium, Total	mg/L	0.00000591	0.0044	0.100	0.153	0.157	0.0920	0.085 to 0.115	92.3	70 to 130	2.58	20
AX02713	Cadmium, Total	mg/L	0.0000192	0.00044	0.100	0.0895	0.0906	0.0949	0.085 to 0.115	89.5	70 to 130	1.22	20
AX02713	Cobalt, Total	mg/L	0.00000756	0.0044	0.100	0.0999	0.101	0.0955	0.085 to 0.115	99.9	70 to 130	1.10	20
AX02713	Lead, Total	mg/L	0.0000158	0.0022	0.100	0.101	0.104	0.104	0.085 to 0.115	101	70 to 130	2.93	20
AX02713	Thallium, Total	mg/L	0.0000430	0.00044	0.100	0.102	0.104	0.100	0.085 to 0.115	102	70 to 130	1.94	20
AX02713	Antimony, Total	mg/L	0.000136	0.00132	0.100	0.0865	0.0869	0.0916	0.085 to 0.115	85.8	70 to 130	0.461	20
AX02713	Beryllium, Total	mg/L	0.0000391	0.00132	0.100	0.0951	0.0992	0.105	0.085 to 0.115	95.1	70 to 130	4.22	20
AX02713	Chromium, Total	mg/L	0.0000137	0.0044	0.100	0.0986	0.100	0.0977	0.085 to 0.115	98.6	70 to 130	1.41	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: WMWBARAP
 Sample Date: 01-Feb-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AX02708

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX02709	Solids, Dissolved	mg/L	7.00	25			387	50.0	40 to 60		0.514 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
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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 01-Feb-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AX02709

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/20/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	J 0.000812	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	0.0151	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	0.0917	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	3/29/2017	EPA 200.7		1	0.02	0.1	J 0.0638	mg/L
* Calcium, Total	HRG	3/29/2017	EPA 200.7		1	0.1	0.5	25.6	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	J 0.00228	mg/L
* Mercury, Total by CVAA	ABB	2/9/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/29/2017	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	2/15/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	2/6/2017	SM 2540C		1		25	391	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: WMWBARAP
 Sample Date: 01-Feb-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AX02709

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX02713	Lithium, Total	mg/L	-0.0000204	0.022	0.20	0.248	0.251	0.207	0.17 to 0.23	124	70 to 130	1.30	20	
AX02713	Molybdenum, Total	mg/L	0.0000186	0.0044	0.100	0.0901	0.0922	0.0914	0.085 to 0.115	90.1	70 to 130	2.30	20	
AX02713	Selenium, Total	mg/L	0.0000239	0.0044	0.100	0.0907	0.0933	0.0967	0.085 to 0.115	90.7	70 to 130	2.83	20	
AX02709	Mercury, Total by CVAA	mg/L	0.000154	0.0005	0.004	0.00384	0.00375	0.00395	0.0034 to 0.0046	96.0	70 to 130	2.51	20	
AX02713	Calcium, Total	mg/L	-0.00732	0.22	5.00	55.0	54.2	4.98	4.25 to 5.75	149	70 to 130	1.43	20	
AX02713	Arsenic, Total	mg/L	0.0000201	0.0022	0.100	0.124	0.126	0.0979	0.085 to 0.115	96.6	70 to 130	1.60	20	
AX02713	Barium, Total	mg/L	0.00000591	0.0044	0.100	0.153	0.157	0.0920	0.085 to 0.115	92.3	70 to 130	2.58	20	
AX02713	Cadmium, Total	mg/L	0.0000192	0.00044	0.100	0.0895	0.0906	0.0949	0.085 to 0.115	89.5	70 to 130	1.22	20	
AX02713	Cobalt, Total	mg/L	0.00000756	0.0044	0.100	0.0999	0.101	0.0955	0.085 to 0.115	99.9	70 to 130	1.10	20	
AX02713	Lead, Total	mg/L	0.0000158	0.0022	0.100	0.101	0.104	0.104	0.085 to 0.115	101	70 to 130	2.93	20	
AX02713	Thallium, Total	mg/L	0.0000430	0.00044	0.100	0.102	0.104	0.100	0.085 to 0.115	102	70 to 130	1.94	20	
AX02713	Antimony, Total	mg/L	0.000136	0.00132	0.100	0.0865	0.0869	0.0916	0.085 to 0.115	85.8	70 to 130	0.461	20	
AX02713	Beryllium, Total	mg/L	0.0000391	0.00132	0.100	0.0951	0.0992	0.105	0.085 to 0.115	95.1	70 to 130	4.22	20	
AX02713	Boron, Total	mg/L	-0.00145	0.044	1.00	2.39	2.41	0.955	0.85 to 1.15	96.9	70 to 130	0.969	20	
AX02713	Chromium, Total	mg/L	0.0000137	0.0044	0.100	0.0986	0.100	0.0977	0.085 to 0.115	98.6	70 to 130	1.41	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: WMWBARAP
 Sample Date: 01-Feb-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AX02709

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX02709	Solids, Dissolved	mg/L	7.00	25			387	50.0	40 to 60		0.514 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: WMWBARAP
 Sample Date: 01-Feb-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond - MW-11 Dup

Laboratory ID Number: AX02710

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/20/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	J 0.000805	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	0.0143	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	0.0867	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	3/29/2017	EPA 200.7		1	0.02	0.1	J 0.0632	mg/L
* Calcium, Total	HRG	3/29/2017	EPA 200.7		1	0.1	0.5	25.5	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	J 0.00213	mg/L
* Mercury, Total by CVAA	ABB	2/9/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/29/2017	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	2/15/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	2/6/2017	SM 2540C		1		25	384	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: WMWBARAP
 Sample Date: 01-Feb-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond - MW-11 Dup

Laboratory ID Number: AX02710

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX02713	Lithium, Total	mg/L	-0.0000204	0.022	0.20	0.248	0.251	0.207	0.17 to 0.23	124	70 to 130	1.30	20
AX02713	Molybdenum, Total	mg/L	0.0000186	0.0044	0.100	0.0901	0.0922	0.0914	0.085 to 0.115	90.1	70 to 130	2.30	20
AX02713	Selenium, Total	mg/L	0.0000239	0.0044	0.100	0.0907	0.0933	0.0967	0.085 to 0.115	90.7	70 to 130	2.83	20
AX02713	Calcium, Total	mg/L	-0.00732	0.22	5.00	55.0	54.2	4.98	4.25 to 5.75	149	70 to 130	1.43	20
AX02713	Arsenic, Total	mg/L	0.0000201	0.0022	0.100	0.124	0.126	0.0979	0.085 to 0.115	96.6	70 to 130	1.60	20
AX02713	Barium, Total	mg/L	0.00000591	0.0044	0.100	0.153	0.157	0.0920	0.085 to 0.115	92.3	70 to 130	2.58	20
AX02713	Cadmium, Total	mg/L	0.0000192	0.00044	0.100	0.0895	0.0906	0.0949	0.085 to 0.115	89.5	70 to 130	1.22	20
AX02713	Cobalt, Total	mg/L	0.00000756	0.0044	0.100	0.0999	0.101	0.0955	0.085 to 0.115	99.9	70 to 130	1.10	20
AX02713	Lead, Total	mg/L	0.0000158	0.0022	0.100	0.101	0.104	0.104	0.085 to 0.115	101	70 to 130	2.93	20
AX02713	Thallium, Total	mg/L	0.0000430	0.00044	0.100	0.102	0.104	0.100	0.085 to 0.115	102	70 to 130	1.94	20
AX02713	Antimony, Total	mg/L	0.000136	0.00132	0.100	0.0865	0.0869	0.0916	0.085 to 0.115	85.8	70 to 130	0.461	20
AX02713	Beryllium, Total	mg/L	0.0000391	0.00132	0.100	0.0951	0.0992	0.105	0.085 to 0.115	95.1	70 to 130	4.22	20
AX02713	Boron, Total	mg/L	-0.00145	0.044	1.00	2.39	2.41	0.955	0.85 to 1.15	96.9	70 to 130	0.969	20
AX02713	Chromium, Total	mg/L	0.0000137	0.0044	0.100	0.0986	0.100	0.0977	0.085 to 0.115	98.6	70 to 130	1.41	20
AX02713	Mercury, Total by CVAA	mg/L	0.000150	0.0005	0.004	0.00378	0.00371	0.00391	0.0034 to 0.0046	94.4	70 to 130	1.64	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: WMWBARAP
 Sample Date: 01-Feb-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond - MW-11 Dup

Laboratory ID Number: AX02710

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX02713	Solids, Dissolved	mg/L	7.00	25			347	50.0	40 to 60	0.726	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: WMWBARAP
 Sample Date: 01-Feb-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AX02711

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/20/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	J 0.000738	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	0.0374	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	0.104	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	3/29/2017	EPA 200.7		1	0.02	0.1	2.17	mg/L
* Calcium, Total	HRG	3/29/2017	EPA 200.7		1	0.1	0.5	39.2	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/9/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/29/2017	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	2/15/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	2/6/2017	SM 2540C		1		25	330	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: WMWBARAP
 Sample Date: 01-Feb-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AX02711

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB Limit	Rec		Prec	Prec Limit	
			MB	Limit					Rec	Limit			
AX02713	Lithium, Total	mg/L	-0.0000204	0.022	0.20	0.248	0.251	0.207	0.17 to 0.23	124	70 to 130	1.30	20
AX02713	Molybdenum, Total	mg/L	0.0000186	0.0044	0.100	0.0901	0.0922	0.0914	0.085 to 0.115	90.1	70 to 130	2.30	20
AX02713	Selenium, Total	mg/L	0.0000239	0.0044	0.100	0.0907	0.0933	0.0967	0.085 to 0.115	90.7	70 to 130	2.83	20
AX02713	Calcium, Total	mg/L	-0.00732	0.22	5.00	55.0	54.2	4.98	4.25 to 5.75	149	70 to 130	1.43	20
AX02713	Arsenic, Total	mg/L	0.0000201	0.0022	0.100	0.124	0.126	0.0979	0.085 to 0.115	96.6	70 to 130	1.60	20
AX02713	Barium, Total	mg/L	0.00000591	0.0044	0.100	0.153	0.157	0.0920	0.085 to 0.115	92.3	70 to 130	2.58	20
AX02713	Cadmium, Total	mg/L	0.0000192	0.00044	0.100	0.0895	0.0906	0.0949	0.085 to 0.115	89.5	70 to 130	1.22	20
AX02713	Cobalt, Total	mg/L	0.00000756	0.0044	0.100	0.0999	0.101	0.0955	0.085 to 0.115	99.9	70 to 130	1.10	20
AX02713	Lead, Total	mg/L	0.0000158	0.0022	0.100	0.101	0.104	0.104	0.085 to 0.115	101	70 to 130	2.93	20
AX02713	Thallium, Total	mg/L	0.0000430	0.00044	0.100	0.102	0.104	0.100	0.085 to 0.115	102	70 to 130	1.94	20
AX02713	Antimony, Total	mg/L	0.000136	0.00132	0.100	0.0865	0.0869	0.0916	0.085 to 0.115	85.8	70 to 130	0.461	20
AX02713	Beryllium, Total	mg/L	0.0000391	0.00132	0.100	0.0951	0.0992	0.105	0.085 to 0.115	95.1	70 to 130	4.22	20
AX02713	Boron, Total	mg/L	-0.00145	0.044	1.00	2.39	2.41	0.955	0.85 to 1.15	96.9	70 to 130	0.969	20
AX02713	Chromium, Total	mg/L	0.0000137	0.0044	0.100	0.0986	0.100	0.0977	0.085 to 0.115	98.6	70 to 130	1.41	20
AX02713	Mercury, Total by CVAA	mg/L	0.000150	0.0005	0.004	0.00378	0.00371	0.00391	0.0034 to 0.0046	94.4	70 to 130	1.64	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: WMWBARAP
 Sample Date: 01-Feb-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AX02711

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX02713	Solids, Dissolved	mg/L	7.00	25			347	50.0	40 to 60	0.726	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: WMWBARAPFB
 Sample Date: 01-Feb-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX02712

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/20/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	J 0.000748	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	3/29/2017	EPA 200.7		1	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	3/29/2017	EPA 200.7		1	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/9/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/29/2017	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	2/15/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	2/6/2017	SM 2540C		1		25	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: WMWBARAPFB
 Sample Date: 01-Feb-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX02712

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX02713	Lithium, Total	mg/L	-0.0000204	0.022	0.20	0.248	0.251	0.207	0.17 to 0.23	124	70 to 130	1.30	20
AX02713	Selenium, Total	mg/L	0.0000239	0.0044	0.100	0.0907	0.0933	0.0967	0.085 to 0.115	90.7	70 to 130	2.83	20
AX02713	Molybdenum, Total	mg/L	0.0000186	0.0044	0.100	0.0901	0.0922	0.0914	0.085 to 0.115	90.1	70 to 130	2.30	20
AX02713	Calcium, Total	mg/L	-0.00732	0.22	5.00	55.0	54.2	4.98	4.25 to 5.75	149	70 to 130	1.43	20
AX02713	Arsenic, Total	mg/L	0.0000201	0.0022	0.100	0.124	0.126	0.0979	0.085 to 0.115	96.6	70 to 130	1.60	20
AX02713	Barium, Total	mg/L	0.00000591	0.0044	0.100	0.153	0.157	0.0920	0.085 to 0.115	92.3	70 to 130	2.58	20
AX02713	Cadmium, Total	mg/L	0.0000192	0.00044	0.100	0.0895	0.0906	0.0949	0.085 to 0.115	89.5	70 to 130	1.22	20
AX02713	Cobalt, Total	mg/L	0.00000756	0.0044	0.100	0.0999	0.101	0.0955	0.085 to 0.115	99.9	70 to 130	1.10	20
AX02713	Lead, Total	mg/L	0.0000158	0.0022	0.100	0.101	0.104	0.104	0.085 to 0.115	101	70 to 130	2.93	20
AX02713	Thallium, Total	mg/L	0.0000430	0.00044	0.100	0.102	0.104	0.100	0.085 to 0.115	102	70 to 130	1.94	20
AX02713	Antimony, Total	mg/L	0.000136	0.00132	0.100	0.0865	0.0869	0.0916	0.085 to 0.115	85.8	70 to 130	0.461	20
AX02713	Beryllium, Total	mg/L	0.0000391	0.00132	0.100	0.0951	0.0992	0.105	0.085 to 0.115	95.1	70 to 130	4.22	20
AX02713	Boron, Total	mg/L	-0.00145	0.044	1.00	2.39	2.41	0.955	0.85 to 1.15	96.9	70 to 130	0.969	20
AX02713	Chromium, Total	mg/L	0.0000137	0.0044	0.100	0.0986	0.100	0.0977	0.085 to 0.115	98.6	70 to 130	1.41	20
AX02713	Mercury, Total by CVAA	mg/L	0.000150	0.0005	0.004	0.00378	0.00371	0.00391	0.0034 to 0.0046	94.4	70 to 130	1.64	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
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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer
 John Pugh

Customer Account: WMWBARAPFB
 Sample Date: 01-Feb-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX02712

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX02713	Solids, Dissolved	mg/L	7.00	25			347	50.0	40 to 60	0.726	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: WMWBARAP
 Sample Date: 01-Feb-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AX02713

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Radiological									
Total Radium, Test America	SGC	3/20/2017	EPA 9315/9320		1			Attached	
Metals, Cyanide, Total Phenols									
* Antimony, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	J 0.000743	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	0.0274	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	0.0607	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U Not Detected	mg/L
* Boron, Total	HRG	3/29/2017	EPA 200.7		1	0.02	0.1	1.42	mg/L
* Calcium, Total	HRG	4/7/2017	EPA 200.7		10	1.0	5	47.6	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	U Not Detected	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Chromium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	2/9/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	3/29/2017	EPA 200.7		1	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Lead, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	U Not Detected	mg/L
* Thallium, Total	JHK	2/15/2017	EPA 200.8		5	0.00020	0.0010	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	2/6/2017	SM 2540C		1		25	342	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 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
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 01-Feb-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AX02713

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB Limit	Rec		Prec	Prec Limit	
			MB	Limit					Rec	Limit			
AX02713	Lithium, Total	mg/L	-0.0000204	0.022	0.20	0.248	0.251	0.207	0.17 to 0.23	124	70 to 130	1.30	20
AX02713	Molybdenum, Total	mg/L	0.0000186	0.0044	0.100	0.0901	0.0922	0.0914	0.085 to 0.115	90.1	70 to 130	2.30	20
AX02713	Selenium, Total	mg/L	0.0000239	0.0044	0.100	0.0907	0.0933	0.0967	0.085 to 0.115	90.7	70 to 130	2.83	20
AX02713	Calcium, Total	mg/L	-0.00732	0.22	5.00	55.0	54.2	4.98	4.25 to 5.75	149	70 to 130	1.43	20
AX02713	Arsenic, Total	mg/L	0.0000201	0.0022	0.100	0.124	0.126	0.0979	0.085 to 0.115	96.6	70 to 130	1.60	20
AX02713	Barium, Total	mg/L	0.00000591	0.0044	0.100	0.153	0.157	0.0920	0.085 to 0.115	92.3	70 to 130	2.58	20
AX02713	Cadmium, Total	mg/L	0.0000192	0.00044	0.100	0.0895	0.0906	0.0949	0.085 to 0.115	89.5	70 to 130	1.22	20
AX02713	Cobalt, Total	mg/L	0.00000756	0.0044	0.100	0.0999	0.101	0.0955	0.085 to 0.115	99.9	70 to 130	1.10	20
AX02713	Lead, Total	mg/L	0.0000158	0.0022	0.100	0.101	0.104	0.104	0.085 to 0.115	101	70 to 130	2.93	20
AX02713	Thallium, Total	mg/L	0.0000430	0.00044	0.100	0.102	0.104	0.100	0.085 to 0.115	102	70 to 130	1.94	20
AX02713	Antimony, Total	mg/L	0.000136	0.00132	0.100	0.0865	0.0869	0.0916	0.085 to 0.115	85.8	70 to 130	0.461	20
AX02713	Beryllium, Total	mg/L	0.0000391	0.00132	0.100	0.0951	0.0992	0.105	0.085 to 0.115	95.1	70 to 130	4.22	20
AX02713	Boron, Total	mg/L	-0.00145	0.044	1.00	2.39	2.41	0.955	0.85 to 1.15	96.9	70 to 130	0.969	20
AX02713	Chromium, Total	mg/L	0.0000137	0.0044	0.100	0.0986	0.100	0.0977	0.085 to 0.115	98.6	70 to 130	1.41	20
AX02713	Mercury, Total by CVAA	mg/L	0.000150	0.0005	0.004	0.00378	0.00371	0.00391	0.0034 to 0.0046	94.4	70 to 130	1.64	20

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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 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
 John Pugh

Customer Account: WMWBARAP
 Sample Date: 01-Feb-17
 Customer ID:
 Delivery Date: 02-Feb-17

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AX02713

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX02713	Solids, Dissolved	mg/L	7.00	25			347	50.0	40 to 60	0.726	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 spec. The spike amount was less than 30% of the sample amount.

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 02/01/2017 12:00

Requested Complete Date	Routine
Site Representative	Angie Jimmerson
Collector	Nick Pitts

Results To	Dustin Brooks, John Pugh, Greg Dyer
Requested By	Greg Dyer
Location	Barry Ash Pond

Analysis Requested	Bottle 1 (1L): Radiological, Bottle 2 (500mL): Metals, Bottle 3 (250mL): Hg, Bottle 4 (500mL): TDS, Bottle 5 (250mL): Anions
Comments	No anion results reported for the samples listed below due to hold time exceedance. All anions will be re-sampled. SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-4	01/31/2017	09:32	5	Groundwater		AX02658
MW-3	01/31/2017	10:45	5	Groundwater		AX02659
MW-1	01/31/2017	11:48	5	Groundwater		AX02660
FB-2	01/31/2017	12:05	5	Field Blank		AX02661
MW-2	01/31/2017	12:55	5	Groundwater		AX02662
MW-2 Dup	01/31/2017	12:55	5	Sample Duplicate		AX02663
MW-16	01/31/2017	14:07	5	Groundwater		AX02664
MW-15	01/31/2017	15:15	5	Groundwater		AX02665
EB-1	01/31/2017	16:10	5	Equipment Blank		AX02666

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: 2017.02.01 13:15:47 -06'00'</small>	02/01/2017 13:15

SmarTroll ID	4696-23444-3-3
Turbidity ID	3901-20009-2-1

All metals and radiological bottles have pH < 2 <input checked="" type="checkbox"/>	
Cooler Temp	0.7 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 02/01/2017 12:00

Requested Complete Date Routine
Site Representative Angie Jimmerson
Collector Jason Rouss

Results To Dustin Brooks, John Pugh, Greg Dyer
Requested By Greg Dyer
Location Barry Ash Pond

Analysis Requested Bottle 1 (1L): Radiological, Bottle 2 (500mL): Metals, Bottle 3 (250mL): Hg, Bottle 4 (500mL): TDS, Bottle 5 (250mL): Anions
Comments Radium duplicate collected at MW-7
No anion results reported for the samples listed below due to hold time exceedance. All anions will be re-sampled. SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-5	01/31/2017	12:20	5	Groundwater		AX02667
MW-8	01/31/2017	13:38	5	Groundwater		AX02668
MW-7	01/31/2017	14:55	7	Groundwater		AX02669
MW-6	01/31/2017	16:10	5	Groundwater		AX02670

Relinquished By	Received By	Date/Time
		01/31/2017 17:16
	Sarah Copeland <small>Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US Date: 2017.02.01 13:16:25 -0600</small>	02/01/2017 13:16

SmarTroll ID 4696-23443-3-2
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 5521-28270-20-14



Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Field Complete
 Lab Complete

Lab ETA 02/01/2017 16:00

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="Angie Jimmerson"/>	Requested By	<input type="text" value="Greg Dyer"/>
Collector	<input type="text" value="Jason Rouss"/>	Location	<input type="text" value="Barry Ash Pond"/>
Analysis Requested	<input type="text" value="Bottle 1 (1L): Radiological, Bottle 2 (500mL): Metals, Bottle 3 (250mL): Hg, Bottle 4 (500mL): TDS, Bottle 5 (250mL): Anions"/>		
Comments	<input type="text" value="No anion results reported for the samples listed below due to hold time exceedance. All anions will be re-sampled. SGC"/>		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-9	02/01/2017	09:35	5	Groundwater		AX02711
FB-1	02/01/2017	09:46	5	Field Blank		AX02712
MW-10	02/01/2017	10:43	5	Groundwater		AX02713

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: 2017.02.01 16:15:00 -0600</small>	<input type="text" value="02/01/2017 16:14"/> <input type="text" value=""/> <input type="text" value=""/>

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="0.3 degrees C"/> Thermometer ID <input type="text" value="5408-27568-2-2"/> pH Strip ID <input type="text" value="5521-28270-20-14"/>
Turbidity ID <input type="text" value="4677-23342-4-1"/>	



Chain of Custody

Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Field Complete
 Lab Complete

Lab ETA 02/01/2017 15:00

Requested Complete Date	<input type="text" value="Routine"/>	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Angie Jimmerson	Requested By	Greg Dyer
Collector	Ben Rothschild	Location	Barry Ash Pond

Analysis Requested	Bottle 1 (1L): Radiological, Bottle 2 (500mL): Metals, Bottle 3 (250mL): Hg, Bottle 4 (500mL): TDS, Bottle 5 (250mL): Anions
Comments	Radium duplicate collected at MW12 No anion results reported for the samples listed below due to hold time exceedance. All anions will be re-sampled. SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-14	01/31/2017	15:00	5	Groundwater		AX02706
MW-13	01/31/2017	16:05	5	Groundwater		AX02707
MW-12	02/01/2017	09:35	7	Groundwater		AX02708
MW-11	02/01/2017	10:38	5	Groundwater		AX02709
MW-11 DUP	02/01/2017	10:38	5	Sample Duplicate		AX02710

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: 2017.02.01 15:42:01 -0600</small>	02/01/2017 15:41

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="0.2 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: 400-133561-1

TestAmerica Sample Delivery Group: Barry Ash Pond (6)

Client Project/Site: CCR Plant Barry

For:

Alabama Power General Test Laboratory

744 County Rd 87

GSC #8

Calera, Alabama 35040

Attn: Sarah Copeland



Authorized for release by:

3/18/2017 2:46:44 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 Barry

TestAmerica Job ID: 400-133561-1
SDG: Barry Ash Pond (6)

Job ID: 400-133561-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-133561-1

RAD

Method(s) PrecSep_0: Radium-228 Prep Batch 160-293134: The following samples were run at a reduced aliquot due to limited sample volume available: AX02713 MW-10 (400-133561-21).

Method(s) PrecSep_0: Radium 228 Prep Batch 160-293135: the following samples were prepared at a reduced aliquot of 750 mL due to limited sample volume. AX02658 MW-4 (400-133561-1), AX02659 MW-3 (400-133561-2), AX02660 MW-1 (400-133561-3), AX02661 FB-2 (400-133561-4), AX02662 MW-2 (400-133561-5), AX02663 MW-2 DUP (400-133561-6), AX02664 MW-16 (400-133561-7), AX02665 MW-15 (400-133561-8), AX02666 EB-1 (400-133561-9), AX02667 MW-5 (400-133561-10), AX02668 MW-8 (400-133561-11), AX02669 MW-7 (400-133561-12), AX02669 MW-7 (400-133561-12[DU]), AX02670 MW-6 (400-133561-13), AX02706 MW-13 (400-133561-14), AX02707 MW-14 (400-133561-15), AX02708 MW-12 (400-133561-16), AX02708 MW-12 (400-133561-16[DU]), AX02709 MW-11 (400-133561-17), AX02710 MW-11 DUP (400-133561-18), AX02711 MW-9 (400-133561-19) and AX02712 FB-1 (400-133561-20)

Method(s) PrecSep-21: Radium-228 Prep Batch 160-293084: The following samples were run at a reduced aliquot due to limited sample volume available :AX02713 MW-10 (400-133561-21).

Method(s) PrecSep-21: Radium-226 Prep Batch 160-293085: Insufficient sample volume was available to prepare the samples at 1L. The samples were weighed at 750mL. AX02658 MW-4 (400-133561-1), AX02659 MW-3 (400-133561-2), AX02660 MW-1 (400-133561-3), AX02661 FB-2 (400-133561-4), AX02662 MW-2 (400-133561-5), AX02663 MW-2 DUP (400-133561-6), AX02664 MW-16 (400-133561-7), AX02665 MW-15 (400-133561-8), AX02666 EB-1 (400-133561-9), AX02667 MW-5 (400-133561-10), AX02668 MW-8 (400-133561-11), AX02669 MW-7 (400-133561-12), AX02669 MW-7 (400-133561-12[DU]), AX02670 MW-6 (400-133561-13), AX02706 MW-13 (400-133561-14), AX02707 MW-14 (400-133561-15), AX02708 MW-12 (400-133561-16), AX02708 MW-12 (400-133561-16[DU]), AX02709 MW-11 (400-133561-17), AX02710 MW-11 DUP (400-133561-18), AX02711 MW-9 (400-133561-19) and AX02712 FB-1 (400-133561-20)

Method Summary

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

TestAmerica Job ID: 400-133561-1
SDG: Barry 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 Barry

TestAmerica Job ID: 400-133561-1
SDG: Barry Ash Pond (6)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-133561-1	AX02658 MW-4	Water	01/31/17 09:32	02/06/17 14:00
400-133561-2	AX02659 MW-3	Water	01/31/17 10:45	02/06/17 14:00
400-133561-3	AX02660 MW-1	Water	01/31/17 11:48	02/06/17 14:00
400-133561-4	AX02661 FB-2	Water	01/31/17 12:05	02/06/17 14:00
400-133561-5	AX02662 MW-2	Water	01/31/17 12:55	02/06/17 14:00
400-133561-6	AX02663 MW-2 DUP	Water	01/31/17 12:55	02/06/17 14:00
400-133561-7	AX02664 MW-16	Water	01/31/17 14:07	02/06/17 14:00
400-133561-8	AX02665 MW-15	Water	01/31/17 15:15	02/06/17 14:00
400-133561-9	AX02666 EB-1	Water	01/31/17 16:10	02/06/17 14:00
400-133561-10	AX02667 MW-5	Water	01/31/17 12:20	02/06/17 14:00
400-133561-11	AX02668 MW-8	Water	01/31/17 13:38	02/06/17 14:00
400-133561-12	AX02669 MW-7	Water	01/31/17 14:55	02/06/17 14:00
400-133561-13	AX02670 MW-6	Water	01/31/17 16:10	02/06/17 14:00
400-133561-14	AX02706 MW-13	Water	01/31/17 15:00	02/06/17 14:00
400-133561-15	AX02707 MW-14	Water	01/31/17 16:05	02/06/17 14:00
400-133561-16	AX02708 MW-12	Water	02/01/17 09:35	02/06/17 14:00
400-133561-17	AX02709 MW-11	Water	02/01/17 10:38	02/06/17 14:00
400-133561-18	AX02710 MW-11 DUP	Water	02/01/17 10:38	02/06/17 14:00
400-133561-19	AX02711 MW-9	Water	02/01/17 09:35	02/06/17 14:00
400-133561-20	AX02712 FB-1	Water	02/01/17 09:46	02/06/17 14:00
400-133561-21	AX02713 MW-10	Water	02/01/17 10:43	02/06/17 14:00

Client Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02658 MW-4

Lab Sample ID: 400-133561-1

Date Collected: 01/31/17 09:32

Matrix: Water

Date Received: 02/06/17 14:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.102	U	0.0994	0.0998	1.00	0.154	pCi/L	02/17/17 10:55	03/13/17 05:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.6		40 - 110					02/17/17 10:55	03/13/17 05:57	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.148	U	0.291	0.291	1.00	0.497	pCi/L	02/17/17 18:20	03/07/17 11:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.6		40 - 110					02/17/17 18:20	03/07/17 11:03	1
Y Carrier	79.3		40 - 110					02/17/17 18:20	03/07/17 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	0.250	U	0.307	0.308	5.00	0.497	pCi/L		03/14/17 12:39	1

Client Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02659 MW-3

Lab Sample ID: 400-133561-2

Date Collected: 01/31/17 10:45

Matrix: Water

Date Received: 02/06/17 14:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.201		0.131	0.132	1.00	0.183	pCi/L	02/17/17 10:55	03/13/17 05:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110					02/17/17 10:55	03/13/17 05:57	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.295	U	0.300	0.301	1.00	0.488	pCi/L	02/17/17 18:20	03/07/17 11:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110					02/17/17 18:20	03/07/17 11:03	1
Y Carrier	83.7		40 - 110					02/17/17 18:20	03/07/17 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	0.496		0.327	0.329	5.00	0.488	pCi/L		03/14/17 12:39	1

Client Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02660 MW-1

Lab Sample ID: 400-133561-3

Date Collected: 01/31/17 11:48

Matrix: Water

Date Received: 02/06/17 14:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.751		0.208	0.219	1.00	0.181	pCi/L	02/17/17 10:55	03/13/17 05:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		40 - 110					02/17/17 10:55	03/13/17 05:57	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.480	U	0.321	0.324	1.00	0.494	pCi/L	02/17/17 18:20	03/07/17 11:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		40 - 110					02/17/17 18:20	03/07/17 11:03	1
Y Carrier	81.5		40 - 110					02/17/17 18:20	03/07/17 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	1.23		0.382	0.391	5.00	0.494	pCi/L		03/14/17 12:39	1

Client Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02661 FB-2

Lab Sample ID: 400-133561-4

Date Collected: 01/31/17 12:05

Matrix: Water

Date Received: 02/06/17 14:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0241	U	0.0791	0.0791	1.00	0.154	pCi/L	02/17/17 10:55	03/13/17 05:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					02/17/17 10:55	03/13/17 05:57	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.118	U	0.316	0.316	1.00	0.546	pCi/L	02/17/17 18:20	03/07/17 11:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					02/17/17 18:20	03/07/17 11:03	1
Y Carrier	82.6		40 - 110					02/17/17 18:20	03/07/17 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	0.142	U	0.326	0.326	5.00	0.546	pCi/L		03/14/17 12:39	1

Client Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02662 MW-2

Lab Sample ID: 400-133561-5

Date Collected: 01/31/17 12:55

Matrix: Water

Date Received: 02/06/17 14:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0345	U	0.0958	0.0958	1.00	0.178	pCi/L	02/17/17 10:55	03/13/17 05:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					02/17/17 10:55	03/13/17 05:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0312	U	0.245	0.245	1.00	0.452	pCi/L	02/17/17 18:20	03/07/17 11:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					02/17/17 18:20	03/07/17 11:03	1
Y Carrier	84.9		40 - 110					02/17/17 18:20	03/07/17 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	0.00333	U	0.263	0.263	5.00	0.452	pCi/L		03/14/17 12:39	1

Client Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02663 MW-2 DUP

Lab Sample ID: 400-133561-6

Date Collected: 01/31/17 12:55

Matrix: Water

Date Received: 02/06/17 14:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0354	U	0.0759	0.0760	1.00	0.140	pCi/L	02/17/17 10:55	03/13/17 05:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		40 - 110					02/17/17 10:55	03/13/17 05:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.165	U	0.271	0.271	1.00	0.458	pCi/L	02/17/17 18:20	03/07/17 11:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		40 - 110					02/17/17 18:20	03/07/17 11:03	1
Y Carrier	84.9		40 - 110					02/17/17 18:20	03/07/17 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	0.200	U	0.281	0.282	5.00	0.458	pCi/L		03/14/17 12:39	1

Client Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02664 MW-16

Lab Sample ID: 400-133561-7

Date Collected: 01/31/17 14:07

Matrix: Water

Date Received: 02/06/17 14:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.169		0.110	0.111	1.00	0.144	pCi/L	02/17/17 10:55	03/13/17 05:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		40 - 110					02/17/17 10:55	03/13/17 05:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.484	U	0.355	0.358	1.00	0.558	pCi/L	02/17/17 18:20	03/07/17 11:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		40 - 110					02/17/17 18:20	03/07/17 11:03	1
Y Carrier	82.6		40 - 110					02/17/17 18:20	03/07/17 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	0.653		0.372	0.375	5.00	0.558	pCi/L		03/14/17 12:39	1

Client Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02665 MW-15

Lab Sample ID: 400-133561-8

Date Collected: 01/31/17 15:15

Matrix: Water

Date Received: 02/06/17 14:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.167	U	0.125	0.126	1.00	0.183	pCi/L	02/17/17 10:55	03/13/17 05:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					02/17/17 10:55	03/13/17 05:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.235	U	0.280	0.281	1.00	0.462	pCi/L	02/17/17 18:20	03/07/17 11:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					02/17/17 18:20	03/07/17 11:03	1
Y Carrier	82.2		40 - 110					02/17/17 18:20	03/07/17 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	0.402	U	0.306	0.308	5.00	0.462	pCi/L		03/14/17 12:39	1

Client Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02666 EB-1

Lab Sample ID: 400-133561-9

Date Collected: 01/31/17 16:10

Matrix: Water

Date Received: 02/06/17 14:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0724	U	0.0972	0.0974	1.00	0.163	pCi/L	02/17/17 10:55	03/13/17 05:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					02/17/17 10:55	03/13/17 05:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0933	U	0.257	0.257	1.00	0.480	pCi/L	02/17/17 18:20	03/07/17 11:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					02/17/17 18:20	03/07/17 11:04	1
Y Carrier	84.9		40 - 110					02/17/17 18:20	03/07/17 11:04	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0209	U	0.275	0.275	5.00	0.480	pCi/L		03/14/17 12:39	1

Client Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02667 MW-5

Lab Sample ID: 400-133561-10

Date Collected: 01/31/17 12:20

Matrix: Water

Date Received: 02/06/17 14:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.375		0.150	0.154	1.00	0.162	pCi/L	02/17/17 10:55	03/13/17 05:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					02/17/17 10:55	03/13/17 05:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.627		0.365	0.370	1.00	0.559	pCi/L	02/17/17 18:20	03/07/17 11:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.5		40 - 110					02/17/17 18:20	03/07/17 11:04	1
Y Carrier	84.5		40 - 110					02/17/17 18:20	03/07/17 11:04	1

Method: Ra226_Ra228 - Combined Radium-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		0.395	0.400	5.00	0.559	pCi/L		03/14/17 12:39	1

Client Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02668 MW-8

Lab Sample ID: 400-133561-11

Date Collected: 01/31/17 13:38

Matrix: Water

Date Received: 02/06/17 14:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.355		0.145	0.148	1.00	0.154	pCi/L	02/17/17 10:55	03/13/17 05:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.2		40 - 110					02/17/17 10:55	03/13/17 05:59	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.446	U	0.297	0.300	1.00	0.456	pCi/L	02/17/17 18:20	03/07/17 11:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.2		40 - 110					02/17/17 18:20	03/07/17 11:04	1
Y Carrier	84.5		40 - 110					02/17/17 18:20	03/07/17 11:04	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.801		0.330	0.334	5.00	0.456	pCi/L		03/14/17 12:39	1

Client Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02669 MW-7

Lab Sample ID: 400-133561-12

Date Collected: 01/31/17 14:55

Matrix: Water

Date Received: 02/06/17 14:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.207		0.122	0.123	1.00	0.154	pCi/L	02/17/17 10:55	03/13/17 05:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					02/17/17 10:55	03/13/17 05:59	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.112	U	0.348	0.348	1.00	0.631	pCi/L	02/17/17 18:20	03/07/17 11:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					02/17/17 18:20	03/07/17 11:04	1
Y Carrier	83.0		40 - 110					02/17/17 18:20	03/07/17 11:04	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0949	U	0.368	0.369	5.00	0.631	pCi/L		03/14/17 12:39	1

Client Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02670 MW-6

Lab Sample ID: 400-133561-13

Date Collected: 01/31/17 16:10

Matrix: Water

Date Received: 02/06/17 14:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.134	U	0.102	0.103	1.00	0.148	pCi/L	02/17/17 10:55	03/13/17 06:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.6		40 - 110					02/17/17 10:55	03/13/17 06:07	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.151	U	0.309	0.309	1.00	0.571	pCi/L	02/17/17 18:20	03/07/17 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.6		40 - 110					02/17/17 18:20	03/07/17 11:06	1
Y Carrier	84.5		40 - 110					02/17/17 18:20	03/07/17 11:06	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0173	U	0.325	0.326	5.00	0.571	pCi/L		03/14/17 12:39	1

Client Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02706 MW-13

Lab Sample ID: 400-133561-14

Date Collected: 01/31/17 15:00

Matrix: Water

Date Received: 02/06/17 14:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.212		0.127	0.129	1.00	0.173	pCi/L	02/17/17 10:55	03/13/17 06:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.1		40 - 110					02/17/17 10:55	03/13/17 06:07	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.889		0.403	0.411	1.00	0.595	pCi/L	02/17/17 18:20	03/07/17 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.1		40 - 110					02/17/17 18:20	03/07/17 11:06	1
Y Carrier	84.5		40 - 110					02/17/17 18:20	03/07/17 11:06	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.10		0.422	0.431	5.00	0.595	pCi/L		03/14/17 12:39	1

Client Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02707 MW-14

Lab Sample ID: 400-133561-15

Date Collected: 01/31/17 16:05

Matrix: Water

Date Received: 02/06/17 14:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0339	U	0.0987	0.0987	1.00	0.182	pCi/L	02/17/17 10:55	03/13/17 06:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					02/17/17 10:55	03/13/17 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	0.0384	U	0.362	0.362	1.00	0.631	pCi/L	02/17/17 18:20	03/07/17 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					02/17/17 18:20	03/07/17 11:06	1
Y Carrier	84.9		40 - 110					02/17/17 18:20	03/07/17 11:06	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0723	U	0.375	0.375	5.00	0.631	pCi/L		03/14/17 12:39	1

Client Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02708 MW-12

Lab Sample ID: 400-133561-16

Date Collected: 02/01/17 09:35

Matrix: Water

Date Received: 02/06/17 14:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.303		0.140	0.143	1.00	0.165	pCi/L	02/17/17 10:55	03/13/17 06:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					02/17/17 10:55	03/13/17 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	0.806		0.370	0.378	1.00	0.544	pCi/L	02/17/17 18:20	03/07/17 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					02/17/17 18:20	03/07/17 11:06	1
Y Carrier	88.2		40 - 110					02/17/17 18:20	03/07/17 11:06	1

Method: Ra226_Ra228 - Combined Radium-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		0.396	0.404	5.00	0.544	pCi/L		03/14/17 12:39	1

Client Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02709 MW-11

Lab Sample ID: 400-133561-17

Date Collected: 02/01/17 10:38

Matrix: Water

Date Received: 02/06/17 14:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.337		0.148	0.151	1.00	0.172	pCi/L	02/17/17 10:55	03/13/17 06:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					02/17/17 10:55	03/13/17 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	0.429	U	0.368	0.370	1.00	0.591	pCi/L	02/17/17 18:20	03/07/17 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					02/17/17 18:20	03/07/17 11:06	1
Y Carrier	86.0		40 - 110					02/17/17 18:20	03/07/17 11:06	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.766		0.397	0.400	5.00	0.591	pCi/L		03/14/17 12:39	1

Client Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02710 MW-11 DUP

Lab Sample ID: 400-133561-18

Date Collected: 02/01/17 10:38

Matrix: Water

Date Received: 02/06/17 14:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.317		0.136	0.139	1.00	0.152	pCi/L	02/17/17 10:55	03/13/17 06:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.6		40 - 110					02/17/17 10:55	03/13/17 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	0.269	U	0.333	0.334	1.00	0.551	pCi/L	02/17/17 18:20	03/07/17 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.6		40 - 110					02/17/17 18:20	03/07/17 11:06	1
Y Carrier	83.0		40 - 110					02/17/17 18:20	03/07/17 11:06	1

Method: Ra226_Ra228 - Combined Radium-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		0.360	0.362	5.00	0.551	pCi/L		03/14/17 12:39	1

Client Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02711 MW-9

Lab Sample ID: 400-133561-19

Date Collected: 02/01/17 09:35

Matrix: Water

Date Received: 02/06/17 14:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.243		0.133	0.135	1.00	0.171	pCi/L	02/17/17 10:55	03/13/17 06:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					02/17/17 10:55	03/13/17 06:10	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.542		0.336	0.340	1.00	0.514	pCi/L	02/17/17 18:20	03/07/17 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					02/17/17 18:20	03/07/17 11:06	1
Y Carrier	88.2		40 - 110					02/17/17 18:20	03/07/17 11:06	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.785		0.361	0.365	5.00	0.514	pCi/L		03/14/17 12:39	1

Client Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02712 FB-1

Lab Sample ID: 400-133561-20

Date Collected: 02/01/17 09:46

Matrix: Water

Date Received: 02/06/17 14:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0206	U	0.0833	0.0833	1.00	0.159	pCi/L	02/17/17 10:55	03/13/17 06:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.6		40 - 110					02/17/17 10:55	03/13/17 06:10	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.147	U	0.311	0.311	1.00	0.531	pCi/L	02/17/17 18:20	03/07/17 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.6		40 - 110					02/17/17 18:20	03/07/17 11:06	1
Y Carrier	83.0		40 - 110					02/17/17 18:20	03/07/17 11:06	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.167	U	0.322	0.322	5.00	0.531	pCi/L		03/14/17 12:39	1

Client Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02713 MW-10

Lab Sample ID: 400-133561-21

Date Collected: 02/01/17 10:43

Matrix: Water

Date Received: 02/06/17 14:00

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.277		0.159	0.161	1.00	0.214	pCi/L	02/17/17 10:50	03/13/17 04:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.6		40 - 110					02/17/17 10:50	03/13/17 04:15	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.726		0.364	0.370	1.00	0.537	pCi/L	02/17/17 18:16	03/08/17 14:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.6		40 - 110					02/17/17 18:16	03/08/17 14:53	1
Y Carrier	90.1		40 - 110					02/17/17 18:16	03/08/17 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	1.00		0.398	0.404	5.00	0.537	pCi/L		03/14/17 12:39	1

Definitions/Glossary

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

TestAmerica Job ID: 400-133561-1
SDG: Barry Ash Pond (6)

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 Barry

TestAmerica Job ID: 400-133561-1
SDG: Barry Ash Pond (6)

Client Sample ID: AX02658 MW-4

Lab Sample ID: 400-133561-1

Date Collected: 01/31/17 09:32

Matrix: Water

Date Received: 02/06/17 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			293085	02/17/17 10:55	PJM	TAL SL
Total/NA	Analysis	9315		1	297320	03/13/17 05:57	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293135	02/17/17 18:20	PJM	TAL SL
Total/NA	Analysis	9320		1	296225	03/07/17 11:03	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02659 MW-3

Lab Sample ID: 400-133561-2

Date Collected: 01/31/17 10:45

Matrix: Water

Date Received: 02/06/17 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			293085	02/17/17 10:55	PJM	TAL SL
Total/NA	Analysis	9315		1	297320	03/13/17 05:57	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293135	02/17/17 18:20	PJM	TAL SL
Total/NA	Analysis	9320		1	296225	03/07/17 11:03	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02660 MW-1

Lab Sample ID: 400-133561-3

Date Collected: 01/31/17 11:48

Matrix: Water

Date Received: 02/06/17 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			293085	02/17/17 10:55	PJM	TAL SL
Total/NA	Analysis	9315		1	297320	03/13/17 05:57	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293135	02/17/17 18:20	PJM	TAL SL
Total/NA	Analysis	9320		1	296225	03/07/17 11:03	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02661 FB-2

Lab Sample ID: 400-133561-4

Date Collected: 01/31/17 12:05

Matrix: Water

Date Received: 02/06/17 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			293085	02/17/17 10:55	PJM	TAL SL
Total/NA	Analysis	9315		1	297320	03/13/17 05:57	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293135	02/17/17 18:20	PJM	TAL SL
Total/NA	Analysis	9320		1	296225	03/07/17 11:03	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-133561-1
SDG: Barry Ash Pond (6)

Client Sample ID: AX02662 MW-2

Lab Sample ID: 400-133561-5

Date Collected: 01/31/17 12:55

Matrix: Water

Date Received: 02/06/17 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			293085	02/17/17 10:55	PJM	TAL SL
Total/NA	Analysis	9315		1	297320	03/13/17 05:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293135	02/17/17 18:20	PJM	TAL SL
Total/NA	Analysis	9320		1	296225	03/07/17 11:03	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02663 MW-2 DUP

Lab Sample ID: 400-133561-6

Date Collected: 01/31/17 12:55

Matrix: Water

Date Received: 02/06/17 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			293085	02/17/17 10:55	PJM	TAL SL
Total/NA	Analysis	9315		1	297320	03/13/17 05:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293135	02/17/17 18:20	PJM	TAL SL
Total/NA	Analysis	9320		1	296225	03/07/17 11:03	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02664 MW-16

Lab Sample ID: 400-133561-7

Date Collected: 01/31/17 14:07

Matrix: Water

Date Received: 02/06/17 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			293085	02/17/17 10:55	PJM	TAL SL
Total/NA	Analysis	9315		1	297320	03/13/17 05:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293135	02/17/17 18:20	PJM	TAL SL
Total/NA	Analysis	9320		1	296225	03/07/17 11:03	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02665 MW-15

Lab Sample ID: 400-133561-8

Date Collected: 01/31/17 15:15

Matrix: Water

Date Received: 02/06/17 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			293085	02/17/17 10:55	PJM	TAL SL
Total/NA	Analysis	9315		1	297320	03/13/17 05:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293135	02/17/17 18:20	PJM	TAL SL
Total/NA	Analysis	9320		1	296225	03/07/17 11:03	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02666 EB-1

Lab Sample ID: 400-133561-9

Date Collected: 01/31/17 16:10

Matrix: Water

Date Received: 02/06/17 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			293085	02/17/17 10:55	PJM	TAL SL
Total/NA	Analysis	9315		1	297320	03/13/17 05:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293135	02/17/17 18:20	PJM	TAL SL
Total/NA	Analysis	9320		1	296225	03/07/17 11:04	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02667 MW-5

Lab Sample ID: 400-133561-10

Date Collected: 01/31/17 12:20

Matrix: Water

Date Received: 02/06/17 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			293085	02/17/17 10:55	PJM	TAL SL
Total/NA	Analysis	9315		1	297320	03/13/17 05:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293135	02/17/17 18:20	PJM	TAL SL
Total/NA	Analysis	9320		1	296225	03/07/17 11:04	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02668 MW-8

Lab Sample ID: 400-133561-11

Date Collected: 01/31/17 13:38

Matrix: Water

Date Received: 02/06/17 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			293085	02/17/17 10:55	PJM	TAL SL
Total/NA	Analysis	9315		1	297320	03/13/17 05:59	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293135	02/17/17 18:20	PJM	TAL SL
Total/NA	Analysis	9320		1	296225	03/07/17 11:04	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02669 MW-7

Lab Sample ID: 400-133561-12

Date Collected: 01/31/17 14:55

Matrix: Water

Date Received: 02/06/17 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			293085	02/17/17 10:55	PJM	TAL SL
Total/NA	Analysis	9315		1	297320	03/13/17 05:59	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293135	02/17/17 18:20	PJM	TAL SL
Total/NA	Analysis	9320		1	296225	03/07/17 11:04	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02670 MW-6

Lab Sample ID: 400-133561-13

Date Collected: 01/31/17 16:10

Matrix: Water

Date Received: 02/06/17 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			293085	02/17/17 10:55	PJM	TAL SL
Total/NA	Analysis	9315		1	297321	03/13/17 06:07	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293135	02/17/17 18:20	PJM	TAL SL
Total/NA	Analysis	9320		1	296226	03/07/17 11:06	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02706 MW-13

Lab Sample ID: 400-133561-14

Date Collected: 01/31/17 15:00

Matrix: Water

Date Received: 02/06/17 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			293085	02/17/17 10:55	PJM	TAL SL
Total/NA	Analysis	9315		1	297321	03/13/17 06:07	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293135	02/17/17 18:20	PJM	TAL SL
Total/NA	Analysis	9320		1	296226	03/07/17 11:06	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02707 MW-14

Lab Sample ID: 400-133561-15

Date Collected: 01/31/17 16:05

Matrix: Water

Date Received: 02/06/17 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			293085	02/17/17 10:55	PJM	TAL SL
Total/NA	Analysis	9315		1	297321	03/13/17 06:08	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293135	02/17/17 18:20	PJM	TAL SL
Total/NA	Analysis	9320		1	296226	03/07/17 11:06	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02708 MW-12

Lab Sample ID: 400-133561-16

Date Collected: 02/01/17 09:35

Matrix: Water

Date Received: 02/06/17 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			293085	02/17/17 10:55	PJM	TAL SL
Total/NA	Analysis	9315		1	297321	03/13/17 06:08	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293135	02/17/17 18:20	PJM	TAL SL
Total/NA	Analysis	9320		1	296226	03/07/17 11:06	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX02709 MW-11

Lab Sample ID: 400-133561-17

Date Collected: 02/01/17 10:38

Matrix: Water

Date Received: 02/06/17 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			293085	02/17/17 10:55	PJM	TAL SL
Total/NA	Analysis	9315		1	297321	03/13/17 06:09	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293135	02/17/17 18:20	PJM	TAL SL
Total/NA	Analysis	9320		1	296226	03/07/17 11:06	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02710 MW-11 DUP

Lab Sample ID: 400-133561-18

Date Collected: 02/01/17 10:38

Matrix: Water

Date Received: 02/06/17 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			293085	02/17/17 10:55	PJM	TAL SL
Total/NA	Analysis	9315		1	297321	03/13/17 06:09	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293135	02/17/17 18:20	PJM	TAL SL
Total/NA	Analysis	9320		1	296226	03/07/17 11:06	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02711 MW-9

Lab Sample ID: 400-133561-19

Date Collected: 02/01/17 09:35

Matrix: Water

Date Received: 02/06/17 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			293085	02/17/17 10:55	PJM	TAL SL
Total/NA	Analysis	9315		1	297321	03/13/17 06:10	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293135	02/17/17 18:20	PJM	TAL SL
Total/NA	Analysis	9320		1	296226	03/07/17 11:06	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02712 FB-1

Lab Sample ID: 400-133561-20

Date Collected: 02/01/17 09:46

Matrix: Water

Date Received: 02/06/17 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			293085	02/17/17 10:55	PJM	TAL SL
Total/NA	Analysis	9315		1	297321	03/13/17 06:10	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293135	02/17/17 18:20	PJM	TAL SL
Total/NA	Analysis	9320		1	296226	03/07/17 11:06	MLK	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-133561-1
SDG: Barry Ash Pond (6)

Client Sample ID: AX02713 MW-10

Lab Sample ID: 400-133561-21

Date Collected: 02/01/17 10:43

Matrix: Water

Date Received: 02/06/17 14:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			293084	02/17/17 10:50	PJM	TAL SL
Total/NA	Analysis	9315		1	297321	03/13/17 04:15	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293134	02/17/17 18:16	PJM	TAL SL
Total/NA	Analysis	9320		1	296549	03/08/17 14:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	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 Barry

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Rad

Prep Batch: 293084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-133561-21	AX02713 MW-10	Total/NA	Water	PrecSep-21	
MB 160-293084/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-293084/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-133564-B-5-A DU	Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 293085

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-133561-1	AX02658 MW-4	Total/NA	Water	PrecSep-21	
400-133561-2	AX02659 MW-3	Total/NA	Water	PrecSep-21	
400-133561-3	AX02660 MW-1	Total/NA	Water	PrecSep-21	
400-133561-4	AX02661 FB-2	Total/NA	Water	PrecSep-21	
400-133561-5	AX02662 MW-2	Total/NA	Water	PrecSep-21	
400-133561-6	AX02663 MW-2 DUP	Total/NA	Water	PrecSep-21	
400-133561-7	AX02664 MW-16	Total/NA	Water	PrecSep-21	
400-133561-8	AX02665 MW-15	Total/NA	Water	PrecSep-21	
400-133561-9	AX02666 EB-1	Total/NA	Water	PrecSep-21	
400-133561-10	AX02667 MW-5	Total/NA	Water	PrecSep-21	
400-133561-11	AX02668 MW-8	Total/NA	Water	PrecSep-21	
400-133561-12	AX02669 MW-7	Total/NA	Water	PrecSep-21	
400-133561-13	AX02670 MW-6	Total/NA	Water	PrecSep-21	
400-133561-14	AX02706 MW-13	Total/NA	Water	PrecSep-21	
400-133561-15	AX02707 MW-14	Total/NA	Water	PrecSep-21	
400-133561-16	AX02708 MW-12	Total/NA	Water	PrecSep-21	
400-133561-17	AX02709 MW-11	Total/NA	Water	PrecSep-21	
400-133561-18	AX02710 MW-11 DUP	Total/NA	Water	PrecSep-21	
400-133561-19	AX02711 MW-9	Total/NA	Water	PrecSep-21	
400-133561-20	AX02712 FB-1	Total/NA	Water	PrecSep-21	
MB 160-293085/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-293085/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-133561-12 DU	AX02669 MW-7	Total/NA	Water	PrecSep-21	
400-133561-16 DU	AX02708 MW-12	Total/NA	Water	PrecSep-21	

Prep Batch: 293134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-133561-21	AX02713 MW-10	Total/NA	Water	PrecSep_0	
MB 160-293134/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-293134/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-133564-B-5-B DU	Duplicate	Total/NA	Water	PrecSep_0	
400-133564-B-11-B DU	Duplicate	Total/NA	Water	PrecSep_0	

Prep Batch: 293135

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-133561-1	AX02658 MW-4	Total/NA	Water	PrecSep_0	
400-133561-2	AX02659 MW-3	Total/NA	Water	PrecSep_0	
400-133561-3	AX02660 MW-1	Total/NA	Water	PrecSep_0	
400-133561-4	AX02661 FB-2	Total/NA	Water	PrecSep_0	
400-133561-5	AX02662 MW-2	Total/NA	Water	PrecSep_0	
400-133561-6	AX02663 MW-2 DUP	Total/NA	Water	PrecSep_0	
400-133561-7	AX02664 MW-16	Total/NA	Water	PrecSep_0	
400-133561-8	AX02665 MW-15	Total/NA	Water	PrecSep_0	
400-133561-9	AX02666 EB-1	Total/NA	Water	PrecSep_0	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-133561-1
SDG: Barry Ash Pond (6)

Rad (Continued)

Prep Batch: 293135 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-133561-10	AX02667 MW-5	Total/NA	Water	PrecSep_0	
400-133561-11	AX02668 MW-8	Total/NA	Water	PrecSep_0	
400-133561-12	AX02669 MW-7	Total/NA	Water	PrecSep_0	
400-133561-13	AX02670 MW-6	Total/NA	Water	PrecSep_0	
400-133561-14	AX02706 MW-13	Total/NA	Water	PrecSep_0	
400-133561-15	AX02707 MW-14	Total/NA	Water	PrecSep_0	
400-133561-16	AX02708 MW-12	Total/NA	Water	PrecSep_0	
400-133561-17	AX02709 MW-11	Total/NA	Water	PrecSep_0	
400-133561-18	AX02710 MW-11 DUP	Total/NA	Water	PrecSep_0	
400-133561-19	AX02711 MW-9	Total/NA	Water	PrecSep_0	
400-133561-20	AX02712 FB-1	Total/NA	Water	PrecSep_0	
MB 160-293135/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-293135/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-133561-12 DU	AX02669 MW-7	Total/NA	Water	PrecSep_0	
400-133561-16 DU	AX02708 MW-12	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-293084/1-A
Matrix: Water
Analysis Batch: 297321

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 293084

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.03502	U	0.108	0.108	1.00	0.199	pCi/L	02/17/17 10:50	03/13/17 04:15	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.7		40 - 110					02/17/17 10:50	03/13/17 04:15	1

Lab Sample ID: LCS 160-293084/2-A
Matrix: Water
Analysis Batch: 297321

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 293084

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	15.2	14.58		1.55	1.00	0.167	pCi/L	96	68 - 137
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	93.2		40 - 110						

Lab Sample ID: 400-133564-B-5-A DU
Matrix: Water
Analysis Batch: 297321

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 293084

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.414		0.3467		0.157	1.00	0.178	pCi/L	0.21	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	94.4		40 - 110							

Lab Sample ID: MB 160-293085/1-A
Matrix: Water
Analysis Batch: 297320

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 293085

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.03061	U	0.107	0.107	1.00	0.200	pCi/L	02/17/17 10:55	03/13/17 05:57	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.7		40 - 110					02/17/17 10:55	03/13/17 05:57	1

Lab Sample ID: LCS 160-293085/2-A
Matrix: Water
Analysis Batch: 297320

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 293085

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	15.2	14.92		1.57	1.00	0.172	pCi/L	98	68 - 137

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

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

Lab Sample ID: LCS 160-293085/2-A
Matrix: Water
Analysis Batch: 297320

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 293085

	LCS	LCS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	97.1		40 - 110

Lab Sample ID: 400-133561-12 DU
Matrix: Water
Analysis Batch: 297321

Client Sample ID: AX02669 MW-7
Prep Type: Total/NA
Prep Batch: 293085

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.207		0.1337	U	0.117	1.00	0.180	pCi/L	0.31	1

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	96.5		40 - 110

Lab Sample ID: 400-133561-16 DU
Matrix: Water
Analysis Batch: 297321

Client Sample ID: AX02708 MW-12
Prep Type: Total/NA
Prep Batch: 293085

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.303		0.2911		0.145	1.00	0.176	pCi/L	0.04	1

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	95.6		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-293134/1-A
Matrix: Water
Analysis Batch: 296549

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 293134

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.04899	U	0.330	0.330	1.00	0.594	pCi/L	02/17/17 18:16	03/08/17 14:52	1

	MB	MB	Limits	Prepared	Analyzed	Dil Fac
Carrier	%Yield	Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	94.7		40 - 110	02/17/17 18:16	03/08/17 14:52	1
Y Carrier	83.4		40 - 110	02/17/17 18:16	03/08/17 14:52	1

Lab Sample ID: LCS 160-293134/2-A
Matrix: Water
Analysis Batch: 296549

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 293134

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	18.3	18.72		2.03	1.00	0.562	pCi/L	102	56 - 140

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

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

Lab Sample ID: LCS 160-293134/2-A
Matrix: Water
Analysis Batch: 296549

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 293134

	LCS	LCS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	93.2		40 - 110
Y Carrier	89.7		40 - 110

Lab Sample ID: 400-133564-B-5-B DU
Matrix: Water
Analysis Batch: 296549

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 293134

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.454	U	0.5380		0.328	1.00	0.491	pCi/L	0.13	1

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	94.4		40 - 110
Y Carrier	85.6		40 - 110

Lab Sample ID: 400-133564-B-11-B DU
Matrix: Water
Analysis Batch: 296638

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 293134

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.0942	U	0.2138	U	0.351	1.00	0.590	pCi/L	NaN	1

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	97.1		40 - 110
Y Carrier	89.7		40 - 110

Lab Sample ID: MB 160-293135/1-A
Matrix: Water
Analysis Batch: 296225

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 293135

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.08783	U	0.367	0.367	1.00	0.638	pCi/L	02/17/17 18:20	03/07/17 11:02	1

	MB	MB	Limits	Prepared	Analyzed	Dil Fac
Carrier	%Yield	Qualifier	Limits			
Ba Carrier	84.7		40 - 110	02/17/17 18:20	03/07/17 11:02	1
Y Carrier	83.7		40 - 110	02/17/17 18:20	03/07/17 11:02	1

Lab Sample ID: LCS 160-293135/2-A
Matrix: Water
Analysis Batch: 296225

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 293135

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	18.3	18.87		2.03	1.00	0.497	pCi/L	103	56 - 140

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry Ash Pond (6)

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

Lab Sample ID: LCS 160-293135/2-A
Matrix: Water
Analysis Batch: 296225

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 293135

	LCS	LCS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	97.1		40 - 110
Y Carrier	84.5		40 - 110

Lab Sample ID: 400-133561-12 DU
Matrix: Water
Analysis Batch: 296226

Client Sample ID: AX02669 MW-7
Prep Type: Total/NA
Prep Batch: 293135

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	-0.112	U	0.5640	U	0.377	1.00	0.583	pCi/L	0.93	1

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	96.5		40 - 110
Y Carrier	87.1		40 - 110

Lab Sample ID: 400-133561-16 DU
Matrix: Water
Analysis Batch: 296226

Client Sample ID: AX02708 MW-12
Prep Type: Total/NA
Prep Batch: 293135

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.806		0.7161		0.349	1.00	0.501	pCi/L	0.12	1

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	95.6		40 - 110
Y Carrier	86.4		40 - 110

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

Lab Sample ID: 400-133561-12 DU
Matrix: Water
Analysis Batch: 297652

Client Sample ID: AX02669 MW-7
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	0.0949	U	0.6977		0.395	5.00	0.583	pCi/L	0.79	

Lab Sample ID: 400-133561-16 DU
Matrix: Water
Analysis Batch: 297652

Client Sample ID: AX02708 MW-12
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		1.007		0.378	5.00	0.501	pCi/L	0.13	

TestAmerica Pensacola

TestAmerica Pensacola
 3355 McLemore Drive
 Pensacola, FL 32514
 Phone (850) 474-1001 Fax (850) 475-2871

Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information Company: Alabama Power General Test Laboratory Address: 744 County Rd 87 GSC #8 City: Callera State/Zip: AL, 35040 Phone: 205-664-6121 (Tel) Email: sgcopela@southernco.com Project Name: CCR Site: Barry Ash Pond (6)		Sampler: Nick Pitts/ Jason Rouss Phone: Lab POC: Whitmore, Chyenne R E-Mail: chyenne.whitmore@testamericainc.com		COC No: 400-56525-24537.1 Page: Page 1 of 2 Job #: 400-133561	
Due Date Requested: TAT Requested (days): PO #: W/O #: Project #: 40007143 SSON#:		Analysis Requested  400-133561 COC			
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (view water, solid, overwater, entrance, air/water)
AX02658	1/31/17	0932	G	Water	
AX02659	1/31/17	1045	G	Water	
AX02660	1/31/17	1146	G	Water	
AX02661	1/31/17	1205	G	Water	
AX02662	1/31/17	1255	G	Water	
AX02663	1/31/17	1255	G	Water	
AX02664	1/31/17	1407	G	Water	
AX02665	1/31/17	1515	G	Water	
AX02666	1/31/17	1610	G	Water	
AX02667	1/31/17	1220	G	Water	
AX02668	1/31/17	1338	G	Water	
AX02669	1/31/17	1455	G	Water	
AX02670	1/31/17	1610	G	Water	

Special Instructions/Note:
 MW-4
 MW-3
 MW-1
 PB-2 (Field Blank)
 MW-2
 MW-2 Dup (Sample Duplicate)
 MW-16
 MW-15
 EB-1 (Equipment Blank)
 MW-5
 MW-8
 MW-7
 MW-6


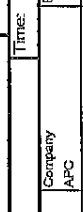
Special Instructions/QC Requirements:
 Return To Client Disposal By Lab Archive For _____ Months
 Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)
 Method of Shipment: _____
 Date: _____
 Received by: _____ Company: _____
 Date/Time: 2-6-17 1400
 Received by: _____ Company: _____
 Date/Time: _____
 Received by: _____ Company: _____
 Date/Time: _____
 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 Client Contact: Sarah Copeland Company: Alabama Power General Test Laboratory Address: 744 County Rd 87 GSC #8 City: Calera State, Zip: AL 35040 Phone: 205-564-6121 (Tel) Email: sgcopela@southamco.com Project #: 40007143 CCR Site: Barry Ash Pond (6)		Sampler: Ben Rofirschad/ Jason Rouss Lab P/LC: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com		Carrier/Tracking No(s): COC No: 400-56625-24537.1 Page: Page 2 of 2 Job #: 400-137561	
Due Date Requested: TAT Requested (days): Routine		Analysis Requested			
PO #: WO #: Project #: SSOW#:		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 - Na2CO3 Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecylhydrate U - Acetone V - NCA4 W - pH 4.5 Z - other (specify)			
Sample Identification AX02705 AX02707 AX02708 AX02709 AX02710 AX02711 AX02712 AX02713		Sample Date 1/31/17 1/31/17 2/1/17 2/1/17 2/1/17 2/1/17 2/1/17		Sample Time 1600 1605 0935 1038 1038 0935 0946 1043	
Matrix (Water, Gas, Other, etc.) Water Water Water Water Water Water Water		Sample Type (C=Comp, G=Grab) G G G G G G G		Special Instructions/Note: MW-13 MW-14 MW-12 MW-11 MW-11 Dup (Sample Duplicate) MW-9 FB-1 (Field Blank) MW-10	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverables Requested: I, II, III, IV, Other (specify)					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months Special Instructions/QC Requirements:					
Empty Kit Relinquished by: Relinquished by: Sarah Copeland Date/Time: 2/7/2017, 11:05 Company: APC		Method of Shipment: Received by:  Date/Time: 2-6-17 1400 Company:  Date/Time: _____ Company: _____ Date/Time: _____ Company: _____			
Relinquished by: Relinquished by: _____ Date/Time: _____ Company: _____		Cooler Temperature(s) °C and Other Remarks: Δ Yes Δ No			



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-133561-1
SDG Number: Barry Ash Pond (6)

Login Number: 133561

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.	True	
The cooler or samples do not appear to have been compromised or tampered with.	N/A	
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	



Certification Summary

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

TestAmerica Job ID: 400-133561-1
 SDG: Barry 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

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 *

* Certification renewal pending - certification considered valid.

Certification Summary

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

TestAmerica Job ID: 400-133561-1
SDG: Barry Ash Pond (6)

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
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 *

* 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



Sample Group : WMWBARAP_1083

Project/Site : Barry Ash Pond
Bucks, AL 36512

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:

Case Narrative



Anions

Barry Ash Pond

WMWBARAP_1083

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 for these samples.

Job Narrative
400-135675-1
General Chemistry

Method(s) SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 348438 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 348542 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.

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: WMWBARAP
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AX06750

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
General Characteristics									
* Chloride, Total, by Test America	SGC	4/17/2017	SM 4500 Cl_E		1	0.60	2.00	11	mg/L
* Fluoride, Total, by Test America	SGC	4/17/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	4/17/2017	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: WMWBARAP
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AX06750

Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
--------	----------	-------	----	-------	-------	----	-----	-----	-------	-----	-------	------	-------

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AX06750

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

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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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 (205) 664-6032 or 6171
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Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AX06751

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
General Characteristics									
* Chloride, Total, by Test America	SGC	4/17/2017	SM 4500 Cl_E		1	0.60	2.00	7.2	mg/L
* Fluoride, Total, by Test America	SGC	4/17/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	4/17/2017	SM 4500 SO4_E		1	1.40	5.00	U <1.4	mg/L

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Expiration: June 30, 2018

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Alabama Power General Test Laboratory
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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AX06751

Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
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 (205) 664-6032 or 6171
 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AX06751

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

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
Sample Date: 21-Mar-17
Customer ID:
Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AX06752

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
General Characteristics									
* Chloride, Total, by Test America	SGC	4/17/2017	SM 4500 Cl_E		1	0.60	2.00	7.2	mg/L
* Fluoride, Total, by Test America	SGC	4/17/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	4/17/2017	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

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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AX06752

Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
--------	----------	-------	----	-------	-------	----	-----	-----	-------	-----	-------	------	-------

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AX06752

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

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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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Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-2 Dup

Laboratory ID Number: AX06753

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
General Characteristics									
* Chloride, Total, by Test America	SGC	4/17/2017	SM 4500 Cl_E		1	0.60	2.00	7.2	mg/L
* Fluoride, Total, by Test America	SGC	4/17/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	4/17/2017	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: WMWBARAP
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-2 Dup

Laboratory ID Number: AX06753

Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
--------	----------	-------	----	-------	-------	----	-----	-----	-------	-----	-------	------	-------

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Expiration: June 30, 2018

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-2 Dup

Laboratory ID Number: AX06753

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

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AX06754

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
General Characteristics									
* Chloride, Total, by Test America	SGC	4/17/2017	SM 4500 Cl_E		1	0.60	2.00	25	mg/L
* Fluoride, Total, by Test America	SGC	4/17/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	4/17/2017	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

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AX06754

Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
--------	----------	-------	----	-------	-------	----	-----	-----	-------	-----	-------	------	-------

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AX06754

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

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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: WMWBARAPEB
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AX06755

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
General Characteristics									
* Chloride, Total, by Test America	SGC	4/17/2017	SM 4500 Cl_E		1	0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	SGC	4/17/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	4/17/2017	SM 4500 SO4_E		1	1.40	5.00	U <1.4	mg/L

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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: WMWBARAPEB
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AX06755

Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
--------	----------	-------	----	-------	-------	----	-----	-----	-------	-----	-------	------	-------

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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: WMWBARAPEB
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AX06755

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

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

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
Sample Date: 21-Mar-17
Customer ID:
Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AX06756

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
General Characteristics									
* Chloride, Total, by Test America	SGC	4/17/2017	SM 4500 Cl_E		1	0.60	2.00	19	mg/L
* Fluoride, Total, by Test America	SGC	4/17/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	4/17/2017	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.

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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: WMWBARAP
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AX06756

Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
--------	----------	-------	----	-------	-------	----	-----	-----	-------	-----	-------	------	-------

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Laboratory certification ID: E571114

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AX06756

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

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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: WMWBARAP
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AX06757

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
General Characteristics									
* Chloride, Total, by Test America	SGC	4/17/2017	SM 4500 Cl_E		1	0.60	2.00	34	mg/L
* Fluoride, Total, by Test America	SGC	4/17/2017	SM 4500 F_C		1	0.032	0.10	0.18	mg/L
* Sulfate, Total, by Test America	SGC	4/17/2017	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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 (205) 664-6032 or 6171
 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AX06757

Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
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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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 (205) 664-6032 or 6171
 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AX06757

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

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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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 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: WMWBARAPFB
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX06758

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
General Characteristics									
* Chloride, Total, by Test America	SGC	4/17/2017	SM 4500 Cl_E		1	0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	SGC	4/17/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	4/17/2017	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

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: WMWBARAPFB
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX06758

Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	LFB	LFB	Limit	Rec	Limit	Prec	Prec	Limit
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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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: WMWBARAPFB
 Sample Date: 21-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX06758

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

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

Alabama Power General Test Laboratory
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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: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AX06759

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
General Characteristics									
* Chloride, Total, by Test America	SGC	4/17/2017	SM 4500 Cl_E		1	0.60	2.00	49	mg/L
* Fluoride, Total, by Test America	SGC	4/17/2017	SM 4500 F_C		1	0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	SGC	4/17/2017	SM 4500 SO4_E		1	1.40	5.00	6.9	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

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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: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AX06759

Sample	Analysis	Units	MB	MB	MS	MSD	LFB	LFB	Rec	Rec	Prec	Prec
			Limit	Spike				Limit	Rec	Limit	Prec	Limit

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

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 (205) 664-6032 or 6171
 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AX06759

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

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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: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AX06760

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
General Characteristics									
* Chloride, Total, by Test America	SGC	4/17/2017	SM 4500 Cl_E		1	0.60	2.00	46	mg/L
* Fluoride, Total, by Test America	SGC	4/17/2017	SM 4500 F_C		1	0.032	0.10	J 0.060	mg/L
* Sulfate, Total, by Test America	SGC	4/17/2017	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

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AX06760

Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AX06760

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

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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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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
Sample Date: 22-Mar-17
Customer ID:
Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AX06761

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
General Characteristics									
* Chloride, Total, by Test America	SGC	4/17/2017	SM 4500 Cl_E		1	0.60	2.00	23	mg/L
* Fluoride, Total, by Test America	SGC	4/17/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	4/17/2017	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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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AX06761

Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
--------	----------	-------	----	-------	-------	----	-----	-----	-------	-----	-------	------	-------

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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: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AX06761

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

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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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Alabama Power General Test Laboratory
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 FAX (205) 257-1654

Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AX06762

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
General Characteristics									
* Chloride, Total, by Test America	SGC	4/17/2017	SM 4500 Cl_E		1	0.60	2.00	27	mg/L
* Fluoride, Total, by Test America	SGC	4/17/2017	SM 4500 F_C		1	0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	SGC	4/17/2017	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

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 (205) 664-6032 or 6171
 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AX06762

Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AX06762

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

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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 Alabama Power



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AX06763

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
General Characteristics									
* Chloride, Total, by Test America	SGC	4/17/2017	SM 4500 Cl_E		1	0.60	2.00	21	mg/L
* Fluoride, Total, by Test America	SGC	4/17/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	4/17/2017	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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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AX06763

Sample	Analysis	Units	MB	MB	MS	MSD	LFB	LFB	Rec	Rec	Prec	Prec
			Limit	Spike				Limit	Limit	Limit	Limit	Limit

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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
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 (205) 664-6032 or 6171
 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AX06763

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

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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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 FAX (205) 257-1654

Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
Sample Date: 22-Mar-17
Customer ID:
Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AX06764

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
General Characteristics									
* Chloride, Total, by Test America	SGC	4/17/2017	SM 4500 Cl_E		1	0.60	2.00	22	mg/L
* Fluoride, Total, by Test America	SGC	4/17/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	4/17/2017	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: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AX06764

Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AX06764

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

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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: WMWBARAP
Sample Date: 22-Mar-17
Customer ID:
Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AX06765

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
General Characteristics									
* Chloride, Total, by Test America	SGC	4/17/2017	SM 4500 Cl_E		1	0.60	2.00	24	mg/L
* Fluoride, Total, by Test America	SGC	4/17/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	4/17/2017	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: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AX06765

Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AX06765

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

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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: WMWBARAP
Sample Date: 22-Mar-17
Customer ID:
Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AX06766

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
General Characteristics									
* Chloride, Total, by Test America	SGC	4/17/2017	SM 4500 Cl_E		1	0.60	2.00	26	mg/L
* Fluoride, Total, by Test America	SGC	4/17/2017	SM 4500 F_C		1	0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	SGC	4/17/2017	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: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AX06766

Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
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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



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AX06766

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

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: WMWBARAPFB
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX06767

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
General Characteristics									
* Chloride, Total, by Test America	SGC	4/17/2017	SM 4500 Cl_E		1	0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	SGC	4/17/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	4/17/2017	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: WMWBARAPFB
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX06767

Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	LFB	LFB	Limit	Rec	Limit	Prec	Prec	Limit
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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



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAPFB
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX06767

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

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

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

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

Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AX06768

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
General Characteristics									
* Chloride, Total, by Test America	SGC	4/17/2017	SM 4500 Cl_E		1	0.60	2.00	13	mg/L
* Fluoride, Total, by Test America	SGC	4/17/2017	SM 4500 F_C		1	0.032	0.10	J 0.060	mg/L
* Sulfate, Total, by Test America	SGC	4/17/2017	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
 744 County Road 87, GSC#8
 Calera, AL 35040
 (205) 664-6032 or 6171
 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AX06768

Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AX06768

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

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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

Customer Account: WMWBARAP
Sample Date: 22-Mar-17
Customer ID:
Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AX06769

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
General Characteristics									
* Chloride, Total, by Test America	SGC	4/17/2017	SM 4500 Cl_E		1	0.60	2.00	6.0	mg/L
* Fluoride, Total, by Test America	SGC	4/17/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	4/17/2017	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
 (205) 664-6032 or 6171
 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AX06769

Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
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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: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AX06769

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

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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: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-6 Dup

Laboratory ID Number: AX06770

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
General Characteristics									
* Chloride, Total, by Test America	SGC	4/17/2017	SM 4500 Cl_E		1	0.60	2.00	5.7	mg/L
* Fluoride, Total, by Test America	SGC	4/17/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	4/17/2017	SM 4500 SO4_E		1	1.40	5.00	U <1.4	mg/L

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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: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-6 Dup

Laboratory ID Number: AX06770

Sample	Analysis	Units	MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 22-Mar-17
 Customer ID:
 Delivery Date: 23-Mar-17

Description: Barry Ash Pond - MW-6 Dup

Laboratory ID Number: AX06770

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

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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 03/23/2017 13:00

Requested Complete Date	<input type="text" value="Routine"/>	Results To	<input type="text" value="Dustin Brooks, Greg Dyer"/>
Site Representative	<input type="text" value="Angie Jimmerson"/>	Requested By	<input type="text" value="Greg Dyer"/>
Collector	<input type="text" value="Nick Pitts"/>	Location	<input type="text" value="Barry Ash Pond"/>
Analysis Requested	<input type="text" value="Bottle 1 (250 ml): Anions"/>		
Comments	<input type="text" value="Anions Re-Sample due to hold time exceedance. Outsourced to Test America. No requirement for pH preservation for anions."/>		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-4	03/21/2017	10:02	1	Groundwater		AX06750
MW-3	03/21/2017	10:47	1	Groundwater		AX06751
MW-2	03/21/2017	12:30	1	Groundwater		AX06752
MW-2 Dup	03/21/2017	12:30	1	Sample Duplicate		AX06753
MW-1	03/21/2017	11:43	1	Groundwater		AX06754
EB-1	03/21/2017	11:00	1	Equipment Blank		AX06755
MW-16	03/21/2017	13:27	1	Groundwater		AX06756
MW-15	03/21/2017	14:16	1	Groundwater		AX06757
FB-1	03/21/2017	14:20	1	Field Blank		AX06758
MW-13	03/22/2017	09:55	1	Groundwater		AX06759
MW-14	03/22/2017	10:42	1	Groundwater		AX06760
MW-12	03/22/2017	11:31	1	Groundwater		AX06761
MW-11	03/22/2017	12:21	1	Groundwater		AX06762
MW-10	03/22/2017	13:11	1	Groundwater		AX06763

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: 2017.03.23 13:55:18 -05'00'</small>	03/23/2017 13:55

SmarTroll ID	<input type="text" value="5141-26150-1-1"/>	All metals and radiological bottles have pH < 2 <input type="checkbox"/>
Turbidity ID	<input type="text" value="5160-26211-1-1"/>	Cooler Temp
		<input type="text" value="0.1 degrees C"/>
		Thermometer ID
		<input type="text" value="5408-27568-2-2"/>
		pH Strip ID
		<input type="text" value="NA"/>



Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

Field Complete
 Lab Complete

Lab ETA 03/23/2017 13:06

Requested Complete Date	<input type="text" value="Routine"/>	Results To	<input type="text" value="Dustin Brooks, Greg Dyer"/>
Site Representative	<input type="text" value="Angie Jimmerson"/>	Requested By	<input type="text" value="Greg Dyer"/>
Collector	<input type="text" value="Jason Rouss"/>	Location	<input type="text" value="Barry Ash Pond"/>
Analysis Requested	<input type="text" value="Bottle 1 (250 mL): Anions"/>		
Comments	<input type="text" value="Complete anion set re-sample due to hold time exceedance. All samples outsourced to Test America. SGC
No requirement for pH preservation for anions."/>		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-5	03/22/2017	09:21	1	Groundwater		AX06764
MW-8	03/22/2017	10:25	1	Groundwater		AX06765
MW-9	03/22/2017	11:18	1	Groundwater		AX06766
FB-2	03/22/2017	11:19	1	Field Blank		AX06767
MW-7	03/22/2017	12:28	1	Groundwater		AX06768
MW-6	03/22/2017	13:22	1	Groundwater		AX06769
MW-6 Dup	03/22/2017	13:22	1	Sample Duplicate		AX06770

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: 2017.03.23 14:06:44 -05'00'</small>	03/23/2017 14:06

SmarTroll ID	<input type="text" value="4696-23443-3-2"/>	All metals and radiological bottles have pH < 2	<input type="checkbox"/>
Turbidity ID	<input type="text" value="4677-23342-4-1"/>	Cooler Temp	<input type="text" value="1.9 degrees C"/>
		Thermometer ID	<input type="text" value="5408-27568-2-2"/>
		pH Strip ID	<input type="text" value="NA"/>

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: 400-135675-1

TestAmerica Sample Delivery Group: Barry Ash Pond (6)

Client Project/Site: CCR Plant Barry

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 11:51:06 AM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

LINKS

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results through

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Have a Question?



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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 Barry

TestAmerica Job ID: 400-135675-1
SDG: Barry Ash Pond (6)

Job ID: 400-135675-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-135675-1

General Chemistry

Method(s) SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 348438 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 matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 348542 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.

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Detection Summary

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

TestAmerica Job ID: 400-135675-1
SDG: Barry Ash Pond (6)

Client Sample ID: AX06750 MW-4

Lab Sample ID: 400-135675-1

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
Sulfate	3.4	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX06751 MW-3

Lab Sample ID: 400-135675-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	7.2		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: AX06752 MW-2

Lab Sample ID: 400-135675-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	7.2		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: AX06753 MW-2 DUP

Lab Sample ID: 400-135675-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	7.2		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: AX06754 MW-1

Lab Sample ID: 400-135675-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	25		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: AX06755 EB-1

Lab Sample ID: 400-135675-6

No Detections.

Client Sample ID: AX06756 MW-16

Lab Sample ID: 400-135675-7

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

Client Sample ID: AX06757 MW-15

Lab Sample ID: 400-135675-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	34		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.18		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX06758 FB-1

Lab Sample ID: 400-135675-9

No Detections.

Client Sample ID: AX06759 MW-13

Lab Sample ID: 400-135675-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	49		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	6.9		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 Barry

TestAmerica Job ID: 400-135675-1
SDG: Barry Ash Pond (6)

Client Sample ID: AX06760 MW-14

Lab Sample ID: 400-135675-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	46		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

Client Sample ID: AX06761 MW-12

Lab Sample ID: 400-135675-12

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

Client Sample ID: AX06762 MW-11

Lab Sample ID: 400-135675-13

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	0.050	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	2.1	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX06763 MW-10

Lab Sample ID: 400-135675-14

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

Client Sample ID: AX06764 MW-5

Lab Sample ID: 400-135675-15

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

Client Sample ID: AX06765 MW-8

Lab Sample ID: 400-135675-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	24		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: AX06766 MW-9

Lab Sample ID: 400-135675-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	26		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: AX06767 FB-2

Lab Sample ID: 400-135675-18

No Detections.

Client Sample ID: AX06768 MW-7

Lab Sample ID: 400-135675-19

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	0.060	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX06769 MW-6

Lab Sample ID: 400-135675-20

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-135675-1
SDG: Barry Ash Pond (6)

Client Sample ID: AX06769 MW-6 (Continued)

Lab Sample ID: 400-135675-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	6.0		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: AX06770 MW-6 DUP

Lab Sample ID: 400-135675-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.7	F1	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

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Method Summary

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

TestAmerica Job ID: 400-135675-1
SDG: Barry 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



Sample Summary

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

TestAmerica Job ID: 400-135675-1
SDG: Barry Ash Pond (6)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-135675-1	AX06750 MW-4	Water	03/21/17 10:02	03/27/17 08:34
400-135675-2	AX06751 MW-3	Water	03/21/17 10:47	03/27/17 08:34
400-135675-3	AX06752 MW-2	Water	03/21/17 12:30	03/27/17 08:34
400-135675-4	AX06753 MW-2 DUP	Water	03/21/17 12:30	03/27/17 08:34
400-135675-5	AX06754 MW-1	Water	03/21/17 11:43	03/27/17 08:34
400-135675-6	AX06755 EB-1	Water	03/21/17 11:00	03/27/17 08:34
400-135675-7	AX06756 MW-16	Water	03/21/17 13:27	03/27/17 08:34
400-135675-8	AX06757 MW-15	Water	03/21/17 14:16	03/27/17 08:34
400-135675-9	AX06758 FB-1	Water	03/21/17 14:20	03/27/17 08:34
400-135675-10	AX06759 MW-13	Water	03/22/17 09:55	03/27/17 08:34
400-135675-11	AX06760 MW-14	Water	03/22/17 10:42	03/27/17 08:34
400-135675-12	AX06761 MW-12	Water	03/22/17 11:31	03/27/17 08:34
400-135675-13	AX06762 MW-11	Water	03/22/17 12:21	03/27/17 08:34
400-135675-14	AX06763 MW-10	Water	03/22/17 13:11	03/27/17 08:34
400-135675-15	AX06764 MW-5	Water	03/22/17 09:21	03/27/17 08:34
400-135675-16	AX06765 MW-8	Water	03/22/17 10:25	03/27/17 08:34
400-135675-17	AX06766 MW-9	Water	03/22/17 11:18	03/27/17 08:34
400-135675-18	AX06767 FB-2	Water	03/22/17 11:19	03/27/17 08:34
400-135675-19	AX06768 MW-7	Water	03/22/17 12:28	03/27/17 08:34
400-135675-20	AX06769 MW-6	Water	03/22/17 13:22	03/27/17 08:34
400-135675-21	AX06770 MW-6 DUP	Water	03/22/17 13:22	03/27/17 08:34

Client Sample Results

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

TestAmerica Job ID: 400-135675-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX06750 MW-4

Lab Sample ID: 400-135675-1

Date Collected: 03/21/17 10:02

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11		2.0	0.60	mg/L			04/04/17 14:47	1
Fluoride	<0.032		0.10	0.032	mg/L			04/06/17 19:06	1
Sulfate	3.4	J	5.0	1.4	mg/L			04/13/17 08:19	1

Client Sample ID: AX06751 MW-3

Lab Sample ID: 400-135675-2

Date Collected: 03/21/17 10:47

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.2		2.0	0.60	mg/L			04/04/17 14:47	1
Fluoride	<0.032		0.10	0.032	mg/L			04/06/17 19:08	1
Sulfate	<1.4		5.0	1.4	mg/L			04/13/17 08:19	1

Client Sample ID: AX06752 MW-2

Lab Sample ID: 400-135675-3

Date Collected: 03/21/17 12:30

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.2		2.0	0.60	mg/L			04/04/17 14:47	1
Fluoride	<0.032		0.10	0.032	mg/L			04/06/17 19:10	1
Sulfate	<1.4		5.0	1.4	mg/L			04/13/17 08:19	1

Client Sample ID: AX06753 MW-2 DUP

Lab Sample ID: 400-135675-4

Date Collected: 03/21/17 12:30

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.2		2.0	0.60	mg/L			04/04/17 14:47	1
Fluoride	<0.032		0.10	0.032	mg/L			04/06/17 19:18	1
Sulfate	<1.4		5.0	1.4	mg/L			04/13/17 08:19	1

Client Sample ID: AX06754 MW-1

Lab Sample ID: 400-135675-5

Date Collected: 03/21/17 11:43

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25		2.0	0.60	mg/L			04/04/17 14:47	1
Fluoride	0.040	J	0.10	0.032	mg/L			04/06/17 19:22	1
Sulfate	<1.4		5.0	1.4	mg/L			04/13/17 08:21	1

Client Sample Results

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

TestAmerica Job ID: 400-135675-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX06755 EB-1

Lab Sample ID: 400-135675-6

Date Collected: 03/21/17 11:00

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			04/04/17 14:47	1
Fluoride	<0.032		0.10	0.032	mg/L			04/06/17 19:24	1
Sulfate	<1.4		5.0	1.4	mg/L			04/13/17 08:21	1

Client Sample ID: AX06756 MW-16

Lab Sample ID: 400-135675-7

Date Collected: 03/21/17 13:27

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19		2.0	0.60	mg/L			04/04/17 14:47	1
Fluoride	0.040	J	0.10	0.032	mg/L			04/06/17 19:26	1
Sulfate	<1.4		5.0	1.4	mg/L			04/13/17 08:43	1

Client Sample ID: AX06757 MW-15

Lab Sample ID: 400-135675-8

Date Collected: 03/21/17 14:16

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	34		2.0	0.60	mg/L			04/04/17 14:47	1
Fluoride	0.18		0.10	0.032	mg/L			04/06/17 19:28	1
Sulfate	<1.4		5.0	1.4	mg/L			04/13/17 08:43	1

Client Sample ID: AX06758 FB-1

Lab Sample ID: 400-135675-9

Date Collected: 03/21/17 14:20

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			04/04/17 14:47	1
Fluoride	<0.032		0.10	0.032	mg/L			04/06/17 19:30	1
Sulfate	<1.4		5.0	1.4	mg/L			04/13/17 08:43	1

Client Sample ID: AX06759 MW-13

Lab Sample ID: 400-135675-10

Date Collected: 03/22/17 09:55

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49		2.0	0.60	mg/L			04/05/17 08:39	1
Fluoride	0.050	J	0.10	0.032	mg/L			04/06/17 18:50	1
Sulfate	6.9		5.0	1.4	mg/L			04/13/17 11:06	1

Client Sample ID: AX06760 MW-14

Lab Sample ID: 400-135675-11

Date Collected: 03/22/17 10:42

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	46		2.0	0.60	mg/L			04/04/17 15:12	1

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-135675-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX06760 MW-14

Lab Sample ID: 400-135675-11

Date Collected: 03/22/17 10:42

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.060	J	0.10	0.032	mg/L			04/06/17 19:32	1
Sulfate	<1.4		5.0	1.4	mg/L			04/13/17 08:43	1

Client Sample ID: AX06761 MW-12

Lab Sample ID: 400-135675-12

Date Collected: 03/22/17 11:31

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23		2.0	0.60	mg/L			04/04/17 15:12	1
Fluoride	0.040	J	0.10	0.032	mg/L			04/06/17 19:35	1
Sulfate	<1.4		5.0	1.4	mg/L			04/13/17 08:43	1

Client Sample ID: AX06762 MW-11

Lab Sample ID: 400-135675-13

Date Collected: 03/22/17 12:21

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27		2.0	0.60	mg/L			04/04/17 15:12	1
Fluoride	0.050	J	0.10	0.032	mg/L			04/07/17 12:18	1
Sulfate	2.1	J	5.0	1.4	mg/L			04/13/17 08:43	1

Client Sample ID: AX06763 MW-10

Lab Sample ID: 400-135675-14

Date Collected: 03/22/17 13:11

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21		2.0	0.60	mg/L			04/04/17 15:12	1
Fluoride	<0.032		0.10	0.032	mg/L			04/07/17 12:20	1
Sulfate	<1.4		5.0	1.4	mg/L			04/13/17 11:06	1

Client Sample ID: AX06764 MW-5

Lab Sample ID: 400-135675-15

Date Collected: 03/22/17 09:21

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22		2.0	0.60	mg/L			04/05/17 08:39	1
Fluoride	0.040	J	0.10	0.032	mg/L			04/07/17 15:23	1
Sulfate	<1.4		5.0	1.4	mg/L			04/13/17 11:06	1

Client Sample ID: AX06765 MW-8

Lab Sample ID: 400-135675-16

Date Collected: 03/22/17 10:25

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24		2.0	0.60	mg/L			04/05/17 08:39	1
Fluoride	<0.032		0.10	0.032	mg/L			04/07/17 12:24	1

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-135675-1
SDG: Barry Ash Pond (6)

Client Sample ID: AX06765 MW-8

Lab Sample ID: 400-135675-16

Date Collected: 03/22/17 10:25

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.4		5.0	1.4	mg/L			04/13/17 11:06	1

Client Sample ID: AX06766 MW-9

Lab Sample ID: 400-135675-17

Date Collected: 03/22/17 11:18

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26		2.0	0.60	mg/L			04/05/17 08:39	1
Fluoride	0.050	J	0.10	0.032	mg/L			04/07/17 12:11	1
Sulfate	<1.4		5.0	1.4	mg/L			04/13/17 12:28	1

Client Sample ID: AX06767 FB-2

Lab Sample ID: 400-135675-18

Date Collected: 03/22/17 11:19

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			04/05/17 08:39	1
Fluoride	<0.032		0.10	0.032	mg/L			04/07/17 12:27	1
Sulfate	<1.4		5.0	1.4	mg/L			04/13/17 11:06	1

Client Sample ID: AX06768 MW-7

Lab Sample ID: 400-135675-19

Date Collected: 03/22/17 12:28

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13		2.0	0.60	mg/L			04/05/17 08:39	1
Fluoride	0.060	J	0.10	0.032	mg/L			04/07/17 13:31	1
Sulfate	<1.4		5.0	1.4	mg/L			04/13/17 11:06	1

Client Sample ID: AX06769 MW-6

Lab Sample ID: 400-135675-20

Date Collected: 03/22/17 13:22

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.0		2.0	0.60	mg/L			04/05/17 08:39	1
Fluoride	<0.032		0.10	0.032	mg/L			04/07/17 15:21	1
Sulfate	<1.4		5.0	1.4	mg/L			04/13/17 11:07	1

Client Sample ID: AX06770 MW-6 DUP

Lab Sample ID: 400-135675-21

Date Collected: 03/22/17 13:22

Matrix: Water

Date Received: 03/27/17 08:34

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.7	F1	2.0	0.60	mg/L			04/05/17 10:27	1
Fluoride	<0.032		0.10	0.032	mg/L			04/07/17 14:54	1
Sulfate	<1.4		5.0	1.4	mg/L			04/13/17 12:28	1

TestAmerica Pensacola

Definitions/Glossary

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

TestAmerica Job ID: 400-135675-1
SDG: Barry Ash Pond (6)

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.
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.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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 Barry

TestAmerica Job ID: 400-135675-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX06750 MW-4

Lab Sample ID: 400-135675-1

Date Collected: 03/21/17 10:02

Matrix: Water

Date Received: 03/27/17 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	348438	04/04/17 14:47	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348794	04/06/17 19:06	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	349553	04/13/17 08:19	BJB	TAL PEN

Client Sample ID: AX06751 MW-3

Lab Sample ID: 400-135675-2

Date Collected: 03/21/17 10:47

Matrix: Water

Date Received: 03/27/17 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	348438	04/04/17 14:47	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348794	04/06/17 19:08	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	349553	04/13/17 08:19	BJB	TAL PEN

Client Sample ID: AX06752 MW-2

Lab Sample ID: 400-135675-3

Date Collected: 03/21/17 12:30

Matrix: Water

Date Received: 03/27/17 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	348438	04/04/17 14:47	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348794	04/06/17 19:10	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	349553	04/13/17 08:19	BJB	TAL PEN

Client Sample ID: AX06753 MW-2 DUP

Lab Sample ID: 400-135675-4

Date Collected: 03/21/17 12:30

Matrix: Water

Date Received: 03/27/17 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	348438	04/04/17 14:47	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348794	04/06/17 19:18	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	349553	04/13/17 08:19	BJB	TAL PEN

Client Sample ID: AX06754 MW-1

Lab Sample ID: 400-135675-5

Date Collected: 03/21/17 11:43

Matrix: Water

Date Received: 03/27/17 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	348438	04/04/17 14:47	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348794	04/06/17 19:22	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	349553	04/13/17 08:21	BJB	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-135675-1
SDG: Barry Ash Pond (6)

Client Sample ID: AX06755 EB-1

Lab Sample ID: 400-135675-6

Date Collected: 03/21/17 11:00

Matrix: Water

Date Received: 03/27/17 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	348438	04/04/17 14:47	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348794	04/06/17 19:24	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	349553	04/13/17 08:21	BJB	TAL PEN

Client Sample ID: AX06756 MW-16

Lab Sample ID: 400-135675-7

Date Collected: 03/21/17 13:27

Matrix: Water

Date Received: 03/27/17 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	348438	04/04/17 14:47	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348794	04/06/17 19:26	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	349553	04/13/17 08:43	BJB	TAL PEN

Client Sample ID: AX06757 MW-15

Lab Sample ID: 400-135675-8

Date Collected: 03/21/17 14:16

Matrix: Water

Date Received: 03/27/17 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	348438	04/04/17 14:47	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348794	04/06/17 19:28	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	349553	04/13/17 08:43	BJB	TAL PEN

Client Sample ID: AX06758 FB-1

Lab Sample ID: 400-135675-9

Date Collected: 03/21/17 14:20

Matrix: Water

Date Received: 03/27/17 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	348438	04/04/17 14:47	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348794	04/06/17 19:30	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	349553	04/13/17 08:43	BJB	TAL PEN

Client Sample ID: AX06759 MW-13

Lab Sample ID: 400-135675-10

Date Collected: 03/22/17 09:55

Matrix: Water

Date Received: 03/27/17 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	348485	04/05/17 08:39	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348794	04/06/17 18:50	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	349600	04/13/17 11:06	BJB	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-135675-1
SDG: Barry Ash Pond (6)

Client Sample ID: AX06760 MW-14

Lab Sample ID: 400-135675-11

Date Collected: 03/22/17 10:42

Matrix: Water

Date Received: 03/27/17 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	348438	04/04/17 15:12	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348794	04/06/17 19:32	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	349553	04/13/17 08:43	BJB	TAL PEN

Client Sample ID: AX06761 MW-12

Lab Sample ID: 400-135675-12

Date Collected: 03/22/17 11:31

Matrix: Water

Date Received: 03/27/17 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	348438	04/04/17 15:12	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348794	04/06/17 19:35	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	349553	04/13/17 08:43	BJB	TAL PEN

Client Sample ID: AX06762 MW-11

Lab Sample ID: 400-135675-13

Date Collected: 03/22/17 12:21

Matrix: Water

Date Received: 03/27/17 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	348438	04/04/17 15:12	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348938	04/07/17 12:18	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	349553	04/13/17 08:43	BJB	TAL PEN

Client Sample ID: AX06763 MW-10

Lab Sample ID: 400-135675-14

Date Collected: 03/22/17 13:11

Matrix: Water

Date Received: 03/27/17 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	348438	04/04/17 15:12	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348938	04/07/17 12:20	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	349600	04/13/17 11:06	BJB	TAL PEN

Client Sample ID: AX06764 MW-5

Lab Sample ID: 400-135675-15

Date Collected: 03/22/17 09:21

Matrix: Water

Date Received: 03/27/17 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	348485	04/05/17 08:39	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348938	04/07/17 15:23	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	349600	04/13/17 11:06	BJB	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-135675-1
 SDG: Barry Ash Pond (6)

Client Sample ID: AX06765 MW-8

Lab Sample ID: 400-135675-16

Date Collected: 03/22/17 10:25

Matrix: Water

Date Received: 03/27/17 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	348485	04/05/17 08:39	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348938	04/07/17 12:24	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	349600	04/13/17 11:06	BJB	TAL PEN

Client Sample ID: AX06766 MW-9

Lab Sample ID: 400-135675-17

Date Collected: 03/22/17 11:18

Matrix: Water

Date Received: 03/27/17 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	348485	04/05/17 08:39	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348938	04/07/17 12:11	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	349638	04/13/17 12:28	BJB	TAL PEN

Client Sample ID: AX06767 FB-2

Lab Sample ID: 400-135675-18

Date Collected: 03/22/17 11:19

Matrix: Water

Date Received: 03/27/17 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	348485	04/05/17 08:39	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348938	04/07/17 12:27	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	349600	04/13/17 11:06	BJB	TAL PEN

Client Sample ID: AX06768 MW-7

Lab Sample ID: 400-135675-19

Date Collected: 03/22/17 12:28

Matrix: Water

Date Received: 03/27/17 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	348485	04/05/17 08:39	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348938	04/07/17 13:31	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	349600	04/13/17 11:06	BJB	TAL PEN

Client Sample ID: AX06769 MW-6

Lab Sample ID: 400-135675-20

Date Collected: 03/22/17 13:22

Matrix: Water

Date Received: 03/27/17 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	348485	04/05/17 08:39	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348938	04/07/17 15:21	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	349600	04/13/17 11:07	BJB	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-135675-1
SDG: Barry Ash Pond (6)

Client Sample ID: AX06770 MW-6 DUP

Lab Sample ID: 400-135675-21

Date Collected: 03/22/17 13:22

Matrix: Water

Date Received: 03/27/17 08:34

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	348542	04/05/17 10:27	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348938	04/07/17 14:54	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	349638	04/13/17 12:28	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 Barry

TestAmerica Job ID: 400-135675-1
 SDG: Barry Ash Pond (6)

General Chemistry

Analysis Batch: 348438

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135675-1	AX06750 MW-4	Total/NA	Water	SM 4500 Cl- E	
400-135675-2	AX06751 MW-3	Total/NA	Water	SM 4500 Cl- E	
400-135675-3	AX06752 MW-2	Total/NA	Water	SM 4500 Cl- E	
400-135675-4	AX06753 MW-2 DUP	Total/NA	Water	SM 4500 Cl- E	
400-135675-5	AX06754 MW-1	Total/NA	Water	SM 4500 Cl- E	
400-135675-6	AX06755 EB-1	Total/NA	Water	SM 4500 Cl- E	
400-135675-7	AX06756 MW-16	Total/NA	Water	SM 4500 Cl- E	
400-135675-8	AX06757 MW-15	Total/NA	Water	SM 4500 Cl- E	
400-135675-9	AX06758 FB-1	Total/NA	Water	SM 4500 Cl- E	
400-135675-11	AX06760 MW-14	Total/NA	Water	SM 4500 Cl- E	
400-135675-12	AX06761 MW-12	Total/NA	Water	SM 4500 Cl- E	
400-135675-13	AX06762 MW-11	Total/NA	Water	SM 4500 Cl- E	
400-135675-14	AX06763 MW-10	Total/NA	Water	SM 4500 Cl- E	
MB 400-348438/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-348438/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-348438/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-135676-A-13 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-135676-A-13 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 348485

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135675-10	AX06759 MW-13	Total/NA	Water	SM 4500 Cl- E	
400-135675-15	AX06764 MW-5	Total/NA	Water	SM 4500 Cl- E	
400-135675-16	AX06765 MW-8	Total/NA	Water	SM 4500 Cl- E	
400-135675-17	AX06766 MW-9	Total/NA	Water	SM 4500 Cl- E	
400-135675-18	AX06767 FB-2	Total/NA	Water	SM 4500 Cl- E	
400-135675-19	AX06768 MW-7	Total/NA	Water	SM 4500 Cl- E	
400-135675-20	AX06769 MW-6	Total/NA	Water	SM 4500 Cl- E	
MB 400-348485/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-348485/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-348485/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-135675-10 MS	AX06759 MW-13	Total/NA	Water	SM 4500 Cl- E	
400-135675-10 MSD	AX06759 MW-13	Total/NA	Water	SM 4500 Cl- E	
400-135675-17 MS	AX06766 MW-9	Total/NA	Water	SM 4500 Cl- E	
400-135675-17 MSD	AX06766 MW-9	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 348542

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135675-21	AX06770 MW-6 DUP	Total/NA	Water	SM 4500 Cl- E	
MB 400-348542/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-348542/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-348542/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-135675-21 MS	AX06770 MW-6 DUP	Total/NA	Water	SM 4500 Cl- E	
400-135675-21 MSD	AX06770 MW-6 DUP	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 348794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135675-1	AX06750 MW-4	Total/NA	Water	SM 4500 F C	
400-135675-2	AX06751 MW-3	Total/NA	Water	SM 4500 F C	
400-135675-3	AX06752 MW-2	Total/NA	Water	SM 4500 F C	
400-135675-4	AX06753 MW-2 DUP	Total/NA	Water	SM 4500 F C	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-135675-1
SDG: Barry Ash Pond (6)

General Chemistry (Continued)

Analysis Batch: 348794 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135675-5	AX06754 MW-1	Total/NA	Water	SM 4500 F C	
400-135675-6	AX06755 EB-1	Total/NA	Water	SM 4500 F C	
400-135675-7	AX06756 MW-16	Total/NA	Water	SM 4500 F C	
400-135675-8	AX06757 MW-15	Total/NA	Water	SM 4500 F C	
400-135675-9	AX06758 FB-1	Total/NA	Water	SM 4500 F C	
400-135675-10	AX06759 MW-13	Total/NA	Water	SM 4500 F C	
400-135675-11	AX06760 MW-14	Total/NA	Water	SM 4500 F C	
400-135675-12	AX06761 MW-12	Total/NA	Water	SM 4500 F C	
MB 400-348794/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-348794/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-135675-10 MS	AX06759 MW-13	Total/NA	Water	SM 4500 F C	
400-135675-10 MSD	AX06759 MW-13	Total/NA	Water	SM 4500 F C	
400-135675-4 DU	AX06753 MW-2 DUP	Total/NA	Water	SM 4500 F C	

Analysis Batch: 348938

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135675-13	AX06762 MW-11	Total/NA	Water	SM 4500 F C	
400-135675-14	AX06763 MW-10	Total/NA	Water	SM 4500 F C	
400-135675-15	AX06764 MW-5	Total/NA	Water	SM 4500 F C	
400-135675-16	AX06765 MW-8	Total/NA	Water	SM 4500 F C	
400-135675-17	AX06766 MW-9	Total/NA	Water	SM 4500 F C	
400-135675-18	AX06767 FB-2	Total/NA	Water	SM 4500 F C	
400-135675-19	AX06768 MW-7	Total/NA	Water	SM 4500 F C	
400-135675-20	AX06769 MW-6	Total/NA	Water	SM 4500 F C	
400-135675-21	AX06770 MW-6 DUP	Total/NA	Water	SM 4500 F C	
MB 400-348938/6	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-348938/7	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-135675-17 MS	AX06766 MW-9	Total/NA	Water	SM 4500 F C	
400-135675-17 MSD	AX06766 MW-9	Total/NA	Water	SM 4500 F C	
400-135675-21 MS	AX06770 MW-6 DUP	Total/NA	Water	SM 4500 F C	
400-135675-21 MSD	AX06770 MW-6 DUP	Total/NA	Water	SM 4500 F C	

Analysis Batch: 349553

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135675-1	AX06750 MW-4	Total/NA	Water	SM 4500 SO4 E	
400-135675-2	AX06751 MW-3	Total/NA	Water	SM 4500 SO4 E	
400-135675-3	AX06752 MW-2	Total/NA	Water	SM 4500 SO4 E	
400-135675-4	AX06753 MW-2 DUP	Total/NA	Water	SM 4500 SO4 E	
400-135675-5	AX06754 MW-1	Total/NA	Water	SM 4500 SO4 E	
400-135675-6	AX06755 EB-1	Total/NA	Water	SM 4500 SO4 E	
400-135675-7	AX06756 MW-16	Total/NA	Water	SM 4500 SO4 E	
400-135675-8	AX06757 MW-15	Total/NA	Water	SM 4500 SO4 E	
400-135675-9	AX06758 FB-1	Total/NA	Water	SM 4500 SO4 E	
400-135675-11	AX06760 MW-14	Total/NA	Water	SM 4500 SO4 E	
400-135675-12	AX06761 MW-12	Total/NA	Water	SM 4500 SO4 E	
400-135675-13	AX06762 MW-11	Total/NA	Water	SM 4500 SO4 E	
MB 400-349553/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-349553/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-349553/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-135676-A-13 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-135676-A-13 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-135675-1
SDG: Barry Ash Pond (6)

Analysis Batch: 349600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135675-10	AX06759 MW-13	Total/NA	Water	SM 4500 SO4 E	
400-135675-14	AX06763 MW-10	Total/NA	Water	SM 4500 SO4 E	
400-135675-15	AX06764 MW-5	Total/NA	Water	SM 4500 SO4 E	
400-135675-16	AX06765 MW-8	Total/NA	Water	SM 4500 SO4 E	
400-135675-18	AX06767 FB-2	Total/NA	Water	SM 4500 SO4 E	
400-135675-19	AX06768 MW-7	Total/NA	Water	SM 4500 SO4 E	
400-135675-20	AX06769 MW-6	Total/NA	Water	SM 4500 SO4 E	
MB 400-349600/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-349600/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-349600/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-135675-10 MS	AX06759 MW-13	Total/NA	Water	SM 4500 SO4 E	
400-135675-10 MSD	AX06759 MW-13	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 349638

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135675-17	AX06766 MW-9	Total/NA	Water	SM 4500 SO4 E	
400-135675-21	AX06770 MW-6 DUP	Total/NA	Water	SM 4500 SO4 E	
MB 400-349638/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-349638/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-349638/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-135675-17 MS	AX06766 MW-9	Total/NA	Water	SM 4500 SO4 E	
400-135675-17 MSD	AX06766 MW-9	Total/NA	Water	SM 4500 SO4 E	
400-135675-21 MS	AX06770 MW-6 DUP	Total/NA	Water	SM 4500 SO4 E	
400-135675-21 MSD	AX06770 MW-6 DUP	Total/NA	Water	SM 4500 SO4 E	

QC Sample Results

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

TestAmerica Job ID: 400-135675-1
 SDG: Barry Ash Pond (6)

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-348438/6
Matrix: Water
Analysis Batch: 348438

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			04/04/17 13:22	1

Lab Sample ID: LCS 400-348438/7
Matrix: Water
Analysis Batch: 348438

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	31.6		mg/L		105	90 - 110

Lab Sample ID: MRL 400-348438/3
Matrix: Water
Analysis Batch: 348438

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	1.83	J	mg/L		92	50 - 150

Lab Sample ID: 400-135676-A-13 MS
Matrix: Water
Analysis Batch: 348438

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	2.8	F1	10.0	15.2	F1	mg/L		125	73 - 120

Lab Sample ID: 400-135676-A-13 MSD
Matrix: Water
Analysis Batch: 348438

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	2.8	F1	10.0	15.3	F1	mg/L		125	73 - 120	1	8

Lab Sample ID: MB 400-348485/6
Matrix: Water
Analysis Batch: 348485

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			04/05/17 08:14	1

Lab Sample ID: LCS 400-348485/7
Matrix: Water
Analysis Batch: 348485

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	31.7		mg/L		106	90 - 110

Lab Sample ID: MRL 400-348485/3
Matrix: Water
Analysis Batch: 348485

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	1.17	J	mg/L		59	50 - 150

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-135675-1
 SDG: Barry Ash Pond (6)

Lab Sample ID: 400-135675-10 MS
Matrix: Water
Analysis Batch: 348485

Client Sample ID: AX06759 MW-13
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	49		10.0	57.9	4	mg/L		88	73 - 120

Lab Sample ID: 400-135675-10 MSD
Matrix: Water
Analysis Batch: 348485

Client Sample ID: AX06759 MW-13
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	49		10.0	58.0	4	mg/L		89	73 - 120	0	8

Lab Sample ID: 400-135675-17 MS
Matrix: Water
Analysis Batch: 348485

Client Sample ID: AX06766 MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	26		10.0	36.8		mg/L		107	73 - 120

Lab Sample ID: 400-135675-17 MSD
Matrix: Water
Analysis Batch: 348485

Client Sample ID: AX06766 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	26		10.0	36.8		mg/L		107	73 - 120	0	8

Lab Sample ID: MB 400-348542/6
Matrix: Water
Analysis Batch: 348542

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			04/05/17 09:29	1

Lab Sample ID: LCS 400-348542/7
Matrix: Water
Analysis Batch: 348542

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	32.4		mg/L		108	90 - 110

Lab Sample ID: MRL 400-348542/3
Matrix: Water
Analysis Batch: 348542

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	1.63	J	mg/L		81	50 - 150

Lab Sample ID: 400-135675-21 MS
Matrix: Water
Analysis Batch: 348542

Client Sample ID: AX06770 MW-6 DUP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.7	F1	10.0	18.7	F1	mg/L		131	73 - 120

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-135675-1
 SDG: Barry Ash Pond (6)

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: 400-135675-21 MSD
Matrix: Water
Analysis Batch: 348542

Client Sample ID: AX06770 MW-6 DUP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	5.7	F1	10.0	18.4	F1	mg/L		127	73 - 120	2	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-348794/3
Matrix: Water
Analysis Batch: 348794

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			04/06/17 18:41	1

Lab Sample ID: LCS 400-348794/4
Matrix: Water
Analysis Batch: 348794

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	4.13		mg/L		103	90 - 110

Lab Sample ID: 400-135675-10 MS
Matrix: Water
Analysis Batch: 348794

Client Sample ID: AX06759 MW-13
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	1.06		mg/L		101	75 - 125

Lab Sample ID: 400-135675-10 MSD
Matrix: Water
Analysis Batch: 348794

Client Sample ID: AX06759 MW-13
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	1.06		mg/L		101	75 - 125	0	4

Lab Sample ID: 400-135675-4 DU
Matrix: Water
Analysis Batch: 348794

Client Sample ID: AX06753 MW-2 DUP
Prep Type: Total/NA

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

Lab Sample ID: MB 400-348938/6
Matrix: Water
Analysis Batch: 348938

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			04/07/17 12:03	1

QC Sample Results

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

TestAmerica Job ID: 400-135675-1
 SDG: Barry Ash Pond (6)

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: LCS 400-348938/7
Matrix: Water
Analysis Batch: 348938

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	4.05		mg/L		101	90 - 110

Lab Sample ID: 400-135675-17 MS
Matrix: Water
Analysis Batch: 348938

Client Sample ID: AX06766 MW-9
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: 400-135675-17 MSD
Matrix: Water
Analysis Batch: 348938

Client Sample ID: AX06766 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	0.050	J	1.00	1.08		mg/L		103	75 - 125	0	4

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-349553/6
Matrix: Water
Analysis Batch: 349553

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			04/13/17 08:19	1

Lab Sample ID: LCS 400-349553/7
Matrix: Water
Analysis Batch: 349553

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	14.8		mg/L		98	90 - 110

Lab Sample ID: MRL 400-349553/3
Matrix: Water
Analysis Batch: 349553

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	4.79	J	mg/L		96	50 - 150

Lab Sample ID: 400-135676-A-13 MS
Matrix: Water
Analysis Batch: 349553

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	9.0		10.0	20.7		mg/L		116	77 - 128

QC Sample Results

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

TestAmerica Job ID: 400-135675-1
 SDG: Barry Ash Pond (6)

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: 400-135676-A-13 MSD

Matrix: Water
Analysis Batch: 349553

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	9.0		10.0	20.7		mg/L		117	77 - 128	0	5

Lab Sample ID: MB 400-349600/6

Matrix: Water
Analysis Batch: 349600

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			04/13/17 10:13	1

Lab Sample ID: LCS 400-349600/7

Matrix: Water
Analysis Batch: 349600

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 400-349600/3

Matrix: Water
Analysis Batch: 349600

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	4.89	J	mg/L		98	50 - 150

Lab Sample ID: 400-135675-10 MS

Matrix: Water
Analysis Batch: 349600

Client Sample ID: AX06759 MW-13
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	6.9		10.0	15.8		mg/L		89	77 - 128

Lab Sample ID: 400-135675-10 MSD

Matrix: Water
Analysis Batch: 349600

Client Sample ID: AX06759 MW-13
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	6.9		10.0	15.9		mg/L		91	77 - 128	1	5

Lab Sample ID: MB 400-349638/6

Matrix: Water
Analysis Batch: 349638

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			04/13/17 12:28	1

Lab Sample ID: LCS 400-349638/7

Matrix: Water
Analysis Batch: 349638

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	15.3		mg/L		102	90 - 110

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-135675-1
 SDG: Barry Ash Pond (6)

Lab Sample ID: MRL 400-349638/3
Matrix: Water
Analysis Batch: 349638

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

Lab Sample ID: 400-135675-17 MS
Matrix: Water
Analysis Batch: 349638

Client Sample ID: AX06766 MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	<1.4		10.0	10.1		mg/L		101	77 - 128

Lab Sample ID: 400-135675-17 MSD
Matrix: Water
Analysis Batch: 349638

Client Sample ID: AX06766 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	<1.4		10.0	10.1		mg/L		101	77 - 128	1	5

Lab Sample ID: 400-135675-21 MS
Matrix: Water
Analysis Batch: 349638

Client Sample ID: AX06770 MW-6 DUP
Prep Type: Total/NA


Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	<1.4		10.0	9.87		mg/L		99	77 - 128

Lab Sample ID: 400-135675-21 MSD
Matrix: Water
Analysis Batch: 349638

Client Sample ID: AX06770 MW-6 DUP
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	9.86		mg/L		99	77 - 128	0	5

Chain of Custody Record

Client Information	Sampler: Nick Pitts 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: Barry Ash Pond (6)	Lab P.M.: Whitmire, Chylene R E-Mail: chylene.r.whitmire@testamericainc.com	Carrier Tracking No(s): COC No: 400-56525-24537.1 Page: Page 1 of 2 Job #: 400-135675	Analysis Requested  400-135675 COC	Preservation Codes: M - Hexane N - None O - ASNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 G - Anchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	Special Instructions/Note: MW-4 MW-3 MW-2 MW-2 Dup (Sample Duplicate) MW-1 EB-1 (Equipment Blank) MW-16 MW-15 FB-1 (Field Blank) MW-13 MW-14 MW-12 MW-11
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Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, ET=Extr, A=Ag)	Field Filtered Sample (Yes or No)	Form MS/SP (Yes or No)	SM 4500 F-C	SM 4500 CL-E	SM 4500 SO4-E
AX06750	3/21/17	1002	G	Water			X	X	X
AX06751	3/21/17	1047	G	Water			X	X	X
AX06752	3/21/17	1230	G	Water			X	X	X
AX06753	3/21/17	1230	G	Water			X	X	X
AX06754	3/21/17	1143	G	Water			X	X	X
AX06755	3/21/17	1100	G	Water			X	X	X
AX06756	3/21/17	1327	G	Water			X	X	X
AX06757	3/21/17	1416	G	Water			X	X	X
AX06758	3/21/17	1420	G	Water			X	X	X
AX06759	3/22/17	0955	G	Water	Y		X	X	X
AX06760	3/22/17	1042	G	Water			X	X	X
AX06761	3/22/17	1131	G	Water			X	X	X
AX06762	3/22/17	1221	G	Water			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)			
Empty Kit Relinquished by: Sarah Copeland		Date: 03/24/2017, 1230	
Relinquished by: Sarah Copeland		Company: APC	
Relinquished by:		Date/Time:	
Relinquished by:		Company:	
Custody Seals Intact: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>		Custody Seal No.: 19.1.c [Signature]	

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:



Chain of Custody Record

Client Information Sampler: Nick Pitts/ Jason Rouss 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 Name: CCR Site: Barry Ash Pond (6)		Lab P/N: Whitnire, Cheyenne R E-Mail: cheyenne.whitnire@testamericainc.com Carrier Tracking No(s): Job #: 400-15675		COC No: 400-56525-24537.1 Page: Page 2 of 2									
Due Date Requested: TAT Requested (days): Routine PO #: W/O #: Project #: 40007143 SSO#:		Analysis Requested											
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wasteoil, BT=leach, AW=)	Preservation Code	Filter/Filtered Sample (Yes or No)	Form (MS/SD) (Yes or No)	SM 4500 F-C	SM 4500 Cl-E	SM 4500 SO4-E	Total Number of Containers	Special Instructions/Note:	
AX06763	3/22/17	1311	G	Water				X	X	X		MW-10	
AX06764	3/22/17	0921	G	Water				X	X	X		MW-5	
AX06765	3/22/17	1025	G	Water				X	X	X		MW-8	
AX06766	3/22/17	1118	G	Water		Y		X	X	X		MW-9	
AX06767	3/22/17	1119	G	Water				X	X	X		FB-2 (Field Blank)	
AX06768	3/22/17	1228	G	Water				X	X	X		MW-7	
AX06769	3/22/17	1322	G	Water				X	X	X		MW-6	
AX06770	3/22/17	1322	G	Water		Y		X	X	X		MW-6 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 Special Instructions/QC Requirements:													
Empty Kit Relinquished by: Sarah Copeland Relinquished by: Sarah Copeland Relinquished by:		Date: 03/24/2017, 1230 Date/Time:		Date/Time: 3/24/17 08:54 Date/Time:		Date/Time:		Date/Time:		Date/Time:		Date/Time:	
Relinquished by:		Date/Time:		Date/Time:		Date/Time:		Date/Time:		Date/Time:		Date/Time:	
Relinquished by:		Date/Time:		Date/Time:		Date/Time:		Date/Time:		Date/Time:		Date/Time:	
Custody Seals Intact: Δ Yes Δ 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:		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: 400-135675-1
SDG Number: Barry Ash Pond (6)

Login Number: 135675

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	19.1°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 Barry

TestAmerica Job ID: 400-135675-1
 SDG: Barry 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



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 : WMWBARAP_1092

Project/Site : Barry Ash Pond
Bucks, AL 36512

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

Barry Ash Pond

WMWBARAP_1092

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 for these samples.

Job Narrative
400-137613-1
General Chemistry

Method(s) SM 4500 F C: The matrix spike / matrix spike duplicate (MS/MSD) RPD for Batch 353939 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method(s) SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 353292 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 353008 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

Barry Ash Pond

WMWBARAP_1092

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>
AX10306	20170518K	WMWBARAP_1092
AX10307	20170518K	WMWBARAP_1092
AX10308	20170518K	WMWBARAP_1092
AX10309	20170518K	WMWBARAP_1092
AX10310	20170518K	WMWBARAP_1092
AX10311	20170518K	WMWBARAP_1092
AX10312	20170518K	WMWBARAP_1092
AX10313	20170518K	WMWBARAP_1092
AX10314	20170518K	WMWBARAP_1092
AX10315	20170518K	WMWBARAP_1092
AX10316	20170518AK	WMWBARAP_1092
AX10317	20170518AK	WMWBARAP_1092
AX10318	20170518AK	WMWBARAP_1092
AX10319	20170518AK	WMWBARAP_1092
AX10320	20170518AK	WMWBARAP_1092
AX10321	20170518AK	WMWBARAP_1092
AX10322	20170518AK	WMWBARAP_1092
AX10323	20170518AK	WMWBARAP_1092
AX10324	20170518AK	WMWBARAP_1092
AX10325	20170518AK	WMWBARAP_1092
AX10326	20170518BK	WMWBARAP_1092

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 at a x2 dilution to compensate for any potential matrix effects.
 8. The raw data results include results corrected for dilution.



Metals ICPMS

Barry Ash Pond

WMWBARAP_1092

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>
AX10306	593612	WMWBARAP_1092
AX10307	593612	WMWBARAP_1092
AX10308	593612	WMWBARAP_1092
AX10309	593612	WMWBARAP_1092
AX10310	593612	WMWBARAP_1092
AX10311	593612	WMWBARAP_1092
AX10312	593612	WMWBARAP_1092
AX10313	593612	WMWBARAP_1092
AX10314	593612	WMWBARAP_1092
AX10315	593612	WMWBARAP_1092
AX10316	593613	WMWBARAP_1092
AX10317	593613	WMWBARAP_1092
AX10318	593613	WMWBARAP_1092
AX10319	593613	WMWBARAP_1092
AX10320	593613	WMWBARAP_1092
AX10321	593613	WMWBARAP_1092
AX10322	593613	WMWBARAP_1092
AX10323	593613	WMWBARAP_1092
AX10324	593613	WMWBARAP_1092
AX10325	593613	WMWBARAP_1092
AX10326	593614	WMWBARAP_1092

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

Barry Ash Pond

WMWBARAP_1092

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>
AX10306	593762	WMWBARAP_1092
AX10307	593762	WMWBARAP_1092
AX10308	593762	WMWBARAP_1092
AX10309	593762	WMWBARAP_1092
AX10310	593762	WMWBARAP_1092
AX10311	593762	WMWBARAP_1092
AX10312	593762	WMWBARAP_1092
AX10313	593762	WMWBARAP_1092
AX10314	593762	WMWBARAP_1092
AX10315	593763	WMWBARAP_1092
AX10316	593763	WMWBARAP_1092
AX10317	593763	WMWBARAP_1092
AX10318	593763	WMWBARAP_1092
AX10319	593763	WMWBARAP_1092
AX10320	593763	WMWBARAP_1092
AX10321	593763	WMWBARAP_1092
AX10322	593763	WMWBARAP_1092
AX10323	593763	WMWBARAP_1092
AX10324	593763	WMWBARAP_1092
AX10325	593763	WMWBARAP_1092
AX10326	593764	WMWBARAP_1092

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

Barry Ash Pond

WMWBARAP_1092

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>
AX10306	593452	WMWBARAP_1092
AX10307	593452	WMWBARAP_1092
AX10308	593452	WMWBARAP_1092
AX10309	593452	WMWBARAP_1092
AX10310	593452	WMWBARAP_1092
AX10311	593452	WMWBARAP_1092
AX10312	593452	WMWBARAP_1092
AX10313	593452	WMWBARAP_1092
AX10314	593452	WMWBARAP_1092
AX10315	593452	WMWBARAP_1092
AX10316	593453	WMWBARAP_1092
AX10317	593453	WMWBARAP_1092
AX10318	593453	WMWBARAP_1092
AX10319	593453	WMWBARAP_1092
AX10320	593453	WMWBARAP_1092
AX10321	593453	WMWBARAP_1092
AX10322	593453	WMWBARAP_1092
AX10323	593453	WMWBARAP_1092
AX10324	593453	WMWBARAP_1092
AX10325	593453	WMWBARAP_1092
AX10326	593475	WMWBARAP_1092

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.

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 AX10315, AX10316 & AX10322 which did not meet the 2.5mg residue requirements.

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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AX10306

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	0.0241	mg/L
* Beryllium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/18/2017	EPA 200.7		2	0.1	0.5	0.826	mg/L
* Cadmium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	J 0.00891	mg/L
* Chromium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/11/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/9/2017	SM 2540C		1		25	30.7	mg/L
* Chloride, Total, by Test America	SGC	5/24/2017	SM 4500 Cl_E		1	0.60	2.00	12	mg/L
* Fluoride, Total, by Test America	SGC	5/24/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	5/24/2017	SM 4500 SO4_E		1	1.40	5.00	J 2.7	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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AX10306

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX10315	Beryllium, Total	mg/L	0.0000392	0.00132	0.100	0.122	0.118	0.110	0.085 to 0.115	122	70 to 130	3.33	20
AX10315	Boron, Total	mg/L	0.000264	0.044	1.00	0.978	0.975	0.971	0.85 to 1.15	97.8	70 to 130	0.304	20
AX10315	Cobalt, Total	mg/L	0.00000201	0.0044	0.100	0.102	0.104	0.104	0.085 to 0.115	102	70 to 130	1.94	20
AX10315	Cadmium, Total	mg/L	0.00000329	0.00044	0.100	0.0914	0.0948	0.0960	0.085 to 0.115	91.4	70 to 130	3.65	20
AX10315	Molybdenum, Total	mg/L	0.0000239	0.0044	0.100	0.0995	0.101	0.0995	0.085 to 0.115	99.5	70 to 130	1.50	20
AX10315	Arsenic, Total	mg/L	0.0000109	0.0022	0.100	0.0999	0.102	0.102	0.085 to 0.115	99.9	70 to 130	2.08	20
AX10315	Calcium, Total	mg/L	-0.0179	0.22	5.00	4.86	4.82	4.88	4.25 to 5.75	97.2	70 to 130	0.855	20
AX10315	Chromium, Total	mg/L	0.0000190	0.0044	0.100	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.94	20
AX10315	Mercury, Total by CVAA	mg/L	0.0000684	0.0005	0.004	0.00386	0.00385	0.00384	0.0034 to 0.0046	96.6	70 to 130	0.389	20
AX10315	Antimony, Total	mg/L	0.0000608	0.00132	0.100	0.0979	0.101	0.102	0.085 to 0.115	97.9	70 to 130	3.12	20
AX10315	Barium, Total	mg/L	0.00000640	0.0044	0.100	0.0955	0.0989	0.0989	0.085 to 0.115	95.5	70 to 130	3.50	20
AX10315	Lead, Total	mg/L	0.0000122	0.0022	0.100	0.111	0.114	0.107	0.085 to 0.115	111	70 to 130	2.67	20
AX10315	Selenium, Total	mg/L	0.0000683	0.0044	0.100	0.0962	0.0994	0.0986	0.085 to 0.115	96.2	70 to 130	3.27	20
AX10315	Thallium, Total	mg/L	0.00000461	0.00044	0.100	0.110	0.114	0.103	0.085 to 0.115	110	70 to 130	3.57	20
AX10315	Lithium, Total	mg/L	-0.0000289	0.022	0.20	0.197	0.196	0.196	0.17 to 0.23	98.7	70 to 130	0.765	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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AX10306

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX10314	Solids, Dissolved	mg/L	0.00	25			303	53.0	40 to 60		0.498 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



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-4 Dup

Laboratory ID Number: AX10307

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	0.0225	mg/L
* Beryllium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/18/2017	EPA 200.7		2	0.1	0.5	0.821	mg/L
* Cadmium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	J 0.00818	mg/L
* Chromium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/11/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/9/2017	SM 2540C		1		25	26.0	mg/L
* Chloride, Total, by Test America	SGC	5/24/2017	SM 4500 Cl_E		1	0.60	2.00	12	mg/L
* Fluoride, Total, by Test America	SGC	5/24/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	5/24/2017	SM 4500 SO4_E		1	1.40	5.00	J 2.0	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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-4 Dup

Laboratory ID Number: AX10307

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB Limit	Rec		Prec	Prec Limit
			MB	Limit					Rec	Limit		
AX10315	Lithium, Total	mg/L	-0.0000289	0.022	0.20	0.197	0.196	0.17 to 0.23	98.7	70 to 130	0.765	20
AX10315	Cadmium, Total	mg/L	0.00000329	0.00044	0.100	0.0914	0.0948	0.085 to 0.115	91.4	70 to 130	3.65	20
AX10315	Molybdenum, Total	mg/L	0.0000239	0.0044	0.100	0.0995	0.101	0.085 to 0.115	99.5	70 to 130	1.50	20
AX10315	Arsenic, Total	mg/L	0.0000109	0.0022	0.100	0.0999	0.102	0.085 to 0.115	99.9	70 to 130	2.08	20
AX10315	Calcium, Total	mg/L	-0.0179	0.22	5.00	4.86	4.82	4.25 to 5.75	97.2	70 to 130	0.855	20
AX10315	Chromium, Total	mg/L	0.0000190	0.0044	0.100	0.102	0.104	0.085 to 0.115	102	70 to 130	1.94	20
AX10315	Mercury, Total by CVAA	mg/L	0.0000684	0.0005	0.004	0.00386	0.00385	0.0034 to 0.0046	96.6	70 to 130	0.389	20
AX10315	Beryllium, Total	mg/L	0.0000392	0.00132	0.100	0.122	0.118	0.085 to 0.115	122	70 to 130	3.33	20
AX10315	Antimony, Total	mg/L	0.0000608	0.00132	0.100	0.0979	0.101	0.085 to 0.115	97.9	70 to 130	3.12	20
AX10315	Barium, Total	mg/L	0.00000640	0.0044	0.100	0.0955	0.0989	0.085 to 0.115	95.5	70 to 130	3.50	20
AX10315	Lead, Total	mg/L	0.0000122	0.0022	0.100	0.111	0.114	0.085 to 0.115	111	70 to 130	2.67	20
AX10315	Selenium, Total	mg/L	0.0000683	0.0044	0.100	0.0962	0.0994	0.085 to 0.115	96.2	70 to 130	3.27	20
AX10315	Thallium, Total	mg/L	0.00000461	0.00044	0.100	0.110	0.114	0.085 to 0.115	110	70 to 130	3.57	20
AX10315	Boron, Total	mg/L	0.000264	0.044	1.00	0.978	0.975	0.85 to 1.15	97.8	70 to 130	0.304	20
AX10315	Cobalt, Total	mg/L	0.00000201	0.0044	0.100	0.102	0.104	0.085 to 0.115	102	70 to 130	1.94	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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-4 Dup

Laboratory ID Number: AX10307

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX10314	Solids, Dissolved	mg/L	0.00	25			303	53.0	40 to 60		0.498 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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AX10308

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	0.0332	mg/L
* Beryllium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/18/2017	EPA 200.7		2	0.1	0.5	0.969	mg/L
* Cadmium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/11/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/9/2017	SM 2540C		1		25	28.0	mg/L
* Chloride, Total, by Test America	SGC	5/24/2017	SM 4500 Cl_E		1	0.60	2.00	8.6	mg/L
* Fluoride, Total, by Test America	SGC	5/24/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	5/24/2017	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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AX10308

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AX10315	Beryllium, Total	mg/L	0.0000392	0.00132	0.100	0.122	0.118	0.110	0.085 to 0.115		122	70 to 130		3.33	20
AX10315	Lithium, Total	mg/L	-0.0000289	0.022	0.20	0.197	0.196	0.196	0.17 to 0.23		98.7	70 to 130		0.765	20
AX10315	Boron, Total	mg/L	0.000264	0.044	1.00	0.978	0.975	0.971	0.85 to 1.15		97.8	70 to 130		0.304	20
AX10315	Cobalt, Total	mg/L	0.00000201	0.0044	0.100	0.102	0.104	0.104	0.085 to 0.115		102	70 to 130		1.94	20
AX10315	Cadmium, Total	mg/L	0.00000329	0.00044	0.100	0.0914	0.0948	0.0960	0.085 to 0.115		91.4	70 to 130		3.65	20
AX10315	Molybdenum, Total	mg/L	0.0000239	0.0044	0.100	0.0995	0.101	0.0995	0.085 to 0.115		99.5	70 to 130		1.50	20
AX10315	Arsenic, Total	mg/L	0.0000109	0.0022	0.100	0.0999	0.102	0.102	0.085 to 0.115		99.9	70 to 130		2.08	20
AX10315	Calcium, Total	mg/L	-0.0179	0.22	5.00	4.86	4.82	4.88	4.25 to 5.75		97.2	70 to 130		0.855	20
AX10315	Chromium, Total	mg/L	0.0000190	0.0044	0.100	0.102	0.104	0.101	0.085 to 0.115		102	70 to 130		1.94	20
AX10315	Mercury, Total by CVAA	mg/L	0.0000684	0.0005	0.004	0.00386	0.00385	0.00384	0.0034 to 0.0046		96.6	70 to 130		0.389	20
AX10315	Antimony, Total	mg/L	0.0000608	0.00132	0.100	0.0979	0.101	0.102	0.085 to 0.115		97.9	70 to 130		3.12	20
AX10315	Barium, Total	mg/L	0.00000640	0.0044	0.100	0.0955	0.0989	0.0989	0.085 to 0.115		95.5	70 to 130		3.50	20
AX10315	Lead, Total	mg/L	0.0000122	0.0022	0.100	0.111	0.114	0.107	0.085 to 0.115		111	70 to 130		2.67	20
AX10315	Selenium, Total	mg/L	0.0000683	0.0044	0.100	0.0962	0.0994	0.0986	0.085 to 0.115		96.2	70 to 130		3.27	20
AX10315	Thallium, Total	mg/L	0.00000461	0.00044	0.100	0.110	0.114	0.103	0.085 to 0.115		110	70 to 130		3.57	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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AX10308

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX10314	Solids, Dissolved	mg/L	0.00	25			303	53.0	40 to 60		0.498 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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AX10309

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	J 0.00194	mg/L
* Barium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	0.0257	mg/L
* Beryllium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/18/2017	EPA 200.7		2	0.1	0.5	2.82	mg/L
* Cadmium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	J 0.00686	mg/L
* Chromium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/11/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/9/2017	SM 2540C		1		25	44.0	mg/L
* Chloride, Total, by Test America	SGC	5/24/2017	SM 4500 Cl_E		1	0.60	2.00	8.3	mg/L
* Fluoride, Total, by Test America	SGC	5/24/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	5/24/2017	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

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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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AX10309

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX10315	Beryllium, Total	mg/L	0.0000392	0.00132	0.100	0.122	0.118	0.110	0.085 to 0.115	122	70 to 130	3.33	20
AX10315	Lithium, Total	mg/L	-0.0000289	0.022	0.20	0.197	0.196	0.196	0.17 to 0.23	98.7	70 to 130	0.765	20
AX10315	Boron, Total	mg/L	0.000264	0.044	1.00	0.978	0.975	0.971	0.85 to 1.15	97.8	70 to 130	0.304	20
AX10315	Cobalt, Total	mg/L	0.00000201	0.0044	0.100	0.102	0.104	0.104	0.085 to 0.115	102	70 to 130	1.94	20
AX10315	Antimony, Total	mg/L	0.0000608	0.00132	0.100	0.0979	0.101	0.102	0.085 to 0.115	97.9	70 to 130	3.12	20
AX10315	Barium, Total	mg/L	0.00000640	0.0044	0.100	0.0955	0.0989	0.0989	0.085 to 0.115	95.5	70 to 130	3.50	20
AX10315	Lead, Total	mg/L	0.0000122	0.0022	0.100	0.111	0.114	0.107	0.085 to 0.115	111	70 to 130	2.67	20
AX10315	Selenium, Total	mg/L	0.0000683	0.0044	0.100	0.0962	0.0994	0.0986	0.085 to 0.115	96.2	70 to 130	3.27	20
AX10315	Thallium, Total	mg/L	0.00000461	0.00044	0.100	0.110	0.114	0.103	0.085 to 0.115	110	70 to 130	3.57	20
AX10315	Cadmium, Total	mg/L	0.00000329	0.00044	0.100	0.0914	0.0948	0.0960	0.085 to 0.115	91.4	70 to 130	3.65	20
AX10315	Molybdenum, Total	mg/L	0.0000239	0.0044	0.100	0.0995	0.101	0.0995	0.085 to 0.115	99.5	70 to 130	1.50	20
AX10315	Arsenic, Total	mg/L	0.0000109	0.0022	0.100	0.0999	0.102	0.102	0.085 to 0.115	99.9	70 to 130	2.08	20
AX10315	Calcium, Total	mg/L	-0.0179	0.22	5.00	4.86	4.82	4.88	4.25 to 5.75	97.2	70 to 130	0.855	20
AX10315	Chromium, Total	mg/L	0.0000190	0.0044	0.100	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.94	20
AX10315	Mercury, Total by CVAA	mg/L	0.0000684	0.0005	0.004	0.00386	0.00385	0.00384	0.0034 to 0.0046	96.6	70 to 130	0.389	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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AX10309

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX10314	Solids, Dissolved	mg/L	0.00	25			303	53.0	40 to 60		0.498
											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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AX10310

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	0.0672	mg/L
* Barium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	0.290	mg/L
* Beryllium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2017	EPA 200.7		2	0.02	0.1	1.73	mg/L
* Calcium, Total	HRG	5/18/2017	EPA 200.7		2	0.1	0.5	35.1	mg/L
* Cadmium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	J 0.00269	mg/L
* Mercury, Total by CVAA	ABB	5/11/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/9/2017	SM 2540C		1		50	442	mg/L
* Chloride, Total, by Test America	SGC	5/24/2017	SM 4500 Cl_E		1	0.60	2.00	26	mg/L
* Fluoride, Total, by Test America	SGC	5/24/2017	SM 4500 F_C		1	0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	SGC	5/24/2017	SM 4500 SO4_E		1	1.40	5.00	6.0	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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AX10310

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AX10315	Beryllium, Total	mg/L	0.0000392	0.00132	0.100	0.122	0.118	0.110	0.085 to 0.115		122	70 to 130		3.33	20
AX10315	Lithium, Total	mg/L	-0.0000289	0.022	0.20	0.197	0.196	0.196	0.17 to 0.23		98.7	70 to 130		0.765	20
AX10315	Boron, Total	mg/L	0.000264	0.044	1.00	0.978	0.975	0.971	0.85 to 1.15		97.8	70 to 130		0.304	20
AX10315	Cobalt, Total	mg/L	0.00000201	0.0044	0.100	0.102	0.104	0.104	0.085 to 0.115		102	70 to 130		1.94	20
AX10315	Arsenic, Total	mg/L	0.0000109	0.0022	0.100	0.0999	0.102	0.102	0.085 to 0.115		99.9	70 to 130		2.08	20
AX10315	Calcium, Total	mg/L	-0.0179	0.22	5.00	4.86	4.82	4.88	4.25 to 5.75		97.2	70 to 130		0.855	20
AX10315	Chromium, Total	mg/L	0.0000190	0.0044	0.100	0.102	0.104	0.101	0.085 to 0.115		102	70 to 130		1.94	20
AX10315	Mercury, Total by CVAA	mg/L	0.0000684	0.0005	0.004	0.00386	0.00385	0.00384	0.0034 to 0.0046		96.6	70 to 130		0.389	20
AX10315	Cadmium, Total	mg/L	0.00000329	0.00044	0.100	0.0914	0.0948	0.0960	0.085 to 0.115		91.4	70 to 130		3.65	20
AX10315	Molybdenum, Total	mg/L	0.0000239	0.0044	0.100	0.0995	0.101	0.0995	0.085 to 0.115		99.5	70 to 130		1.50	20
AX10315	Antimony, Total	mg/L	0.0000608	0.00132	0.100	0.0979	0.101	0.102	0.085 to 0.115		97.9	70 to 130		3.12	20
AX10315	Barium, Total	mg/L	0.00000640	0.0044	0.100	0.0955	0.0989	0.0989	0.085 to 0.115		95.5	70 to 130		3.50	20
AX10315	Lead, Total	mg/L	0.0000122	0.0022	0.100	0.111	0.114	0.107	0.085 to 0.115		111	70 to 130		2.67	20
AX10315	Selenium, Total	mg/L	0.0000683	0.0044	0.100	0.0962	0.0994	0.0986	0.085 to 0.115		96.2	70 to 130		3.27	20
AX10315	Thallium, Total	mg/L	0.00000461	0.00044	0.100	0.110	0.114	0.103	0.085 to 0.115		110	70 to 130		3.57	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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AX10310

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX10314	Solids, Dissolved	mg/L	0.00	25			303	53.0	40 to 60		0.498 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

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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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AX10311

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	0.0102	mg/L
* Barium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	0.0761	mg/L
* Beryllium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2017	EPA 200.7		2	0.02	0.1	1.64	mg/L
* Calcium, Total	HRG	5/18/2017	EPA 200.7		2	0.1	0.5	13.5	mg/L
* Cadmium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	0.0166	mg/L
* Chromium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/11/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/9/2017	SM 2540C		1		25	259	mg/L
* Chloride, Total, by Test America	SGC	5/24/2017	SM 4500 Cl_E		1	0.60	2.00	19	mg/L
* Fluoride, Total, by Test America	SGC	5/24/2017	SM 4500 F_C		1	0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	SGC	5/24/2017	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.

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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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AX10311

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AX10315	Beryllium, Total	mg/L	0.0000392	0.00132	0.100	0.122	0.118	0.110	0.085 to 0.115		122	70 to 130		3.33	20
AX10315	Lithium, Total	mg/L	-0.0000289	0.022	0.20	0.197	0.196	0.196	0.17 to 0.23		98.7	70 to 130		0.765	20
AX10315	Boron, Total	mg/L	0.000264	0.044	1.00	0.978	0.975	0.971	0.85 to 1.15		97.8	70 to 130		0.304	20
AX10315	Cobalt, Total	mg/L	0.00000201	0.0044	0.100	0.102	0.104	0.104	0.085 to 0.115		102	70 to 130		1.94	20
AX10315	Cadmium, Total	mg/L	0.00000329	0.00044	0.100	0.0914	0.0948	0.0960	0.085 to 0.115		91.4	70 to 130		3.65	20
AX10315	Molybdenum, Total	mg/L	0.0000239	0.0044	0.100	0.0995	0.101	0.0995	0.085 to 0.115		99.5	70 to 130		1.50	20
AX10315	Antimony, Total	mg/L	0.0000608	0.00132	0.100	0.0979	0.101	0.102	0.085 to 0.115		97.9	70 to 130		3.12	20
AX10315	Barium, Total	mg/L	0.00000640	0.0044	0.100	0.0955	0.0989	0.0989	0.085 to 0.115		95.5	70 to 130		3.50	20
AX10315	Lead, Total	mg/L	0.0000122	0.0022	0.100	0.111	0.114	0.107	0.085 to 0.115		111	70 to 130		2.67	20
AX10315	Selenium, Total	mg/L	0.0000683	0.0044	0.100	0.0962	0.0994	0.0986	0.085 to 0.115		96.2	70 to 130		3.27	20
AX10315	Thallium, Total	mg/L	0.00000461	0.00044	0.100	0.110	0.114	0.103	0.085 to 0.115		110	70 to 130		3.57	20
AX10315	Arsenic, Total	mg/L	0.0000109	0.0022	0.100	0.0999	0.102	0.102	0.085 to 0.115		99.9	70 to 130		2.08	20
AX10315	Calcium, Total	mg/L	-0.0179	0.22	5.00	4.86	4.82	4.88	4.25 to 5.75		97.2	70 to 130		0.855	20
AX10315	Chromium, Total	mg/L	0.0000190	0.0044	0.100	0.102	0.104	0.101	0.085 to 0.115		102	70 to 130		1.94	20
AX10315	Mercury, Total by CVAA	mg/L	0.0000684	0.0005	0.004	0.00386	0.00385	0.00384	0.0034 to 0.0046		96.6	70 to 130		0.389	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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AX10311

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
								Duplicate	LFB	Limit	Rec	Limit	Prec
AX10314	Solids, Dissolved	mg/L	0.00	25				303	53.0	40 to 60			0.498
													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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AX10312

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	0.0172	mg/L
* Barium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	0.0473	mg/L
* Beryllium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2017	EPA 200.7		2	0.02	0.1	J 0.0775	mg/L
* Calcium, Total	HRG	5/18/2017	EPA 200.7		2	0.1	0.5	6.94	mg/L
* Cadmium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	0.0274	mg/L
* Chromium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/11/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	J 0.00201	mg/L
* Lead, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/9/2017	SM 2540C		1		25	183	mg/L
* Chloride, Total, by Test America	SGC	5/24/2017	SM 4500 Cl_E		1	0.60	2.00	33	mg/L
* Fluoride, Total, by Test America	SGC	5/24/2017	SM 4500 F_C		1	0.032	0.10	0.18	mg/L
* Sulfate, Total, by Test America	SGC	5/24/2017	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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AX10312

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AX10315	Beryllium, Total	mg/L	0.0000392	0.00132	0.100	0.122	0.118	0.110	0.085 to 0.115		122	70 to 130		3.33	20
AX10315	Lithium, Total	mg/L	-0.0000289	0.022	0.20	0.197	0.196	0.196	0.17 to 0.23		98.7	70 to 130		0.765	20
AX10315	Boron, Total	mg/L	0.000264	0.044	1.00	0.978	0.975	0.971	0.85 to 1.15		97.8	70 to 130		0.304	20
AX10315	Cobalt, Total	mg/L	0.00000201	0.0044	0.100	0.102	0.104	0.104	0.085 to 0.115		102	70 to 130		1.94	20
AX10315	Cadmium, Total	mg/L	0.00000329	0.00044	0.100	0.0914	0.0948	0.0960	0.085 to 0.115		91.4	70 to 130		3.65	20
AX10315	Molybdenum, Total	mg/L	0.0000239	0.0044	0.100	0.0995	0.101	0.0995	0.085 to 0.115		99.5	70 to 130		1.50	20
AX10315	Arsenic, Total	mg/L	0.0000109	0.0022	0.100	0.0999	0.102	0.102	0.085 to 0.115		99.9	70 to 130		2.08	20
AX10315	Calcium, Total	mg/L	-0.0179	0.22	5.00	4.86	4.82	4.88	4.25 to 5.75		97.2	70 to 130		0.855	20
AX10315	Chromium, Total	mg/L	0.0000190	0.0044	0.100	0.102	0.104	0.101	0.085 to 0.115		102	70 to 130		1.94	20
AX10315	Mercury, Total by CVAA	mg/L	0.0000684	0.0005	0.004	0.00386	0.00385	0.00384	0.0034 to 0.0046		96.6	70 to 130		0.389	20
AX10315	Antimony, Total	mg/L	0.0000608	0.00132	0.100	0.0979	0.101	0.102	0.085 to 0.115		97.9	70 to 130		3.12	20
AX10315	Barium, Total	mg/L	0.00000640	0.0044	0.100	0.0955	0.0989	0.0989	0.085 to 0.115		95.5	70 to 130		3.50	20
AX10315	Lead, Total	mg/L	0.0000122	0.0022	0.100	0.111	0.114	0.107	0.085 to 0.115		111	70 to 130		2.67	20
AX10315	Selenium, Total	mg/L	0.0000683	0.0044	0.100	0.0962	0.0994	0.0986	0.085 to 0.115		96.2	70 to 130		3.27	20
AX10315	Thallium, Total	mg/L	0.00000461	0.00044	0.100	0.110	0.114	0.103	0.085 to 0.115		110	70 to 130		3.57	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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AX10312

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
								Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AX10314	Solids, Dissolved	mg/L	0.00		25			303	53.0	40 to 60			0.498	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



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-15 Dup

Laboratory ID Number: AX10313

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	0.0169	mg/L
* Barium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	0.0467	mg/L
* Beryllium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2017	EPA 200.7		2	0.02	0.1	J 0.0766	mg/L
* Calcium, Total	HRG	5/18/2017	EPA 200.7		2	0.1	0.5	6.98	mg/L
* Cadmium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	0.0264	mg/L
* Chromium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/11/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	J 0.00206	mg/L
* Lead, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/9/2017	SM 2540C		1		25	186	mg/L
* Chloride, Total, by Test America	SGC	5/24/2017	SM 4500 Cl_E		1	0.60	2.00	33	mg/L
* Fluoride, Total, by Test America	SGC	5/24/2017	SM 4500 F_C		1	0.032	0.10	0.18	mg/L
* Sulfate, Total, by Test America	SGC	5/24/2017	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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-15 Dup

Laboratory ID Number: AX10313

Sample	Analysis	Units	MB				LFB			Rec		Prec	
			MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Limit	
AX10315	Beryllium, Total	mg/L	0.0000392	0.00132	0.100	0.122	0.118	0.110	0.085 to 0.115	122	70 to 130	3.33	20
AX10315	Lithium, Total	mg/L	-0.0000289	0.022	0.20	0.197	0.196	0.196	0.17 to 0.23	98.7	70 to 130	0.765	20
AX10315	Boron, Total	mg/L	0.000264	0.044	1.00	0.978	0.975	0.971	0.85 to 1.15	97.8	70 to 130	0.304	20
AX10315	Cobalt, Total	mg/L	0.00000201	0.0044	0.100	0.102	0.104	0.104	0.085 to 0.115	102	70 to 130	1.94	20
AX10315	Arsenic, Total	mg/L	0.0000109	0.0022	0.100	0.0999	0.102	0.102	0.085 to 0.115	99.9	70 to 130	2.08	20
AX10315	Calcium, Total	mg/L	-0.0179	0.22	5.00	4.86	4.82	4.88	4.25 to 5.75	97.2	70 to 130	0.855	20
AX10315	Chromium, Total	mg/L	0.0000190	0.0044	0.100	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.94	20
AX10315	Mercury, Total by CVAA	mg/L	0.0000684	0.0005	0.004	0.00386	0.00385	0.00384	0.0034 to 0.0046	96.6	70 to 130	0.389	20
AX10315	Cadmium, Total	mg/L	0.00000329	0.00044	0.100	0.0914	0.0948	0.0960	0.085 to 0.115	91.4	70 to 130	3.65	20
AX10315	Molybdenum, Total	mg/L	0.0000239	0.0044	0.100	0.0995	0.101	0.0995	0.085 to 0.115	99.5	70 to 130	1.50	20
AX10315	Antimony, Total	mg/L	0.0000608	0.00132	0.100	0.0979	0.101	0.102	0.085 to 0.115	97.9	70 to 130	3.12	20
AX10315	Barium, Total	mg/L	0.00000640	0.0044	0.100	0.0955	0.0989	0.0989	0.085 to 0.115	95.5	70 to 130	3.50	20
AX10315	Lead, Total	mg/L	0.0000122	0.0022	0.100	0.111	0.114	0.107	0.085 to 0.115	111	70 to 130	2.67	20
AX10315	Selenium, Total	mg/L	0.0000683	0.0044	0.100	0.0962	0.0994	0.0986	0.085 to 0.115	96.2	70 to 130	3.27	20
AX10315	Thallium, Total	mg/L	0.00000461	0.00044	0.100	0.110	0.114	0.103	0.085 to 0.115	110	70 to 130	3.57	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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-15 Dup

Laboratory ID Number: AX10313

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
				Limit			Duplicate	LFB	Limit	Prec	
AX10314	Solids, Dissolved	mg/L	0.00	25			303	53.0	40 to 60	0.498	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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AX10314

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	0.0131	mg/L
* Barium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	0.0616	mg/L
* Beryllium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2017	EPA 200.7		2	0.02	0.1	J 0.0587	mg/L
* Calcium, Total	HRG	5/18/2017	EPA 200.7		2	0.1	0.5	11.9	mg/L
* Cadmium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	J 0.00524	mg/L
* Mercury, Total by CVAA	ABB	5/11/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/9/2017	SM 2540C		1		25	300	mg/L
* Chloride, Total, by Test America	SGC	5/24/2017	SM 4500 Cl_E		1	0.60	2.00	42	mg/L
* Fluoride, Total, by Test America	SGC	5/24/2017	SM 4500 F_C		1	0.032	0.10	J 0.080	mg/L
* Sulfate, Total, by Test America	SGC	5/24/2017	SM 4500 SO4_E		1	1.40	5.00	J 1.8	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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AX10314

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX10315	Beryllium, Total	mg/L	0.0000392	0.00132	0.100	0.122	0.118	0.110	0.085 to 0.115	122	70 to 130	3.33	20
AX10315	Lithium, Total	mg/L	-0.0000289	0.022	0.20	0.197	0.196	0.196	0.17 to 0.23	98.7	70 to 130	0.765	20
AX10315	Boron, Total	mg/L	0.000264	0.044	1.00	0.978	0.975	0.971	0.85 to 1.15	97.8	70 to 130	0.304	20
AX10315	Cobalt, Total	mg/L	0.00000201	0.0044	0.100	0.102	0.104	0.104	0.085 to 0.115	102	70 to 130	1.94	20
AX10315	Cadmium, Total	mg/L	0.00000329	0.00044	0.100	0.0914	0.0948	0.0960	0.085 to 0.115	91.4	70 to 130	3.65	20
AX10315	Molybdenum, Total	mg/L	0.0000239	0.0044	0.100	0.0995	0.101	0.0995	0.085 to 0.115	99.5	70 to 130	1.50	20
AX10315	Antimony, Total	mg/L	0.0000608	0.00132	0.100	0.0979	0.101	0.102	0.085 to 0.115	97.9	70 to 130	3.12	20
AX10315	Barium, Total	mg/L	0.00000640	0.0044	0.100	0.0955	0.0989	0.0989	0.085 to 0.115	95.5	70 to 130	3.50	20
AX10315	Lead, Total	mg/L	0.0000122	0.0022	0.100	0.111	0.114	0.107	0.085 to 0.115	111	70 to 130	2.67	20
AX10315	Selenium, Total	mg/L	0.0000683	0.0044	0.100	0.0962	0.0994	0.0986	0.085 to 0.115	96.2	70 to 130	3.27	20
AX10315	Thallium, Total	mg/L	0.00000461	0.00044	0.100	0.110	0.114	0.103	0.085 to 0.115	110	70 to 130	3.57	20
AX10315	Arsenic, Total	mg/L	0.0000109	0.0022	0.100	0.0999	0.102	0.102	0.085 to 0.115	99.9	70 to 130	2.08	20
AX10315	Calcium, Total	mg/L	-0.0179	0.22	5.00	4.86	4.82	4.88	4.25 to 5.75	97.2	70 to 130	0.855	20
AX10315	Chromium, Total	mg/L	0.0000190	0.0044	0.100	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.94	20
AX10315	Mercury, Total by CVAA	mg/L	0.0000684	0.0005	0.004	0.00386	0.00385	0.00384	0.0034 to 0.0046	96.6	70 to 130	0.389	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: WMWBARAP
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AX10314

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX10314	Solids, Dissolved	mg/L	0.00	25			303	53.0	40 to 60	0.498	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



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAPFB
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX10315

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Beryllium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/18/2017	EPA 200.7		2	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/11/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/9/2017	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total, by Test America	SGC	5/24/2017	SM 4500 Cl_E		1	0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	SGC	5/24/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	5/24/2017	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: WMWBARAPFB
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX10315

Sample	Analysis	Units	MB				LFB			Rec		Prec	
			MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	
AX10315	Beryllium, Total	mg/L	0.0000392	0.00132	0.100	0.122	0.118	0.110	0.085 to 0.115	122	70 to 130	3.33	20
AX10315	Lithium, Total	mg/L	-0.0000289	0.022	0.20	0.197	0.196	0.196	0.17 to 0.23	98.7	70 to 130	0.765	20
AX10315	Boron, Total	mg/L	0.000264	0.044	1.00	0.978	0.975	0.971	0.85 to 1.15	97.8	70 to 130	0.304	20
AX10315	Cobalt, Total	mg/L	0.00000201	0.0044	0.100	0.102	0.104	0.104	0.085 to 0.115	102	70 to 130	1.94	20
AX10315	Antimony, Total	mg/L	0.0000608	0.00132	0.100	0.0979	0.101	0.102	0.085 to 0.115	97.9	70 to 130	3.12	20
AX10315	Barium, Total	mg/L	0.00000640	0.0044	0.100	0.0955	0.0989	0.0989	0.085 to 0.115	95.5	70 to 130	3.50	20
AX10315	Lead, Total	mg/L	0.0000122	0.0022	0.100	0.111	0.114	0.107	0.085 to 0.115	111	70 to 130	2.67	20
AX10315	Selenium, Total	mg/L	0.0000683	0.0044	0.100	0.0962	0.0994	0.0986	0.085 to 0.115	96.2	70 to 130	3.27	20
AX10315	Thallium, Total	mg/L	0.00000461	0.00044	0.100	0.110	0.114	0.103	0.085 to 0.115	110	70 to 130	3.57	20
AX10315	Cadmium, Total	mg/L	0.00000329	0.00044	0.100	0.0914	0.0948	0.0960	0.085 to 0.115	91.4	70 to 130	3.65	20
AX10315	Molybdenum, Total	mg/L	0.0000239	0.0044	0.100	0.0995	0.101	0.0995	0.085 to 0.115	99.5	70 to 130	1.50	20
AX10315	Arsenic, Total	mg/L	0.0000109	0.0022	0.100	0.0999	0.102	0.102	0.085 to 0.115	99.9	70 to 130	2.08	20
AX10315	Calcium, Total	mg/L	-0.0179	0.22	5.00	4.86	4.82	4.88	4.25 to 5.75	97.2	70 to 130	0.855	20
AX10315	Chromium, Total	mg/L	0.0000190	0.0044	0.100	0.102	0.104	0.101	0.085 to 0.115	102	70 to 130	1.94	20
AX10315	Mercury, Total by CVAA	mg/L	0.0000684	0.0005	0.004	0.00386	0.00385	0.00384	0.0034 to 0.0046	96.6	70 to 130	0.389	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: WMWBARAPFB
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX10315

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX10314	Solids, Dissolved	mg/L	0.00	25			303	53.0	40 to 60			0.498	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: WMWBARAPEB
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AX10316

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Beryllium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/18/2017	EPA 200.7		2	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/11/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/9/2017	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total, by Test America	SGC	5/24/2017	SM 4500 Cl_E		1	0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	SGC	5/24/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	5/24/2017	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: WMWBARAPEB
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AX10316

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX10325	Thallium, Total	mg/L	0.00000461	0.00044	0.100	0.114	0.103	0.085 to 0.115	114	70 to 130	1.77	20	
AX10325	Antimony, Total	mg/L	0.0000608	0.00132	0.100	0.102	0.102	0.085 to 0.115	102	70 to 130	1.98	20	
AX10325	Beryllium, Total	mg/L	0.0000392	0.00132	0.100	0.125	0.110	0.085 to 0.115	125	70 to 130	4.08	20	
AX10325	Cadmium, Total	mg/L	0.00000329	0.00044	0.100	0.0942	0.0935	0.085 to 0.115	94.2	70 to 130	0.746	20	
AX10325	Lithium, Total	mg/L	-0.0000966	0.022	0.20	0.205	0.204	0.17 to 0.23	102	70 to 130	0.129	20	
AX10325	Lead, Total	mg/L	0.0000122	0.0022	0.100	0.114	0.107	0.085 to 0.115	114	70 to 130	1.77	20	
AX10325	Mercury, Total by CVAA	mg/L	0.0000558	0.0005	0.004	0.00391	0.00386	0.0034 to 0.0046	97.8	70 to 130	1.40	20	
AX10325	Arsenic, Total	mg/L	0.0000109	0.0022	0.100	0.125	0.102	0.085 to 0.115	104	70 to 130	1.61	20	
AX10325	Barium, Total	mg/L	0.00000640	0.0044	0.100	0.160	0.159	0.085 to 0.115	99.9	70 to 130	0.627	20	
AX10325	Boron, Total	mg/L	0.000123	0.044	1.00	1.01	1.01	0.85 to 1.15	97.3	70 to 130	0.134	20	
AX10325	Calcium, Total	mg/L	-0.0189	0.22	5.00	13.6	13.6	4.25 to 5.75	96.0	70 to 130	0.422	20	
AX10325	Chromium, Total	mg/L	0.0000190	0.0044	0.100	0.102	0.103	0.085 to 0.115	102	70 to 130	0.976	20	
AX10325	Cobalt, Total	mg/L	0.00000201	0.0044	0.100	0.122	0.121	0.085 to 0.115	105	70 to 130	0.823	20	
AX10325	Molybdenum, Total	mg/L	0.0000239	0.0044	0.100	0.101	0.101	0.085 to 0.115	101	70 to 130	0.00	20	
AX10325	Selenium, Total	mg/L	0.0000683	0.0044	0.100	0.0994	0.0958	0.085 to 0.115	99.4	70 to 130	3.69	20	

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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: WMWBARAPEB
 Sample Date: 02-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AX10316

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX10325	Solids, Dissolved	mg/L	0.00	25			130	53.0	40 to 60	1.17	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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AX10317

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	0.0140	mg/L
* Barium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	0.0756	mg/L
* Beryllium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2017	EPA 200.7		2	0.02	0.1	J 0.0416	mg/L
* Calcium, Total	HRG	5/18/2017	EPA 200.7		2	0.1	0.5	12.0	mg/L
* Cadmium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	J 0.00712	mg/L
* Mercury, Total by CVAA	ABB	5/11/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/9/2017	SM 2540C		1		25	306	mg/L
* Chloride, Total, by Test America	SGC	5/24/2017	SM 4500 Cl_E		1	0.60	2.00	48	mg/L
* Fluoride, Total, by Test America	SGC	5/24/2017	SM 4500 F_C		1	0.032	0.10	J 0.060	mg/L
* Sulfate, Total, by Test America	SGC	5/24/2017	SM 4500 SO4_E		1	1.40	5.00	6.6	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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AX10317

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX10325	Thallium, Total	mg/L	0.0000461	0.00044	0.100	0.114	0.103	0.085 to 0.115	114	70 to 130	1.77	20	
AX10325	Antimony, Total	mg/L	0.0000608	0.00132	0.100	0.102	0.102	0.085 to 0.115	102	70 to 130	1.98	20	
AX10325	Beryllium, Total	mg/L	0.0000392	0.00132	0.100	0.125	0.110	0.085 to 0.115	125	70 to 130	4.08	20	
AX10325	Cadmium, Total	mg/L	0.00000329	0.00044	0.100	0.0942	0.0935	0.085 to 0.115	94.2	70 to 130	0.746	20	
AX10325	Lithium, Total	mg/L	-0.0000966	0.022	0.20	0.205	0.204	0.17 to 0.23	102	70 to 130	0.129	20	
AX10325	Lead, Total	mg/L	0.0000122	0.0022	0.100	0.114	0.107	0.085 to 0.115	114	70 to 130	1.77	20	
AX10325	Mercury, Total by CVAA	mg/L	0.0000558	0.0005	0.004	0.00391	0.00386	0.0034 to 0.0046	97.8	70 to 130	1.40	20	
AX10325	Arsenic, Total	mg/L	0.0000109	0.0022	0.100	0.125	0.102	0.085 to 0.115	104	70 to 130	1.61	20	
AX10325	Barium, Total	mg/L	0.00000640	0.0044	0.100	0.160	0.159	0.085 to 0.115	99.9	70 to 130	0.627	20	
AX10325	Boron, Total	mg/L	0.000123	0.044	1.00	1.01	1.01	0.85 to 1.15	97.3	70 to 130	0.134	20	
AX10325	Calcium, Total	mg/L	-0.0189	0.22	5.00	13.6	13.6	4.25 to 5.75	96.0	70 to 130	0.422	20	
AX10325	Chromium, Total	mg/L	0.0000190	0.0044	0.100	0.102	0.103	0.085 to 0.115	102	70 to 130	0.976	20	
AX10325	Cobalt, Total	mg/L	0.00000201	0.0044	0.100	0.122	0.121	0.085 to 0.115	105	70 to 130	0.823	20	
AX10325	Molybdenum, Total	mg/L	0.0000239	0.0044	0.100	0.101	0.101	0.085 to 0.115	101	70 to 130	0.00	20	
AX10325	Selenium, Total	mg/L	0.0000683	0.0044	0.100	0.0994	0.0958	0.085 to 0.115	99.4	70 to 130	3.69	20	

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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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AX10317

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX10325	Solids, Dissolved	mg/L	0.00	25			130	53.0	40 to 60	1.17	5

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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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AX10318

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	0.0227	mg/L
* Barium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	0.0780	mg/L
* Beryllium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2017	EPA 200.7		2	0.02	0.1	J 0.0768	mg/L
* Calcium, Total	HRG	5/18/2017	EPA 200.7		2	0.1	0.5	20.9	mg/L
* Cadmium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	J 0.00279	mg/L
* Chromium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	J 0.00369	mg/L
* Mercury, Total by CVAA	ABB	5/11/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/9/2017	SM 2540C		1		25	341	mg/L
* Chloride, Total, by Test America	SGC	5/24/2017	SM 4500 Cl_E		1	0.60	2.00	25	mg/L
* Fluoride, Total, by Test America	SGC	5/24/2017	SM 4500 F_C		1	0.032	0.10	J 0.060	mg/L
* Sulfate, Total, by Test America	SGC	5/24/2017	SM 4500 SO4_E		1	1.40	5.00	J 2.1	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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AX10318

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX10325	Thallium, Total	mg/L	0.0000461	0.00044	0.100	0.114	0.103	0.085 to 0.115	114	70 to 130	1.77	20	
AX10325	Antimony, Total	mg/L	0.0000608	0.00132	0.100	0.102	0.102	0.085 to 0.115	102	70 to 130	1.98	20	
AX10325	Beryllium, Total	mg/L	0.0000392	0.00132	0.100	0.125	0.110	0.085 to 0.115	125	70 to 130	4.08	20	
AX10325	Cadmium, Total	mg/L	0.00000329	0.00044	0.100	0.0942	0.0935	0.085 to 0.115	94.2	70 to 130	0.746	20	
AX10325	Lithium, Total	mg/L	-0.0000966	0.022	0.20	0.205	0.204	0.17 to 0.23	102	70 to 130	0.129	20	
AX10325	Lead, Total	mg/L	0.0000122	0.0022	0.100	0.114	0.107	0.085 to 0.115	114	70 to 130	1.77	20	
AX10325	Mercury, Total by CVAA	mg/L	0.0000558	0.0005	0.004	0.00391	0.00386	0.0034 to 0.0046	97.8	70 to 130	1.40	20	
AX10325	Arsenic, Total	mg/L	0.0000109	0.0022	0.100	0.125	0.102	0.085 to 0.115	104	70 to 130	1.61	20	
AX10325	Barium, Total	mg/L	0.00000640	0.0044	0.100	0.160	0.159	0.085 to 0.115	99.9	70 to 130	0.627	20	
AX10325	Boron, Total	mg/L	0.000123	0.044	1.00	1.01	1.01	0.85 to 1.15	97.3	70 to 130	0.134	20	
AX10325	Calcium, Total	mg/L	-0.0189	0.22	5.00	13.6	13.6	4.25 to 5.75	96.0	70 to 130	0.422	20	
AX10325	Chromium, Total	mg/L	0.0000190	0.0044	0.100	0.102	0.103	0.085 to 0.115	102	70 to 130	0.976	20	
AX10325	Cobalt, Total	mg/L	0.00000201	0.0044	0.100	0.122	0.121	0.085 to 0.115	105	70 to 130	0.823	20	
AX10325	Molybdenum, Total	mg/L	0.0000239	0.0044	0.100	0.101	0.101	0.085 to 0.115	101	70 to 130	0.00	20	
AX10325	Selenium, Total	mg/L	0.0000683	0.0044	0.100	0.0994	0.0958	0.085 to 0.115	99.4	70 to 130	3.69	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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AX10318

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX10325	Solids, Dissolved	mg/L	0.00	25			130	53.0	40 to 60	1.17	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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AX10319

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	0.0155	mg/L
* Barium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	0.0951	mg/L
* Beryllium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2017	EPA 200.7		2	0.02	0.1	J 0.0655	mg/L
* Calcium, Total	HRG	5/18/2017	EPA 200.7		2	0.1	0.5	24.0	mg/L
* Cadmium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	J 0.00229	mg/L
* Mercury, Total by CVAA	ABB	5/11/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/9/2017	SM 2540C		1		25	373	mg/L
* Chloride, Total, by Test America	SGC	5/24/2017	SM 4500 Cl_E		1	0.60	2.00	27	mg/L
* Fluoride, Total, by Test America	SGC	5/24/2017	SM 4500 F_C		1	0.032	0.10	J 0.060	mg/L
* Sulfate, Total, by Test America	SGC	5/24/2017	SM 4500 SO4_E		1	1.40	5.00	J 3.6	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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AX10319

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX10325	Thallium, Total	mg/L	0.0000461	0.00044	0.100	0.114	0.112	0.103	0.085 to 0.115	114	70 to 130	1.77	20
AX10325	Antimony, Total	mg/L	0.0000608	0.00132	0.100	0.102	0.100	0.102	0.085 to 0.115	102	70 to 130	1.98	20
AX10325	Beryllium, Total	mg/L	0.0000392	0.00132	0.100	0.125	0.120	0.110	0.085 to 0.115	125	70 to 130	4.08	20
AX10325	Cadmium, Total	mg/L	0.00000329	0.00044	0.100	0.0942	0.0935	0.0960	0.085 to 0.115	94.2	70 to 130	0.746	20
AX10325	Lithium, Total	mg/L	-0.0000966	0.022	0.20	0.205	0.204	0.194	0.17 to 0.23	102	70 to 130	0.129	20
AX10325	Lead, Total	mg/L	0.0000122	0.0022	0.100	0.114	0.112	0.107	0.085 to 0.115	114	70 to 130	1.77	20
AX10325	Mercury, Total by CVAA	mg/L	0.0000558	0.0005	0.004	0.00391	0.00386	0.00383	0.0034 to 0.0046	97.8	70 to 130	1.40	20
AX10325	Arsenic, Total	mg/L	0.0000109	0.0022	0.100	0.125	0.123	0.102	0.085 to 0.115	104	70 to 130	1.61	20
AX10325	Barium, Total	mg/L	0.00000640	0.0044	0.100	0.160	0.159	0.0989	0.085 to 0.115	99.9	70 to 130	0.627	20
AX10325	Boron, Total	mg/L	0.000123	0.044	1.00	1.01	1.01	0.968	0.85 to 1.15	97.3	70 to 130	0.134	20
AX10325	Calcium, Total	mg/L	-0.0189	0.22	5.00	13.6	13.6	4.82	4.25 to 5.75	96.0	70 to 130	0.422	20
AX10325	Chromium, Total	mg/L	0.0000190	0.0044	0.100	0.102	0.103	0.101	0.085 to 0.115	102	70 to 130	0.976	20
AX10325	Cobalt, Total	mg/L	0.00000201	0.0044	0.100	0.122	0.121	0.104	0.085 to 0.115	105	70 to 130	0.823	20
AX10325	Molybdenum, Total	mg/L	0.0000239	0.0044	0.100	0.101	0.101	0.0995	0.085 to 0.115	101	70 to 130	0.00	20
AX10325	Selenium, Total	mg/L	0.0000683	0.0044	0.100	0.0994	0.0958	0.0986	0.085 to 0.115	99.4	70 to 130	3.69	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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AX10319

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX10325	Solids, Dissolved	mg/L	0.00	25			130	53.0	40 to 60	1.17	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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AX10320

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	0.0300	mg/L
* Barium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	0.0665	mg/L
* Beryllium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2017	EPA 200.7		2	0.02	0.1	1.52	mg/L
* Calcium, Total	HRG	5/18/2017	EPA 200.7		2	0.1	0.5	51.3	mg/L
* Cadmium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/11/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/9/2017	SM 2540C		1		25	369	mg/L
* Chloride, Total, by Test America	SGC	5/24/2017	SM 4500 Cl_E		1	0.60	2.00	22	mg/L
* Fluoride, Total, by Test America	SGC	5/24/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	5/24/2017	SM 4500 SO4_E		1	1.40	5.00	J 4.1	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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AX10320

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX10325	Thallium, Total	mg/L	0.00000461	0.00044	0.100	0.114	0.103	0.085 to 0.115	114	70 to 130	1.77	20	
AX10325	Antimony, Total	mg/L	0.0000608	0.00132	0.100	0.102	0.102	0.085 to 0.115	102	70 to 130	1.98	20	
AX10325	Beryllium, Total	mg/L	0.0000392	0.00132	0.100	0.125	0.110	0.085 to 0.115	125	70 to 130	4.08	20	
AX10325	Cadmium, Total	mg/L	0.00000329	0.00044	0.100	0.0942	0.0935	0.085 to 0.115	94.2	70 to 130	0.746	20	
AX10325	Lithium, Total	mg/L	-0.0000966	0.022	0.20	0.205	0.204	0.17 to 0.23	102	70 to 130	0.129	20	
AX10325	Lead, Total	mg/L	0.0000122	0.0022	0.100	0.114	0.107	0.085 to 0.115	114	70 to 130	1.77	20	
AX10325	Mercury, Total by CVAA	mg/L	0.0000558	0.0005	0.004	0.00391	0.00386	0.0034 to 0.0046	97.8	70 to 130	1.40	20	
AX10325	Arsenic, Total	mg/L	0.0000109	0.0022	0.100	0.125	0.123	0.085 to 0.115	104	70 to 130	1.61	20	
AX10325	Barium, Total	mg/L	0.00000640	0.0044	0.100	0.160	0.159	0.085 to 0.115	99.9	70 to 130	0.627	20	
AX10325	Boron, Total	mg/L	0.000123	0.044	1.00	1.01	1.01	0.85 to 1.15	97.3	70 to 130	0.134	20	
AX10325	Calcium, Total	mg/L	-0.0189	0.22	5.00	13.6	13.6	4.25 to 5.75	96.0	70 to 130	0.422	20	
AX10325	Chromium, Total	mg/L	0.0000190	0.0044	0.100	0.102	0.103	0.085 to 0.115	102	70 to 130	0.976	20	
AX10325	Cobalt, Total	mg/L	0.00000201	0.0044	0.100	0.122	0.121	0.085 to 0.115	105	70 to 130	0.823	20	
AX10325	Molybdenum, Total	mg/L	0.0000239	0.0044	0.100	0.101	0.101	0.085 to 0.115	101	70 to 130	0.00	20	
AX10325	Selenium, Total	mg/L	0.0000683	0.0044	0.100	0.0994	0.0958	0.085 to 0.115	99.4	70 to 130	3.69	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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AX10320

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX10325	Solids, Dissolved	mg/L	0.00	25			130	53.0	40 to 60	1.17	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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AX10321

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	0.0444	mg/L
* Barium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	0.126	mg/L
* Beryllium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2017	EPA 200.7		2	0.02	0.1	2.28	mg/L
* Calcium, Total	HRG	5/18/2017	EPA 200.7		2	0.1	0.5	39.1	mg/L
* Cadmium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/11/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/9/2017	SM 2540C		1		25	338	mg/L
* Chloride, Total, by Test America	SGC	5/24/2017	SM 4500 Cl_E		1	0.60	2.00	26	mg/L
* Fluoride, Total, by Test America	SGC	5/24/2017	SM 4500 F_C		1	0.032	0.10	J 0.060	mg/L
* Sulfate, Total, by Test America	SGC	5/24/2017	SM 4500 SO4_E		1	1.40	5.00	J 2.7	mg/L

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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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AX10321

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit	
			MB	Limit				Limit	Rec	Limit	Prec			
AX10325	Thallium, Total	mg/L	0.0000461	0.00044	0.100	0.114	0.103	0.085 to 0.115		114	70 to 130		1.77	20
AX10325	Antimony, Total	mg/L	0.0000608	0.00132	0.100	0.102	0.102	0.085 to 0.115		102	70 to 130		1.98	20
AX10325	Beryllium, Total	mg/L	0.0000392	0.00132	0.100	0.125	0.110	0.085 to 0.115		125	70 to 130		4.08	20
AX10325	Lead, Total	mg/L	0.0000122	0.0022	0.100	0.114	0.107	0.085 to 0.115		114	70 to 130		1.77	20
AX10325	Mercury, Total by CVAA	mg/L	0.0000558	0.0005	0.004	0.00391	0.00386	0.0034 to 0.0046		97.8	70 to 130		1.40	20
AX10325	Cadmium, Total	mg/L	0.0000329	0.00044	0.100	0.0942	0.0935	0.085 to 0.115		94.2	70 to 130		0.746	20
AX10325	Lithium, Total	mg/L	-0.0000966	0.022	0.20	0.205	0.204	0.17 to 0.23		102	70 to 130		0.129	20
AX10325	Arsenic, Total	mg/L	0.0000109	0.0022	0.100	0.125	0.123	0.085 to 0.115		104	70 to 130		1.61	20
AX10325	Barium, Total	mg/L	0.00000640	0.0044	0.100	0.160	0.159	0.085 to 0.115		99.9	70 to 130		0.627	20
AX10325	Boron, Total	mg/L	0.000123	0.044	1.00	1.01	1.01	0.85 to 1.15		97.3	70 to 130		0.134	20
AX10325	Calcium, Total	mg/L	-0.0189	0.22	5.00	13.6	13.6	4.25 to 5.75		96.0	70 to 130		0.422	20
AX10325	Chromium, Total	mg/L	0.0000190	0.0044	0.100	0.102	0.103	0.085 to 0.115		102	70 to 130		0.976	20
AX10325	Cobalt, Total	mg/L	0.00000201	0.0044	0.100	0.122	0.121	0.085 to 0.115		105	70 to 130		0.823	20
AX10325	Molybdenum, Total	mg/L	0.0000239	0.0044	0.100	0.101	0.101	0.085 to 0.115		101	70 to 130		0.00	20
AX10325	Selenium, Total	mg/L	0.0000683	0.0044	0.100	0.0994	0.0958	0.085 to 0.115		99.4	70 to 130		3.69	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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AX10321

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec
AX10325	Solids, Dissolved	mg/L	0.00	25				130	53.0	40 to 60			1.17
													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: WMWBARAPFB
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX10322

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Beryllium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/18/2017	EPA 200.7		2	0.1	0.5	U Not Detected	mg/L
* Cadmium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/11/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/9/2017	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total, by Test America	SGC	5/24/2017	SM 4500 Cl_E		1	0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	SGC	5/24/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	5/24/2017	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: WMWBARAPFB
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX10322

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX10325	Thallium, Total	mg/L	0.0000461	0.00044	0.100	0.114	0.103	0.085 to 0.115	114	70 to 130	1.77	20	
AX10325	Antimony, Total	mg/L	0.0000608	0.00132	0.100	0.102	0.102	0.085 to 0.115	102	70 to 130	1.98	20	
AX10325	Beryllium, Total	mg/L	0.0000392	0.00132	0.100	0.125	0.110	0.085 to 0.115	125	70 to 130	4.08	20	
AX10325	Cadmium, Total	mg/L	0.00000329	0.00044	0.100	0.0942	0.0935	0.085 to 0.115	94.2	70 to 130	0.746	20	
AX10325	Lithium, Total	mg/L	-0.0000966	0.022	0.20	0.205	0.204	0.17 to 0.23	102	70 to 130	0.129	20	
AX10325	Lead, Total	mg/L	0.0000122	0.0022	0.100	0.114	0.107	0.085 to 0.115	114	70 to 130	1.77	20	
AX10325	Mercury, Total by CVAA	mg/L	0.0000558	0.0005	0.004	0.00391	0.00386	0.0034 to 0.0046	97.8	70 to 130	1.40	20	
AX10325	Arsenic, Total	mg/L	0.0000109	0.0022	0.100	0.125	0.123	0.085 to 0.115	104	70 to 130	1.61	20	
AX10325	Barium, Total	mg/L	0.00000640	0.0044	0.100	0.160	0.159	0.085 to 0.115	99.9	70 to 130	0.627	20	
AX10325	Boron, Total	mg/L	0.000123	0.044	1.00	1.01	1.01	0.85 to 1.15	97.3	70 to 130	0.134	20	
AX10325	Calcium, Total	mg/L	-0.0189	0.22	5.00	13.6	13.6	4.25 to 5.75	96.0	70 to 130	0.422	20	
AX10325	Chromium, Total	mg/L	0.0000190	0.0044	0.100	0.102	0.103	0.085 to 0.115	102	70 to 130	0.976	20	
AX10325	Cobalt, Total	mg/L	0.00000201	0.0044	0.100	0.122	0.121	0.085 to 0.115	105	70 to 130	0.823	20	
AX10325	Molybdenum, Total	mg/L	0.0000239	0.0044	0.100	0.101	0.101	0.085 to 0.115	101	70 to 130	0.00	20	
AX10325	Selenium, Total	mg/L	0.0000683	0.0044	0.100	0.0994	0.0958	0.085 to 0.115	99.4	70 to 130	3.69	20	

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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
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAPFB
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX10322

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
								Duplicate	LFB	Limit	Rec	Limit	Prec
AX10325	Solids, Dissolved	mg/L	0.00	25				130	53.0	40 to 60			1.17
													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**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AX10323

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	0.0309	mg/L
* Barium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	0.146	mg/L
* Beryllium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2017	EPA 200.7		2	0.02	0.1	J 0.0737	mg/L
* Calcium, Total	HRG	5/18/2017	EPA 200.7		2	0.1	0.5	14.3	mg/L
* Cadmium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/11/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/9/2017	SM 2540C		1		25	259	mg/L
* Chloride, Total, by Test America	SGC	5/24/2017	SM 4500 Cl_E		1	0.60	2.00	22	mg/L
* Fluoride, Total, by Test America	SGC	5/24/2017	SM 4500 F_C		1	0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	SGC	5/24/2017	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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AX10323

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX10325	Thallium, Total	mg/L	0.0000461	0.00044	0.100	0.114	0.112	0.103	0.085 to 0.115	114	70 to 130	1.77	20
AX10325	Antimony, Total	mg/L	0.0000608	0.00132	0.100	0.102	0.100	0.102	0.085 to 0.115	102	70 to 130	1.98	20
AX10325	Beryllium, Total	mg/L	0.0000392	0.00132	0.100	0.125	0.120	0.110	0.085 to 0.115	125	70 to 130	4.08	20
AX10325	Lead, Total	mg/L	0.0000122	0.0022	0.100	0.114	0.112	0.107	0.085 to 0.115	114	70 to 130	1.77	20
AX10325	Mercury, Total by CVAA	mg/L	0.0000558	0.0005	0.004	0.00391	0.00386	0.00383	0.0034 to 0.0046	97.8	70 to 130	1.40	20
AX10325	Cadmium, Total	mg/L	0.0000329	0.00044	0.100	0.0942	0.0935	0.0960	0.085 to 0.115	94.2	70 to 130	0.746	20
AX10325	Lithium, Total	mg/L	-0.0000966	0.022	0.20	0.205	0.204	0.194	0.17 to 0.23	102	70 to 130	0.129	20
AX10325	Arsenic, Total	mg/L	0.0000109	0.0022	0.100	0.125	0.123	0.102	0.085 to 0.115	104	70 to 130	1.61	20
AX10325	Barium, Total	mg/L	0.00000640	0.0044	0.100	0.160	0.159	0.0989	0.085 to 0.115	99.9	70 to 130	0.627	20
AX10325	Boron, Total	mg/L	0.000123	0.044	1.00	1.01	1.01	0.968	0.85 to 1.15	97.3	70 to 130	0.134	20
AX10325	Calcium, Total	mg/L	-0.0189	0.22	5.00	13.6	13.6	4.82	4.25 to 5.75	96.0	70 to 130	0.422	20
AX10325	Chromium, Total	mg/L	0.0000190	0.0044	0.100	0.102	0.103	0.101	0.085 to 0.115	102	70 to 130	0.976	20
AX10325	Cobalt, Total	mg/L	0.00000201	0.0044	0.100	0.122	0.121	0.104	0.085 to 0.115	105	70 to 130	0.823	20
AX10325	Molybdenum, Total	mg/L	0.0000239	0.0044	0.100	0.101	0.101	0.0995	0.085 to 0.115	101	70 to 130	0.00	20
AX10325	Selenium, Total	mg/L	0.0000683	0.0044	0.100	0.0994	0.0958	0.0986	0.085 to 0.115	99.4	70 to 130	3.69	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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AX10323

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX10325	Solids, Dissolved	mg/L	0.00	25			130	53.0	40 to 60	1.17	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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AX10324

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	0.0416	mg/L
* Barium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	0.145	mg/L
* Beryllium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2017	EPA 200.7		2	0.02	0.1	1.45	mg/L
* Calcium, Total	HRG	5/18/2017	EPA 200.7		2	0.1	0.5	34.1	mg/L
* Cadmium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/11/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/9/2017	SM 2540C		1		25	300	mg/L
* Chloride, Total, by Test America	SGC	5/24/2017	SM 4500 Cl_E		1	0.60	2.00	25	mg/L
* Fluoride, Total, by Test America	SGC	5/24/2017	SM 4500 F_C		1	0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	SGC	5/24/2017	SM 4500 SO4_E		1	1.40	5.00	J 2.7	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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AX10324

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB Limit	Rec		Prec	Prec Limit	
			MB	Limit					Rec	Limit			
AX10325	Thallium, Total	mg/L	0.0000461	0.00044	0.100	0.114	0.112	0.103	0.085 to 0.115	114	70 to 130	1.77	20
AX10325	Antimony, Total	mg/L	0.0000608	0.00132	0.100	0.102	0.100	0.102	0.085 to 0.115	102	70 to 130	1.98	20
AX10325	Beryllium, Total	mg/L	0.0000392	0.00132	0.100	0.125	0.120	0.110	0.085 to 0.115	125	70 to 130	4.08	20
AX10325	Cadmium, Total	mg/L	0.00000329	0.00044	0.100	0.0942	0.0935	0.0960	0.085 to 0.115	94.2	70 to 130	0.746	20
AX10325	Lithium, Total	mg/L	-0.0000966	0.022	0.20	0.205	0.204	0.194	0.17 to 0.23	102	70 to 130	0.129	20
AX10325	Lead, Total	mg/L	0.0000122	0.0022	0.100	0.114	0.112	0.107	0.085 to 0.115	114	70 to 130	1.77	20
AX10325	Mercury, Total by CVAA	mg/L	0.0000558	0.0005	0.004	0.00391	0.00386	0.00383	0.0034 to 0.0046	97.8	70 to 130	1.40	20
AX10325	Arsenic, Total	mg/L	0.0000109	0.0022	0.100	0.125	0.123	0.102	0.085 to 0.115	104	70 to 130	1.61	20
AX10325	Barium, Total	mg/L	0.00000640	0.0044	0.100	0.160	0.159	0.0989	0.085 to 0.115	99.9	70 to 130	0.627	20
AX10325	Boron, Total	mg/L	0.000123	0.044	1.00	1.01	1.01	0.968	0.85 to 1.15	97.3	70 to 130	0.134	20
AX10325	Calcium, Total	mg/L	-0.0189	0.22	5.00	13.6	13.6	4.82	4.25 to 5.75	96.0	70 to 130	0.422	20
AX10325	Chromium, Total	mg/L	0.0000190	0.0044	0.100	0.102	0.103	0.101	0.085 to 0.115	102	70 to 130	0.976	20
AX10325	Cobalt, Total	mg/L	0.00000201	0.0044	0.100	0.122	0.121	0.104	0.085 to 0.115	105	70 to 130	0.823	20
AX10325	Molybdenum, Total	mg/L	0.0000239	0.0044	0.100	0.101	0.101	0.0995	0.085 to 0.115	101	70 to 130	0.00	20
AX10325	Selenium, Total	mg/L	0.0000683	0.0044	0.100	0.0994	0.0958	0.0986	0.085 to 0.115	99.4	70 to 130	3.69	20

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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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AX10324

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX10325	Solids, Dissolved	mg/L	0.00	25			130	53.0	40 to 60			1.17	5

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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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AX10325

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	0.0212	mg/L
* Barium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	0.0601	mg/L
* Beryllium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2017	EPA 200.7		2	0.02	0.1	J 0.0370	mg/L
* Calcium, Total	HRG	5/18/2017	EPA 200.7		2	0.1	0.5	8.85	mg/L
* Cadmium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	0.0172	mg/L
* Chromium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/11/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/9/2017	SM 2540C		1		25	127	mg/L
* Chloride, Total, by Test America	SGC	5/24/2017	SM 4500 Cl_E		1	0.60	2.00	14	mg/L
* Fluoride, Total, by Test America	SGC	5/24/2017	SM 4500 F_C		1	0.032	0.10	J 0.080	mg/L
* Sulfate, Total, by Test America	SGC	5/24/2017	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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AX10325

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX10325	Thallium, Total	mg/L	0.0000461	0.00044	0.100	0.114	0.112	0.103	0.085 to 0.115	114	70 to 130	1.77	20
AX10325	Antimony, Total	mg/L	0.0000608	0.00132	0.100	0.102	0.100	0.102	0.085 to 0.115	102	70 to 130	1.98	20
AX10325	Beryllium, Total	mg/L	0.0000392	0.00132	0.100	0.125	0.120	0.110	0.085 to 0.115	125	70 to 130	4.08	20
AX10325	Lead, Total	mg/L	0.0000122	0.0022	0.100	0.114	0.112	0.107	0.085 to 0.115	114	70 to 130	1.77	20
AX10325	Mercury, Total by CVAA	mg/L	0.0000558	0.0005	0.004	0.00391	0.00386	0.00383	0.0034 to 0.0046	97.8	70 to 130	1.40	20
AX10325	Cadmium, Total	mg/L	0.0000329	0.00044	0.100	0.0942	0.0935	0.0960	0.085 to 0.115	94.2	70 to 130	0.746	20
AX10325	Lithium, Total	mg/L	-0.0000966	0.022	0.20	0.205	0.204	0.194	0.17 to 0.23	102	70 to 130	0.129	20
AX10325	Arsenic, Total	mg/L	0.0000109	0.0022	0.100	0.125	0.123	0.102	0.085 to 0.115	104	70 to 130	1.61	20
AX10325	Barium, Total	mg/L	0.00000640	0.0044	0.100	0.160	0.159	0.0989	0.085 to 0.115	99.9	70 to 130	0.627	20
AX10325	Boron, Total	mg/L	0.000123	0.044	1.00	1.01	1.01	0.968	0.85 to 1.15	97.3	70 to 130	0.134	20
AX10325	Calcium, Total	mg/L	-0.0189	0.22	5.00	13.6	13.6	4.82	4.25 to 5.75	96.0	70 to 130	0.422	20
AX10325	Chromium, Total	mg/L	0.0000190	0.0044	0.100	0.102	0.103	0.101	0.085 to 0.115	102	70 to 130	0.976	20
AX10325	Cobalt, Total	mg/L	0.00000201	0.0044	0.100	0.122	0.121	0.104	0.085 to 0.115	105	70 to 130	0.823	20
AX10325	Molybdenum, Total	mg/L	0.0000239	0.0044	0.100	0.101	0.101	0.0995	0.085 to 0.115	101	70 to 130	0.00	20
AX10325	Selenium, Total	mg/L	0.0000683	0.0044	0.100	0.0994	0.0958	0.0986	0.085 to 0.115	99.4	70 to 130	3.69	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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AX10325

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX10325	Solids, Dissolved	mg/L	0.00	25			130	53.0	40 to 60	1.17	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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AX10326

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	0.0268	mg/L
* Beryllium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	5/18/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	5/18/2017	EPA 200.7		2	0.1	0.5	1.97	mg/L
* Cadmium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	DLJ	5/10/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/11/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	5/18/2017	EPA 200.7		2	0.01	0.05	U Not Detected	mg/L
* Molybdenum, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	DLJ	5/10/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	DLJ	5/10/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	DLJ	5/10/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	5/9/2017	SM 2540C		1		25	44.7	mg/L
* Chloride, Total, by Test America	SGC	5/24/2017	SM 4500 Cl_E		1	0.60	2.00	6.4	mg/L
* Fluoride, Total, by Test America	SGC	5/24/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	5/24/2017	SM 4500 SO4_E		1	1.40	5.00	J 1.4	mg/L

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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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AX10326

Sample	Analysis	Units	MB				LFB			Rec		Prec	
			MB	Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Limit	
AX10326	Selenium, Total	mg/L	0.0000254	0.0044	0.100	0.0951	0.0959	0.0998	0.085 to 0.115	95.1	70 to 130	0.838	20
AX10326	Boron, Total	mg/L	0.0000866	0.044	1.00	0.991	0.965	0.969	0.85 to 1.15	99.1	70 to 130	2.68	20
AX10326	Lead, Total	mg/L	0.0000119	0.0022	0.100	0.112	0.111	0.109	0.085 to 0.115	112	70 to 130	0.897	20
AX10326	Beryllium, Total	mg/L	0.0000414	0.00132	0.100	0.120	0.115	0.113	0.085 to 0.115	120	70 to 130	4.26	20
AX10326	Cobalt, Total	mg/L	0.0000129	0.0044	0.100	0.104	0.101	0.108	0.085 to 0.115	104	70 to 130	2.93	20
AX10326	Thallium, Total	mg/L	0.0000103	0.00044	0.100	0.112	0.112	0.105	0.085 to 0.115	112	70 to 130	0.00	20
AX10326	Calcium, Total	mg/L	-0.0184	0.22	5.00	6.89	6.79	4.80	4.25 to 5.75	98.4	70 to 130	1.42	20
AX10326	Molybdenum, Total	mg/L	0.0000102	0.0044	0.100	0.0993	0.0982	0.0997	0.085 to 0.115	99.3	70 to 130	1.11	20
AX10326	Arsenic, Total	mg/L	0.0000156	0.0022	0.100	0.101	0.102	0.104	0.085 to 0.115	101	70 to 130	0.985	20
AX10326	Barium, Total	mg/L	0.0000128	0.0044	0.100	0.126	0.126	0.100	0.085 to 0.115	99.2	70 to 130	0.00	20
AX10326	Mercury, Total by CVAA	mg/L	0.0000589	0.0005	0.004	0.00395	0.00392	0.00390	0.0034 to 0.0046	98.8	70 to 130	0.887	20
AX10326	Antimony, Total	mg/L	0.0000504	0.00132	0.100	0.101	0.101	0.103	0.085 to 0.115	101	70 to 130	0.00	20
AX10326	Cadmium, Total	mg/L	0.0000172	0.00044	0.100	0.0928	0.0927	0.0967	0.085 to 0.115	92.8	70 to 130	0.108	20
AX10326	Chromium, Total	mg/L	0.0000255	0.0044	0.100	0.101	0.0999	0.102	0.085 to 0.115	101	70 to 130	1.10	20
AX10326	Lithium, Total	mg/L	-0.000117	0.022	0.20	0.200	0.196	0.193	0.17 to 0.23	100	70 to 130	2.00	20

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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: WMWBARAP
 Sample Date: 03-May-17
 Customer ID:
 Delivery Date: 04-May-17

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AX10326

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec		
			Limit	Limit			Duplicate	LFB	Limit	Limit		
AX10356	Solids, Dissolved	mg/L	7.00	25			33.3	56.0	40 to 60		3.09	5

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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 05/04/2017 08:30

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Angie Jimmerson	Requested By	Greg Dyer
Collector	Ben Rothschild	Location	Barry 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-4	05/02/2017	08:24	4	Groundwater		AX10306
MW-4 DUP	05/02/2017	08:24	4	Sample Duplicate		AX10307
MW-3	05/02/2017	09:30	4	Groundwater		AX10308
MW-2	05/02/2017	10:49	4	Groundwater		AX10309
MW-1	05/02/2017	11:58	4	Groundwater		AX10310
MW-16	05/02/2017	13:42	4	Groundwater		AX10311
MW-15	05/02/2017	15:04	4	Groundwater		AX10312
MW-15 DUP	05/02/2017	15:04	4	Sample Duplicate		AX10313
MW-14	05/02/2017	16:21	4	Groundwater		AX10314
FB-1	05/02/2017	17:30	4	Field Blank		AX10315
EB-1	05/02/2017	17:40	4	Equipment Blank		AX10316
MW-13	05/03/2017	08:31	4	Groundwater		AX10317
MW-12	05/03/2017	09:31	4	Groundwater		AX10318
MW-11	05/03/2017	10:35	4	Groundwater		AX10319
MW-10	05/03/2017	11:30	4	Groundwater		AX10320
MW-9	05/03/2017	12:24	4	Groundwater		AX10321
FB-2	05/03/2017	12:40	4	Field Blank		AX10322

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: 2017.05.04 07:49:04 -05'00'</small>	05/04/2017 07:49

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
		0.4 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: 400-137613-1

TestAmerica Sample Delivery Group: Barry Ash Pond (7)

Client Project/Site: CCR Plant Barry

For:

Alabama Power General Test Laboratory

744 County Rd 87

GSC #8

Calera, Alabama 35040

Attn: Sarah Copeland



Authorized for release by:

5/23/2017 5:24:19 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 Barry

TestAmerica Job ID: 400-137613-1
SDG: Barry Ash Pond (7)

Job ID: 400-137613-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-137613-1

General Chemistry

Method(s) SM 4500 F C: The matrix spike / matrix spike duplicate (MS/MSD) RPD for Batch 353939 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected.

Method(s) SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 353292 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 353008 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 Barry

TestAmerica Job ID: 400-137613-1
SDG: Barry Ash Pond (7)

Client Sample ID: AX10306 MW-4

Lab Sample ID: 400-137613-1

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
Sulfate	2.7	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX10307 MW-4 DUP

Lab Sample ID: 400-137613-2

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	2.0	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX10308 MW-3

Lab Sample ID: 400-137613-3

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

Client Sample ID: AX10309 MW-2

Lab Sample ID: 400-137613-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	8.3		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: AX10310 MW-1

Lab Sample ID: 400-137613-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	26		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	6.0		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX10311 MW-16

Lab Sample ID: 400-137613-6

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	0.050	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX10312 MW-15

Lab Sample ID: 400-137613-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	33		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.18		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX10313 MW-15 DUP

Lab Sample ID: 400-137613-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	33		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.18		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX10314 MW-14

Lab Sample ID: 400-137613-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	42		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

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-137613-1
SDG: Barry Ash Pond (7)

Client Sample ID: AX10314 MW-14 (Continued)

Lab Sample ID: 400-137613-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	1.8	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX10315 FB-1

Lab Sample ID: 400-137613-10

No Detections.

Client Sample ID: AX10316 EB-1

Lab Sample ID: 400-137613-11

No Detections.

Client Sample ID: AX10317 MW-13

Lab Sample ID: 400-137613-12

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	0.060	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	6.6		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX10318 MW-12

Lab Sample ID: 400-137613-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	25		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	2.1	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX10319 MW-11

Lab Sample ID: 400-137613-14

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	3.6	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX10320 MW-10

Lab Sample ID: 400-137613-15

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	4.1	J F2	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX10321 MW-9

Lab Sample ID: 400-137613-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	26		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	2.7	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX10322 FB-2

Lab Sample ID: 400-137613-17

No Detections.

Client Sample ID: AX10323 MW-5

Lab Sample ID: 400-137613-18

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-137613-1
SDG: Barry Ash Pond (7)

Client Sample ID: AX10323 MW-5 (Continued)

Lab Sample ID: 400-137613-18

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

Client Sample ID: AX10324 MW-8

Lab Sample ID: 400-137613-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	25		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	2.7	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX10325 MW-7

Lab Sample ID: 400-137613-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	14		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.080	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX10326 MW-6

Lab Sample ID: 400-137613-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	6.4		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	1.4	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

Method Summary

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

TestAmerica Job ID: 400-137613-1
SDG: Barry 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

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- 13
- 14

Sample Summary

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

TestAmerica Job ID: 400-137613-1
SDG: Barry Ash Pond (7)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-137613-1	AX10306 MW-4	Water	05/02/17 08:24	05/08/17 09:12
400-137613-2	AX10307 MW-4 DUP	Water	05/02/17 08:24	05/08/17 09:12
400-137613-3	AX10308 MW-3	Water	05/02/17 09:30	05/08/17 09:12
400-137613-4	AX10309 MW-2	Water	05/02/17 10:49	05/08/17 09:12
400-137613-5	AX10310 MW-1	Water	05/02/17 11:58	05/08/17 09:12
400-137613-6	AX10311 MW-16	Water	05/02/17 13:42	05/08/17 09:12
400-137613-7	AX10312 MW-15	Water	05/02/17 15:04	05/08/17 09:12
400-137613-8	AX10313 MW-15 DUP	Water	05/02/17 15:04	05/08/17 09:12
400-137613-9	AX10314 MW-14	Water	05/02/17 16:21	05/08/17 09:12
400-137613-10	AX10315 FB-1	Water	05/02/17 17:30	05/08/17 09:12
400-137613-11	AX10316 EB-1	Water	05/02/17 17:40	05/08/17 09:12
400-137613-12	AX10317 MW-13	Water	05/03/17 08:31	05/08/17 09:12
400-137613-13	AX10318 MW-12	Water	05/03/17 09:31	05/08/17 09:12
400-137613-14	AX10319 MW-11	Water	05/03/17 10:35	05/08/17 09:12
400-137613-15	AX10320 MW-10	Water	05/03/17 11:30	05/08/17 09:12
400-137613-16	AX10321 MW-9	Water	05/03/17 12:24	05/08/17 09:12
400-137613-17	AX10322 FB-2	Water	05/03/17 12:40	05/08/17 09:12
400-137613-18	AX10323 MW-5	Water	05/03/17 08:05	05/08/17 09:12
400-137613-19	AX10324 MW-8	Water	05/03/17 08:58	05/08/17 09:12
400-137613-20	AX10325 MW-7	Water	05/03/17 09:45	05/08/17 09:12
400-137613-21	AX10326 MW-6	Water	05/03/17 10:30	05/08/17 09:12

Client Sample Results

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

TestAmerica Job ID: 400-137613-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10306 MW-4

Lab Sample ID: 400-137613-1

Date Collected: 05/02/17 08:24

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		2.0	0.60	mg/L			05/09/17 15:22	1
Fluoride	<0.032		0.10	0.032	mg/L			05/10/17 16:36	1
Sulfate	2.7	J	5.0	1.4	mg/L			05/12/17 11:41	1

Client Sample ID: AX10307 MW-4 DUP

Lab Sample ID: 400-137613-2

Date Collected: 05/02/17 08:24

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		2.0	0.60	mg/L			05/11/17 15:13	1
Fluoride	<0.032		0.10	0.032	mg/L			05/10/17 16:47	1
Sulfate	2.0	J	5.0	1.4	mg/L			05/16/17 14:31	1

Client Sample ID: AX10308 MW-3

Lab Sample ID: 400-137613-3

Date Collected: 05/02/17 09:30

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.6		2.0	0.60	mg/L			05/09/17 15:22	1
Fluoride	<0.032		0.10	0.032	mg/L			05/10/17 16:53	1
Sulfate	<1.4		5.0	1.4	mg/L			05/10/17 08:43	1

Client Sample ID: AX10309 MW-2

Lab Sample ID: 400-137613-4

Date Collected: 05/02/17 10:49

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.3		2.0	0.60	mg/L			05/09/17 15:06	1
Fluoride	0.040	J	0.10	0.032	mg/L			05/10/17 16:55	1
Sulfate	<1.4		5.0	1.4	mg/L			05/12/17 11:41	1

Client Sample ID: AX10310 MW-1

Lab Sample ID: 400-137613-5

Date Collected: 05/02/17 11:58

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26		2.0	0.60	mg/L			05/11/17 11:28	1
Fluoride	0.050	J	0.10	0.032	mg/L			05/10/17 16:57	1
Sulfate	6.0		5.0	1.4	mg/L			05/10/17 08:14	1

Client Sample Results

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

TestAmerica Job ID: 400-137613-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10311 MW-16

Lab Sample ID: 400-137613-6

Date Collected: 05/02/17 13:42

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19		2.0	0.60	mg/L			05/11/17 11:29	1
Fluoride	0.050	J	0.10	0.032	mg/L			05/10/17 16:59	1
Sulfate	<1.4		5.0	1.4	mg/L			05/10/17 08:14	1

Client Sample ID: AX10312 MW-15

Lab Sample ID: 400-137613-7

Date Collected: 05/02/17 15:04

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33		2.0	0.60	mg/L			05/09/17 15:06	1
Fluoride	0.18		0.10	0.032	mg/L			05/10/17 17:01	1
Sulfate	<1.4		5.0	1.4	mg/L			05/12/17 10:58	1

Client Sample ID: AX10313 MW-15 DUP

Lab Sample ID: 400-137613-8

Date Collected: 05/02/17 15:04

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	33		2.0	0.60	mg/L			05/11/17 11:29	1
Fluoride	0.18		0.10	0.032	mg/L			05/10/17 17:03	1
Sulfate	<1.4		5.0	1.4	mg/L			05/10/17 08:41	1

Client Sample ID: AX10314 MW-14

Lab Sample ID: 400-137613-9

Date Collected: 05/02/17 16:21

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	42		2.0	0.60	mg/L			05/11/17 15:14	1
Fluoride	0.080	J	0.10	0.032	mg/L			05/10/17 17:05	1
Sulfate	1.8	J	5.0	1.4	mg/L			05/10/17 08:14	1

Client Sample ID: AX10315 FB-1

Lab Sample ID: 400-137613-10

Date Collected: 05/02/17 17:30

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			05/09/17 15:22	1
Fluoride	<0.032	F2	0.10	0.032	mg/L			05/17/17 17:02	1
Sulfate	<1.4		5.0	1.4	mg/L			05/10/17 15:35	1

Client Sample ID: AX10316 EB-1

Lab Sample ID: 400-137613-11

Date Collected: 05/02/17 17:40

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			05/11/17 11:49	1

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-137613-1
SDG: Barry Ash Pond (7)

Client Sample ID: AX10316 EB-1

Lab Sample ID: 400-137613-11

Date Collected: 05/02/17 17:40

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			05/17/17 17:13	1
Sulfate	<1.4		5.0	1.4	mg/L			05/10/17 08:16	1

Client Sample ID: AX10317 MW-13

Lab Sample ID: 400-137613-12

Date Collected: 05/03/17 08:31

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	48		2.0	0.60	mg/L			05/11/17 11:51	1
Fluoride	0.060	J	0.10	0.032	mg/L			05/17/17 17:15	1
Sulfate	6.6		5.0	1.4	mg/L			05/10/17 08:14	1

Client Sample ID: AX10318 MW-12

Lab Sample ID: 400-137613-13

Date Collected: 05/03/17 09:31

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25		2.0	0.60	mg/L			05/09/17 15:06	1
Fluoride	0.060	J	0.10	0.032	mg/L			05/17/17 17:17	1
Sulfate	2.1	J	5.0	1.4	mg/L			05/10/17 15:35	1

Client Sample ID: AX10319 MW-11

Lab Sample ID: 400-137613-14

Date Collected: 05/03/17 10:35

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27		2.0	0.60	mg/L			05/09/17 15:06	1
Fluoride	0.060	J	0.10	0.032	mg/L			05/17/17 17:19	1
Sulfate	3.6	J	5.0	1.4	mg/L			05/10/17 15:35	1

Client Sample ID: AX10320 MW-10

Lab Sample ID: 400-137613-15

Date Collected: 05/03/17 11:30

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22		2.0	0.60	mg/L			05/16/17 10:15	1
Fluoride	0.040	J	0.10	0.032	mg/L			05/17/17 17:07	1
Sulfate	4.1	J F2	5.0	1.4	mg/L			05/10/17 08:41	1

Client Sample ID: AX10321 MW-9

Lab Sample ID: 400-137613-16

Date Collected: 05/03/17 12:24

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26		2.0	0.60	mg/L			05/11/17 11:51	1
Fluoride	0.060	J	0.10	0.032	mg/L			05/17/17 17:46	1

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-137613-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10321 MW-9

Lab Sample ID: 400-137613-16

Date Collected: 05/03/17 12:24

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2.7	J	5.0	1.4	mg/L			05/10/17 08:41	1

Client Sample ID: AX10322 FB-2

Lab Sample ID: 400-137613-17

Date Collected: 05/03/17 12:40

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			05/09/17 15:22	1
Fluoride	<0.032		0.10	0.032	mg/L			05/17/17 17:51	1
Sulfate	<1.4		5.0	1.4	mg/L			05/10/17 08:43	1

Client Sample ID: AX10323 MW-5

Lab Sample ID: 400-137613-18

Date Collected: 05/03/17 08:05

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22		2.0	0.60	mg/L			05/09/17 15:06	1
Fluoride	0.050	J	0.10	0.032	mg/L			05/17/17 17:53	1
Sulfate	<1.4		5.0	1.4	mg/L			05/10/17 15:37	1

Client Sample ID: AX10324 MW-8

Lab Sample ID: 400-137613-19

Date Collected: 05/03/17 08:58

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25		2.0	0.60	mg/L			05/09/17 15:06	1
Fluoride	0.050	J	0.10	0.032	mg/L			05/17/17 17:55	1
Sulfate	2.7	J	5.0	1.4	mg/L			05/10/17 15:35	1

Client Sample ID: AX10325 MW-7

Lab Sample ID: 400-137613-20

Date Collected: 05/03/17 09:45

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14		2.0	0.60	mg/L			05/11/17 11:50	1
Fluoride	0.080	J	0.10	0.032	mg/L			05/17/17 17:57	1
Sulfate	<1.4		5.0	1.4	mg/L			05/10/17 15:35	1

Client Sample ID: AX10326 MW-6

Lab Sample ID: 400-137613-21

Date Collected: 05/03/17 10:30

Matrix: Water

Date Received: 05/08/17 09:12

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.4		2.0	0.60	mg/L			05/11/17 11:27	1
Fluoride	<0.032		0.10	0.032	mg/L			05/17/17 17:26	1
Sulfate	1.4	J	5.0	1.4	mg/L			05/10/17 14:27	1

TestAmerica Pensacola

Definitions/Glossary

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

TestAmerica Job ID: 400-137613-1
SDG: Barry 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.
F2	MS/MSD RPD exceeds control limits
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

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

Lab Chronicle

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

TestAmerica Job ID: 400-137613-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10306 MW-4

Lab Sample ID: 400-137613-1

Date Collected: 05/02/17 08:24

Matrix: Water

Date Received: 05/08/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	352957	05/09/17 15:22	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	353121	05/10/17 16:36	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353378	05/12/17 11:41	VLS	TAL PEN

Client Sample ID: AX10307 MW-4 DUP

Lab Sample ID: 400-137613-2

Date Collected: 05/02/17 08:24

Matrix: Water

Date Received: 05/08/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	353387	05/11/17 15:13	VLS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	353121	05/10/17 16:47	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353749	05/16/17 14:31	BJB	TAL PEN

Client Sample ID: AX10308 MW-3

Lab Sample ID: 400-137613-3

Date Collected: 05/02/17 09:30

Matrix: Water

Date Received: 05/08/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	352957	05/09/17 15:22	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	353121	05/10/17 16:53	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353008	05/10/17 08:43	RRC	TAL PEN

Client Sample ID: AX10309 MW-2

Lab Sample ID: 400-137613-4

Date Collected: 05/02/17 10:49

Matrix: Water

Date Received: 05/08/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	352957	05/09/17 15:06	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	353121	05/10/17 16:55	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353378	05/12/17 11:41	VLS	TAL PEN

Client Sample ID: AX10310 MW-1

Lab Sample ID: 400-137613-5

Date Collected: 05/02/17 11:58

Matrix: Water

Date Received: 05/08/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	353292	05/11/17 11:28	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	353121	05/10/17 16:57	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353008	05/10/17 08:14	RRC	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-137613-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10311 MW-16

Lab Sample ID: 400-137613-6

Date Collected: 05/02/17 13:42

Matrix: Water

Date Received: 05/08/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	353292	05/11/17 11:29	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	353121	05/10/17 16:59	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353008	05/10/17 08:14	RRC	TAL PEN

Client Sample ID: AX10312 MW-15

Lab Sample ID: 400-137613-7

Date Collected: 05/02/17 15:04

Matrix: Water

Date Received: 05/08/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	352957	05/09/17 15:06	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	353121	05/10/17 17:01	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353378	05/12/17 10:58	VLS	TAL PEN

Client Sample ID: AX10313 MW-15 DUP

Lab Sample ID: 400-137613-8

Date Collected: 05/02/17 15:04

Matrix: Water

Date Received: 05/08/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	353292	05/11/17 11:29	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	353121	05/10/17 17:03	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353008	05/10/17 08:41	RRC	TAL PEN

Client Sample ID: AX10314 MW-14

Lab Sample ID: 400-137613-9

Date Collected: 05/02/17 16:21

Matrix: Water

Date Received: 05/08/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	353387	05/11/17 15:14	VLS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	353121	05/10/17 17:05	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353008	05/10/17 08:14	RRC	TAL PEN

Client Sample ID: AX10315 FB-1

Lab Sample ID: 400-137613-10

Date Collected: 05/02/17 17:30

Matrix: Water

Date Received: 05/08/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	352957	05/09/17 15:22	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	353939	05/17/17 17:02	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353138	05/10/17 15:35	RRC	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-137613-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10316 EB-1

Lab Sample ID: 400-137613-11

Date Collected: 05/02/17 17:40

Matrix: Water

Date Received: 05/08/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	353292	05/11/17 11:49	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	353939	05/17/17 17:13	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353008	05/10/17 08:16	RRC	TAL PEN

Client Sample ID: AX10317 MW-13

Lab Sample ID: 400-137613-12

Date Collected: 05/03/17 08:31

Matrix: Water

Date Received: 05/08/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	353292	05/11/17 11:51	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	353939	05/17/17 17:15	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353008	05/10/17 08:14	RRC	TAL PEN

Client Sample ID: AX10318 MW-12

Lab Sample ID: 400-137613-13

Date Collected: 05/03/17 09:31

Matrix: Water

Date Received: 05/08/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	352957	05/09/17 15:06	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	353939	05/17/17 17:17	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353138	05/10/17 15:35	RRC	TAL PEN

Client Sample ID: AX10319 MW-11

Lab Sample ID: 400-137613-14

Date Collected: 05/03/17 10:35

Matrix: Water

Date Received: 05/08/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	352957	05/09/17 15:06	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	353939	05/17/17 17:19	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353138	05/10/17 15:35	RRC	TAL PEN

Client Sample ID: AX10320 MW-10

Lab Sample ID: 400-137613-15

Date Collected: 05/03/17 11:30

Matrix: Water

Date Received: 05/08/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	353677	05/16/17 10:15	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	353939	05/17/17 17:07	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353008	05/10/17 08:41	RRC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-137613-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10321 MW-9

Lab Sample ID: 400-137613-16

Date Collected: 05/03/17 12:24

Matrix: Water

Date Received: 05/08/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	353292	05/11/17 11:51	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	353939	05/17/17 17:46	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353008	05/10/17 08:41	RRC	TAL PEN

Client Sample ID: AX10322 FB-2

Lab Sample ID: 400-137613-17

Date Collected: 05/03/17 12:40

Matrix: Water

Date Received: 05/08/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	352957	05/09/17 15:22	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	353939	05/17/17 17:51	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353008	05/10/17 08:43	RRC	TAL PEN

Client Sample ID: AX10323 MW-5

Lab Sample ID: 400-137613-18

Date Collected: 05/03/17 08:05

Matrix: Water

Date Received: 05/08/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	352957	05/09/17 15:06	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	353939	05/17/17 17:53	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353138	05/10/17 15:37	RRC	TAL PEN

Client Sample ID: AX10324 MW-8

Lab Sample ID: 400-137613-19

Date Collected: 05/03/17 08:58

Matrix: Water

Date Received: 05/08/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	352957	05/09/17 15:06	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	353939	05/17/17 17:55	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353138	05/10/17 15:35	RRC	TAL PEN

Client Sample ID: AX10325 MW-7

Lab Sample ID: 400-137613-20

Date Collected: 05/03/17 09:45

Matrix: Water

Date Received: 05/08/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	353292	05/11/17 11:50	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	353939	05/17/17 17:57	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353138	05/10/17 15:35	RRC	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-137613-1
SDG: Barry Ash Pond (7)

Client Sample ID: AX10326 MW-6

Lab Sample ID: 400-137613-21

Date Collected: 05/03/17 10:30

Matrix: Water

Date Received: 05/08/17 09:12

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	353292	05/11/17 11:27	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	353939	05/17/17 17:26	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353138	05/10/17 14:27	RRC	TAL PEN

Laboratory References:

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

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QC Association Summary

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

TestAmerica Job ID: 400-137613-1
SDG: Barry Ash Pond (7)

General Chemistry

Analysis Batch: 352957

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137613-1	AX10306 MW-4	Total/NA	Water	SM 4500 Cl- E	
400-137613-3	AX10308 MW-3	Total/NA	Water	SM 4500 Cl- E	
400-137613-4	AX10309 MW-2	Total/NA	Water	SM 4500 Cl- E	
400-137613-7	AX10312 MW-15	Total/NA	Water	SM 4500 Cl- E	
400-137613-10	AX10315 FB-1	Total/NA	Water	SM 4500 Cl- E	
400-137613-13	AX10318 MW-12	Total/NA	Water	SM 4500 Cl- E	
400-137613-14	AX10319 MW-11	Total/NA	Water	SM 4500 Cl- E	
400-137613-17	AX10322 FB-2	Total/NA	Water	SM 4500 Cl- E	
400-137613-18	AX10323 MW-5	Total/NA	Water	SM 4500 Cl- E	
400-137613-19	AX10324 MW-8	Total/NA	Water	SM 4500 Cl- E	
MB 400-352957/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-352957/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-352957/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-137613-10 MS	AX10315 FB-1	Total/NA	Water	SM 4500 Cl- E	
400-137613-10 MSD	AX10315 FB-1	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 353008

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137613-3	AX10308 MW-3	Total/NA	Water	SM 4500 SO4 E	
400-137613-5	AX10310 MW-1	Total/NA	Water	SM 4500 SO4 E	
400-137613-6	AX10311 MW-16	Total/NA	Water	SM 4500 SO4 E	
400-137613-8	AX10313 MW-15 DUP	Total/NA	Water	SM 4500 SO4 E	
400-137613-9	AX10314 MW-14	Total/NA	Water	SM 4500 SO4 E	
400-137613-11	AX10316 EB-1	Total/NA	Water	SM 4500 SO4 E	
400-137613-12	AX10317 MW-13	Total/NA	Water	SM 4500 SO4 E	
400-137613-15	AX10320 MW-10	Total/NA	Water	SM 4500 SO4 E	
400-137613-16	AX10321 MW-9	Total/NA	Water	SM 4500 SO4 E	
400-137613-17	AX10322 FB-2	Total/NA	Water	SM 4500 SO4 E	
MB 400-353008/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-353008/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-353008/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-137613-15 MS	AX10320 MW-10	Total/NA	Water	SM 4500 SO4 E	
400-137613-15 MSD	AX10320 MW-10	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 353121

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137613-1	AX10306 MW-4	Total/NA	Water	SM 4500 F C	
400-137613-2	AX10307 MW-4 DUP	Total/NA	Water	SM 4500 F C	
400-137613-3	AX10308 MW-3	Total/NA	Water	SM 4500 F C	
400-137613-4	AX10309 MW-2	Total/NA	Water	SM 4500 F C	
400-137613-5	AX10310 MW-1	Total/NA	Water	SM 4500 F C	
400-137613-6	AX10311 MW-16	Total/NA	Water	SM 4500 F C	
400-137613-7	AX10312 MW-15	Total/NA	Water	SM 4500 F C	
400-137613-8	AX10313 MW-15 DUP	Total/NA	Water	SM 4500 F C	
400-137613-9	AX10314 MW-14	Total/NA	Water	SM 4500 F C	
MB 400-353121/2	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-353121/3	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-137457-A-1 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-137457-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-137613-2 DU	AX10307 MW-4 DUP	Total/NA	Water	SM 4500 F C	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-137613-1
 SDG: Barry Ash Pond (7)

General Chemistry (Continued)

Analysis Batch: 353138

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137613-10	AX10315 FB-1	Total/NA	Water	SM 4500 SO4 E	
400-137613-13	AX10318 MW-12	Total/NA	Water	SM 4500 SO4 E	
400-137613-14	AX10319 MW-11	Total/NA	Water	SM 4500 SO4 E	
400-137613-18	AX10323 MW-5	Total/NA	Water	SM 4500 SO4 E	
400-137613-19	AX10324 MW-8	Total/NA	Water	SM 4500 SO4 E	
400-137613-20	AX10325 MW-7	Total/NA	Water	SM 4500 SO4 E	
400-137613-21	AX10326 MW-6	Total/NA	Water	SM 4500 SO4 E	
MB 400-353138/17	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-353138/18	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-353138/14	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-137613-10 MS	AX10315 FB-1	Total/NA	Water	SM 4500 SO4 E	
400-137613-10 MSD	AX10315 FB-1	Total/NA	Water	SM 4500 SO4 E	
400-137613-21 MS	AX10326 MW-6	Total/NA	Water	SM 4500 SO4 E	
400-137613-21 MSD	AX10326 MW-6	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 353139

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-353139/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-353139/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-353139/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-137615-A-5 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-137615-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 353292

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137613-5	AX10310 MW-1	Total/NA	Water	SM 4500 CI- E	
400-137613-6	AX10311 MW-16	Total/NA	Water	SM 4500 CI- E	
400-137613-8	AX10313 MW-15 DUP	Total/NA	Water	SM 4500 CI- E	
400-137613-11	AX10316 EB-1	Total/NA	Water	SM 4500 CI- E	
400-137613-12	AX10317 MW-13	Total/NA	Water	SM 4500 CI- E	
400-137613-16	AX10321 MW-9	Total/NA	Water	SM 4500 CI- E	
400-137613-20	AX10325 MW-7	Total/NA	Water	SM 4500 CI- E	
400-137613-21	AX10326 MW-6	Total/NA	Water	SM 4500 CI- E	
MB 400-353292/6	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 400-353292/7	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
MRL 400-353292/3	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
400-137613-10 MS	AX10315 FB-1	Total/NA	Water	SM 4500 CI- E	
400-137613-10 MSD	AX10315 FB-1	Total/NA	Water	SM 4500 CI- E	
400-137613-21 MS	AX10326 MW-6	Total/NA	Water	SM 4500 CI- E	
400-137613-21 MSD	AX10326 MW-6	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 353378

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137613-1	AX10306 MW-4	Total/NA	Water	SM 4500 SO4 E	
400-137613-4	AX10309 MW-2	Total/NA	Water	SM 4500 SO4 E	
400-137613-7	AX10312 MW-15	Total/NA	Water	SM 4500 SO4 E	
MB 400-353378/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-353378/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-353378/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-137613-1 MS	AX10306 MW-4	Total/NA	Water	SM 4500 SO4 E	
400-137613-1 MSD	AX10306 MW-4	Total/NA	Water	SM 4500 SO4 E	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-137613-1
 SDG: Barry Ash Pond (7)

General Chemistry (Continued)

Analysis Batch: 353378 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137613-7 MS	AX10312 MW-15	Total/NA	Water	SM 4500 SO4 E	
400-137613-7 MSD	AX10312 MW-15	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 353387

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137613-2	AX10307 MW-4 DUP	Total/NA	Water	SM 4500 Cl- E	
400-137613-9	AX10314 MW-14	Total/NA	Water	SM 4500 Cl- E	
MB 400-353387/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-353387/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-353387/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-137615-A-13 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-137615-A-13 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 353677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137613-15	AX10320 MW-10	Total/NA	Water	SM 4500 Cl- E	
MB 400-353677/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-353677/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-353677/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-137613-15 MS	AX10320 MW-10	Total/NA	Water	SM 4500 Cl- E	
400-137613-15 MSD	AX10320 MW-10	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 353749

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137613-2	AX10307 MW-4 DUP	Total/NA	Water	SM 4500 SO4 E	
MB 400-353749/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-353749/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-353749/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-137910-A-1 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-137910-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 353939

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137613-10	AX10315 FB-1	Total/NA	Water	SM 4500 F C	
400-137613-11	AX10316 EB-1	Total/NA	Water	SM 4500 F C	
400-137613-12	AX10317 MW-13	Total/NA	Water	SM 4500 F C	
400-137613-13	AX10318 MW-12	Total/NA	Water	SM 4500 F C	
400-137613-14	AX10319 MW-11	Total/NA	Water	SM 4500 F C	
400-137613-15	AX10320 MW-10	Total/NA	Water	SM 4500 F C	
400-137613-16	AX10321 MW-9	Total/NA	Water	SM 4500 F C	
400-137613-17	AX10322 FB-2	Total/NA	Water	SM 4500 F C	
400-137613-18	AX10323 MW-5	Total/NA	Water	SM 4500 F C	
400-137613-19	AX10324 MW-8	Total/NA	Water	SM 4500 F C	
400-137613-20	AX10325 MW-7	Total/NA	Water	SM 4500 F C	
400-137613-21	AX10326 MW-6	Total/NA	Water	SM 4500 F C	
MB 400-353939/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-353939/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-137613-10 MS	AX10315 FB-1	Total/NA	Water	SM 4500 F C	
400-137613-10 MSD	AX10315 FB-1	Total/NA	Water	SM 4500 F C	
400-137613-15 MS	AX10320 MW-10	Total/NA	Water	SM 4500 F C	
400-137613-15 MSD	AX10320 MW-10	Total/NA	Water	SM 4500 F C	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-137613-1
SDG: Barry Ash Pond (7)

General Chemistry (Continued)

Analysis Batch: 353939 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137613-21 MS	AX10326 MW-6	Total/NA	Water	SM 4500 F C	
400-137613-21 MSD	AX10326 MW-6	Total/NA	Water	SM 4500 F C	
400-137613-16 DU	AX10321 MW-9	Total/NA	Water	SM 4500 F C	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

QC Sample Results

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

TestAmerica Job ID: 400-137613-1
 SDG: Barry Ash Pond (7)

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-352957/6
Matrix: Water
Analysis Batch: 352957

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			05/09/17 14:49	1

Lab Sample ID: LCS 400-352957/7
Matrix: Water
Analysis Batch: 352957

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	32.3		mg/L		108	90 - 110

Lab Sample ID: MRL 400-352957/3
Matrix: Water
Analysis Batch: 352957

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	2.47		mg/L		123	50 - 150

Lab Sample ID: 400-137613-10 MS
Matrix: Water
Analysis Batch: 352957

Client Sample ID: AX10315 FB-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<0.60		10.0	11.5		mg/L		115	73 - 120

Lab Sample ID: 400-137613-10 MSD
Matrix: Water
Analysis Batch: 352957

Client Sample ID: AX10315 FB-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<0.60		10.0	11.7		mg/L		117	73 - 120	2	8

Lab Sample ID: MB 400-353292/6
Matrix: Water
Analysis Batch: 353292

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			05/11/17 11:01	1

Lab Sample ID: LCS 400-353292/7
Matrix: Water
Analysis Batch: 353292

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	31.1		mg/L		104	90 - 110

Lab Sample ID: MRL 400-353292/3
Matrix: Water
Analysis Batch: 353292

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	1.11	J	mg/L		55	50 - 150

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-137613-1
 SDG: Barry Ash Pond (7)

Lab Sample ID: 400-137613-10 MS
Matrix: Water
Analysis Batch: 353292

Client Sample ID: AX10315 FB-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<0.60	F1	10.0	11.5		mg/L		115	73 - 120

Lab Sample ID: 400-137613-10 MSD
Matrix: Water
Analysis Batch: 353292

Client Sample ID: AX10315 FB-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<0.60	F1	10.0	12.3	F1	mg/L		123	73 - 120	6	8

Lab Sample ID: 400-137613-21 MS
Matrix: Water
Analysis Batch: 353292

Client Sample ID: AX10326 MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	6.4		10.0	17.8		mg/L		114	73 - 120

Lab Sample ID: 400-137613-21 MSD
Matrix: Water
Analysis Batch: 353292

Client Sample ID: AX10326 MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	6.4		10.0	17.7		mg/L		113	73 - 120	0	8

Lab Sample ID: MB 400-353387/6
Matrix: Water
Analysis Batch: 353387

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			05/11/17 14:37	1

Lab Sample ID: LCS 400-353387/7
Matrix: Water
Analysis Batch: 353387

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	31.7		mg/L		106	90 - 110

Lab Sample ID: MRL 400-353387/3
Matrix: Water
Analysis Batch: 353387

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

Lab Sample ID: 400-137615-A-13 MS
Matrix: Water
Analysis Batch: 353387

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	<0.60	F1	10.0	12.2	F1	mg/L		122	73 - 120

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-137613-1
 SDG: Barry Ash Pond (7)

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: 400-137615-A-13 MSD
Matrix: Water
Analysis Batch: 353387

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	<0.60	F1	10.0	12.1	F1	mg/L		121	73 - 120	1	8

Lab Sample ID: MB 400-353677/6
Matrix: Water
Analysis Batch: 353677

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			05/16/17 09:48	1

Lab Sample ID: LCS 400-353677/7
Matrix: Water
Analysis Batch: 353677

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 400-353677/3
Matrix: Water
Analysis Batch: 353677

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	2.15		mg/L		108	50 - 150

Lab Sample ID: 400-137613-15 MS
Matrix: Water
Analysis Batch: 353677

Client Sample ID: AX10320 MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	22		10.0	30.9		mg/L		85	73 - 120

Lab Sample ID: 400-137613-15 MSD
Matrix: Water
Analysis Batch: 353677

Client Sample ID: AX10320 MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	22		10.0	30.6		mg/L		82	73 - 120	1	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-353121/2
Matrix: Water
Analysis Batch: 353121

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			05/10/17 16:12	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-137613-1
 SDG: Barry Ash Pond (7)

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: LCS 400-353121/3
Matrix: Water
Analysis Batch: 353121

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: 400-137457-A-1 MS
Matrix: Water
Analysis Batch: 353121

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	0.48		1.00	1.58		mg/L		110	75 - 125

Lab Sample ID: 400-137457-A-1 MSD
Matrix: Water
Analysis Batch: 353121

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	0.48		1.00	1.55		mg/L		107	75 - 125	2	4

Lab Sample ID: 400-137613-2 DU
Matrix: Water
Analysis Batch: 353121

Client Sample ID: AX10307 MW-4 DUP
Prep Type: Total/NA

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

Lab Sample ID: MB 400-353939/3
Matrix: Water
Analysis Batch: 353939

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			05/17/17 16:54	1

Lab Sample ID: LCS 400-353939/4
Matrix: Water
Analysis Batch: 353939

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	4.00	3.87		mg/L		97	90 - 110

Lab Sample ID: 400-137613-10 MS
Matrix: Water
Analysis Batch: 353939

Client Sample ID: AX10315 FB-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	<0.032	F2	1.00	0.930		mg/L		93	75 - 125

Lab Sample ID: 400-137613-10 MSD
Matrix: Water
Analysis Batch: 353939

Client Sample ID: AX10315 FB-1
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	F2	1.00	1.00	F2	mg/L		100	75 - 125	7	4

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-137613-1
 SDG: Barry Ash Pond (7)

Lab Sample ID: 400-137613-15 MS
Matrix: Water
Analysis Batch: 353939

Client Sample ID: AX10320 MW-10
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	0.970		mg/L		93	75 - 125

Lab Sample ID: 400-137613-15 MSD
Matrix: Water
Analysis Batch: 353939

Client Sample ID: AX10320 MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.040	J	1.00	1.04	F2	mg/L		100	75 - 125	7	4

Lab Sample ID: 400-137613-21 MS
Matrix: Water
Analysis Batch: 353939

Client Sample ID: AX10326 MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	<0.032		1.00	0.950		mg/L		95	75 - 125

Lab Sample ID: 400-137613-21 MSD
Matrix: Water
Analysis Batch: 353939

Client Sample ID: AX10326 MW-6
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	F2	mg/L		102	75 - 125	7	4

Lab Sample ID: 400-137613-16 DU
Matrix: Water
Analysis Batch: 353939

Client Sample ID: AX10321 MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride	0.060	J	0.0600	J	mg/L		0	4

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-353008/6
Matrix: Water
Analysis Batch: 353008

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			05/10/17 07:50	1

Lab Sample ID: LCS 400-353008/7
Matrix: Water
Analysis Batch: 353008

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	13.6		mg/L		91	90 - 110

QC Sample Results

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

TestAmerica Job ID: 400-137613-1
 SDG: Barry Ash Pond (7)

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: MRL 400-353008/3
Matrix: Water
Analysis Batch: 353008

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	4.20	J	mg/L		84	50 - 150

Lab Sample ID: 400-137613-15 MS
Matrix: Water
Analysis Batch: 353008

Client Sample ID: AX10320 MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	4.1	J F2	10.0	13.1		mg/L		90	77 - 128

Lab Sample ID: 400-137613-15 MSD
Matrix: Water
Analysis Batch: 353008

Client Sample ID: AX10320 MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	4.1	J F2	10.0	15.6	F2	mg/L		116	77 - 128	18	5

Lab Sample ID: MB 400-353138/17
Matrix: Water
Analysis Batch: 353138

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			05/10/17 14:11	1

Lab Sample ID: LCS 400-353138/18
Matrix: Water
Analysis Batch: 353138

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	14.0		mg/L		93	90 - 110

Lab Sample ID: MRL 400-353138/14
Matrix: Water
Analysis Batch: 353138

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	4.22	J	mg/L		84	50 - 150

Lab Sample ID: 400-137613-10 MS
Matrix: Water
Analysis Batch: 353138

Client Sample ID: AX10315 FB-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	<1.4		10.0	8.29		mg/L		83	77 - 128

Lab Sample ID: 400-137613-10 MSD
Matrix: Water
Analysis Batch: 353138

Client Sample ID: AX10315 FB-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	<1.4		10.0	8.13		mg/L		81	77 - 128	2	5

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-137613-1
 SDG: Barry Ash Pond (7)

Lab Sample ID: 400-137613-21 MS
Matrix: Water
Analysis Batch: 353138

Client Sample ID: AX10326 MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	1.4	J	10.0	11.0		mg/L		96	77 - 128

Lab Sample ID: 400-137613-21 MSD
Matrix: Water
Analysis Batch: 353138

Client Sample ID: AX10326 MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Sulfate	1.4	J	10.0	11.2		mg/L		98	77 - 128	2	5

Lab Sample ID: MB 400-353139/6
Matrix: Water
Analysis Batch: 353139

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			05/11/17 07:14	1

Lab Sample ID: LCS 400-353139/7
Matrix: Water
Analysis Batch: 353139

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	13.5		mg/L		90	90 - 110

Lab Sample ID: MRL 400-353139/3
Matrix: Water
Analysis Batch: 353139

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	4.32	J	mg/L		86	50 - 150

Lab Sample ID: 400-137615-A-5 MS
Matrix: Water
Analysis Batch: 353139

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.6		10.0	14.8		mg/L		93	77 - 128

Lab Sample ID: 400-137615-A-5 MSD
Matrix: Water
Analysis Batch: 353139

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	5.6		10.0	14.7		mg/L		92	77 - 128	1	5

Lab Sample ID: MB 400-353378/6
Matrix: Water
Analysis Batch: 353378

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			05/12/17 10:21	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-137613-1
 SDG: Barry Ash Pond (7)

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: LCS 400-353378/7
Matrix: Water
Analysis Batch: 353378

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	14.0		mg/L		93	90 - 110

Lab Sample ID: MRL 400-353378/3
Matrix: Water
Analysis Batch: 353378

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	4.29	J	mg/L		86	50 - 150

Lab Sample ID: 400-137613-1 MS
Matrix: Water
Analysis Batch: 353378

Client Sample ID: AX10306 MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	2.7	J	10.0	11.7		mg/L		90	77 - 128

Lab Sample ID: 400-137613-1 MSD
Matrix: Water
Analysis Batch: 353378

Client Sample ID: AX10306 MW-4
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Sulfate	2.7	J	10.0	11.7		mg/L		90	77 - 128	0	5

Lab Sample ID: 400-137613-7 MS
Matrix: Water
Analysis Batch: 353378

Client Sample ID: AX10312 MW-15
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	<1.4		10.0	9.18		mg/L		92	77 - 128

Lab Sample ID: 400-137613-7 MSD
Matrix: Water
Analysis Batch: 353378

Client Sample ID: AX10312 MW-15
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Sulfate	<1.4		10.0	9.22		mg/L		92	77 - 128	0	5

Lab Sample ID: MB 400-353749/6
Matrix: Water
Analysis Batch: 353749

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			05/16/17 14:12	1

Lab Sample ID: LCS 400-353749/7
Matrix: Water
Analysis Batch: 353749

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

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-137613-1
 SDG: Barry Ash Pond (7)

Lab Sample ID: MRL 400-353749/3
Matrix: Water
Analysis Batch: 353749

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	4.23	J	mg/L		85	50 - 150

Lab Sample ID: 400-137910-A-1 MS
Matrix: Water
Analysis Batch: 353749

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	13		10.0	22.7		mg/L		95	77 - 128


Lab Sample ID: 400-137910-A-1 MSD
Matrix: Water
Analysis Batch: 353749

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	13		10.0	22.9		mg/L		97	77 - 128	1	5

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Chain of Custody Record

Client Information Client Contact: Sarah Copeland Company: Alabama Power General Test Laboratory Address: 744 County Rd 87 GSC #8 City: Callera State, Zip: AL, 35040 Phone: 205-664-6121(Tel) Email: sgcopela@southernco.com Project #: 40007143 CCR Site: Barry Ash Pond (7)		Lab PM: Whitmore, Chelyenne R E-Mail: chelyenne.whitmore@testamericainc.com Camer Tracking No(s): COC No: 400-56525-24537.1 Page: Page 1 of 2 Job #: 400-137613	
Due Date Requested: TAT Requested (days): PO #: WO #: Project #: 40007143 SSOW#:		Analysis Requested  *00-137613 COC	
Sample Identification Sample ID: AX10306 AX10307 AX10308 AX10309 AX10310 AX10311 AX10312 AX10313 AX10314 AX10315 AX10316		Field Filtered Sample (Yes or No) Perform MS/MSD (Yes or No) SM 4500 F.C SM 4500 Cl.E SM 4500 SO4.E	
Sample Date 5/2/17 5/2/17 5/2/17 5/2/17 5/2/17 5/2/17 5/2/17 5/2/17 5/2/17		Total Number of Containers 1 1 1 1 1 1 1 1 1 1	
Sample Time 0824 0824 0930 1049 1158 1342 1504 1504 1621 1730 1740		Special Instructions/Note: MW-4 MW-4 Dup (Sample Duplicate) MW-3 MW-2 MW-1 MW-16 MW-15 MW-15 Dup (Sample Duplicate) MW-14 FB-1 (Field Blank) EB-1 (Equipment Blank)	
Sample Type (C=comp, G=grab) G G G G G G G G G G		Preservation Code: Water Water Water Water Water Water Water Water Water Water	
Matrix (W=water, S=solid, O=water/oil, BT=tissue, A=air) Water Water Water Water Water Water Water Water Water Water		Special Instructions/OC Requirements: Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Method of Shipment: Date/Time: 05/08/2017, 1330 Company: APC	
Empty Kit Relinquished by: Sarah Copeland Relinquished by: Sarah Copeland Relinquished by: Relinquished by:		Date/Time: Date/Time: 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: 21.6 °C	



Chain of Custody Record

Client Information		Lab PM: Whitmire, Cheyenne R		Carrier Tracking No(s):	
Company: Alabama Power General Test Laboratory		E-Mail: cheyenne.whitmire@testamericainc.com		COC No: 400-56525-24537.1	
Address: 744 County Rd 87 GSC #8		Phone: Ben Rothschild/ Anthony Goggins		Page: Page 2 of 2	
City: Calera		State, Zip: AL, 35040		Job #: 400-137613	
PO #: 205-664-6121(Tel)		WO #: _____		Preservation Codes:	
Email: sgcopela@southernco.com		Project #: 40007143		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 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)	
Site: Barry Ash Pond (7)		SSOW#: _____		Other: _____	

Sample Identification	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	Analysis Requested	Total Number of Containers	Special Instructions/Note:
AX10317	5/3/17	0831	G	Water	X	N	X	X	X		1	MW-13
AX10318	5/3/17	0931	G	Water	X	X	X	X	X		1	MW-12
AX10319	5/3/17	1035	G	Water	X	X	X	X	X		1	MW-11
AX10320	5/3/17	1130	G	Water	Y	X	X	X	X		1	MW-10
AX10321	5/3/17	1224	G	Water	X	X	X	X	X		1	MW-9
AX10322	5/3/17	1240	G	Water	X	X	X	X	X		1	FB-2 (Field Blank)
AX10323	5/3/17	0805	G	Water	X	X	X	X	X		1	MW-5
AX10324	5/3/17	0858	G	Water	X	X	X	X	X		1	MW-8
AX10325	5/3/17	0945	G	Water	X	X	X	X	X		1	MW-7
AX10326	5/3/17	1030	G	Water	Y	X	X	X	X		1	MW-6

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: 05/08/2017: 1330 Company: APC

Relinquished by: _____ Date/Time: _____ Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

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

Special 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: 5/8/17 0912 Company: _____

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: 400-137613-1
SDG Number: Barry Ash Pond (7)

Login Number: 137613

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	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	21.6°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 $<6\text{mm}$ (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 Barry

TestAmerica Job ID: 400-137613-1
 SDG: Barry 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	06-30-17
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	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	06-14-17
Washington	State Program	10	C915	05-15-17 *
West Virginia DEP	State Program	3	136	06-30-17

* 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: 400-137871-1

TestAmerica Sample Delivery Group: Barry Ash Pond (7)

Client Project/Site: CCR Plant Barry

For:

Alabama Power General Test Laboratory

744 County Rd 87

GSC #8

Calera, Alabama 35040

Attn: Sarah Copeland



Authorized for release by:

6/14/2017 10:48:33 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 Barry

TestAmerica Job ID: 400-137871-1
SDG: Barry Ash Pond (7)

Job ID: 400-137871-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-137871-1

RAD

Method(s) PrecSep_0: Radium 228 Prep Batch 160-309297. The following samples were reduced due to limited volume: AX10327 MW-4 (400-137871-1), AX10328 MW-4 DUP (400-137871-2), AX10329 MW-3 (400-137871-3), AX10329 MW-3 (400-137871-3[DU]), AX10330 MW-2 (400-137871-4), AX10331 MW-1 (400-137871-5), AX10332 MW-16 (400-137871-6) and AX10333 MW-15 (400-137871-7).

Method(s) PrecSep_0: Radium 228 Prep Batch 160-309353. The following samples were reduced due to limited volume: AX10334 MW-15 DUP (400-137871-8), AX10335 MW-14 (400-137871-9), AX10336 FB-1 (400-137871-10), AX10337 EB-1 (400-137871-11), AX10338 MW-13 (400-137871-12), AX10338 MW-13 (400-137871-12[DU]), AX10339 MW-12 (400-137871-13), AX10340 MW-11 (400-137871-14), AX10341 MW-10 (400-137871-15), AX10342 MW-9 (400-137871-16), AX10343 FB-2 (400-137871-17), AX10344 MW-5 (400-137871-18), AX10345 MW-8 (400-137871-19), AX10346 MW-7 (400-137871-20) and AX10347 MW-6 (400-137871-21).

Method(s) PrecSep-21: Radium 226 Prep Batch 160-309201. The following samples were reduced due to limited volume: AX10327 MW-4 (400-137871-1), AX10328 MW-4 DUP (400-137871-2), AX10329 MW-3 (400-137871-3), AX10329 MW-3 (400-137871-3[DU]), AX10330 MW-2 (400-137871-4), AX10331 MW-1 (400-137871-5), AX10332 MW-16 (400-137871-6) and AX10333 MW-15 (400-137871-7).

Method(s) PrecSep-21: Radium 226 Prep Batch 160-309334. The following samples were reduced due to limited volume: AX10334 MW-15 DUP (400-137871-8), AX10335 MW-14 (400-137871-9), AX10336 FB-1 (400-137871-10), AX10337 EB-1 (400-137871-11), AX10338 MW-13 (400-137871-12), AX10338 MW-13 (400-137871-12[DU]), AX10339 MW-12 (400-137871-13), AX10340 MW-11 (400-137871-14), AX10341 MW-10 (400-137871-15), AX10342 MW-9 (400-137871-16), AX10343 FB-2 (400-137871-17), AX10344 MW-5 (400-137871-18), AX10345 MW-8 (400-137871-19), AX10346 MW-7 (400-137871-20) and AX10347 MW-6 (400-137871-21).

Method Summary

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

TestAmerica Job ID: 400-137871-1
SDG: Barry 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 Barry

TestAmerica Job ID: 400-137871-1
SDG: Barry Ash Pond (7)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-137871-1	AX10327 MW-4	Water	05/02/17 08:24	05/09/17 10:25
400-137871-2	AX10328 MW-4 DUP	Water	05/02/17 08:24	05/09/17 10:25
400-137871-3	AX10329 MW-3	Water	05/02/17 09:30	05/09/17 10:25
400-137871-4	AX10330 MW-2	Water	05/02/17 10:49	05/09/17 10:25
400-137871-5	AX10331 MW-1	Water	05/02/17 11:58	05/09/17 10:25
400-137871-6	AX10332 MW-16	Water	05/02/17 13:42	05/09/17 10:25
400-137871-7	AX10333 MW-15	Water	05/02/17 15:04	05/09/17 10:25
400-137871-8	AX10334 MW-15 DUP	Water	05/02/17 15:04	05/09/17 10:25
400-137871-9	AX10335 MW-14	Water	05/02/17 16:21	05/09/17 10:25
400-137871-10	AX10336 FB-1	Water	05/02/17 17:30	05/09/17 10:25
400-137871-11	AX10337 EB-1	Water	05/02/17 17:40	05/09/17 10:25
400-137871-12	AX10338 MW-13	Water	05/03/17 08:31	05/09/17 10:25
400-137871-13	AX10339 MW-12	Water	05/03/17 09:31	05/09/17 10:25
400-137871-14	AX10340 MW-11	Water	05/03/17 10:35	05/09/17 10:25
400-137871-15	AX10341 MW-10	Water	05/03/17 11:30	05/09/17 10:25
400-137871-16	AX10342 MW-9	Water	05/03/17 12:24	05/09/17 10:25
400-137871-17	AX10343 FB-2	Water	05/03/17 12:40	05/09/17 10:25
400-137871-18	AX10344 MW-5	Water	05/03/17 08:05	05/09/17 10:25
400-137871-19	AX10345 MW-8	Water	05/03/17 08:58	05/09/17 10:25
400-137871-20	AX10346 MW-7	Water	05/03/17 09:45	05/09/17 10:25
400-137871-21	AX10347 MW-6	Water	05/03/17 10:30	05/09/17 10:25

Client Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10327 MW-4
Date Collected: 05/02/17 08:24
Date Received: 05/09/17 10:25

Lab Sample ID: 400-137871-1
Matrix: Water

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.168		0.0893	0.0906	1.00	0.0950	pCi/L	05/18/17 08:04	06/09/17 06:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.4		40 - 110					05/18/17 08:04	06/09/17 06:23	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.223	U	0.306	0.307	1.00	0.511	pCi/L	05/18/17 08:47	06/01/17 10:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.4		40 - 110					05/18/17 08:47	06/01/17 10:53	1
Y Carrier	74.4		40 - 110					05/18/17 08:47	06/01/17 10:53	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	0.391	U	0.319	0.320	5.00	0.511	pCi/L		06/12/17 11:55	1

Client Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10328 MW-4 DUP

Lab Sample ID: 400-137871-2

Date Collected: 05/02/17 08:24

Matrix: Water

Date Received: 05/09/17 10:25

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.247		0.105	0.107	1.00	0.100	pCi/L	05/18/17 08:04	06/09/17 06:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					05/18/17 08:04	06/09/17 06:23	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0632	U	0.322	0.322	1.00	0.565	pCi/L	05/18/17 08:47	06/01/17 10:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					05/18/17 08:47	06/01/17 10:53	1
Y Carrier	71.8		40 - 110					05/18/17 08:47	06/01/17 10:53	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	0.310	U	0.339	0.339	5.00	0.565	pCi/L		06/12/17 11:55	1

Client Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10329 MW-3

Lab Sample ID: 400-137871-3

Date Collected: 05/02/17 09:30

Matrix: Water

Date Received: 05/09/17 10:25

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0212	U	0.0722	0.0722	1.00	0.138	pCi/L	05/18/17 08:04	06/09/17 06:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110					05/18/17 08:04	06/09/17 06:23	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.128	U	0.273	0.273	1.00	0.468	pCi/L	05/18/17 08:47	06/01/17 10:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110					05/18/17 08:47	06/01/17 10:54	1
Y Carrier	87.5		40 - 110					05/18/17 08:47	06/01/17 10:54	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	0.149	U	0.283	0.283	5.00	0.468	pCi/L		06/12/17 11:55	1

Client Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10330 MW-2

Lab Sample ID: 400-137871-4

Date Collected: 05/02/17 10:49

Matrix: Water

Date Received: 05/09/17 10:25

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0583	U	0.0582	0.0585	1.00	0.0848	pCi/L	05/18/17 08:04	06/09/17 06:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110					05/18/17 08:04	06/09/17 06:24	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.342	U	0.334	0.336	1.00	0.543	pCi/L	05/18/17 08:47	06/01/17 10:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110					05/18/17 08:47	06/01/17 10:54	1
Y Carrier	83.7		40 - 110					05/18/17 08:47	06/01/17 10:54	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	0.400	U	0.339	0.341	5.00	0.543	pCi/L		06/12/17 11:55	1

Client Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10331 MW-1

Lab Sample ID: 400-137871-5

Date Collected: 05/02/17 11:58

Matrix: Water

Date Received: 05/09/17 10:25

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.555		0.152	0.160	1.00	0.108	pCi/L	05/18/17 08:04	06/09/17 06:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					05/18/17 08:04	06/09/17 06:24	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.06		0.371	0.383	1.00	0.510	pCi/L	05/18/17 08:47	06/01/17 10:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					05/18/17 08:47	06/01/17 10:54	1
Y Carrier	84.1		40 - 110					05/18/17 08:47	06/01/17 10:54	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	1.62		0.401	0.416	5.00	0.510	pCi/L		06/12/17 11:55	1

Client Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10332 MW-16

Lab Sample ID: 400-137871-6

Date Collected: 05/02/17 13:42

Matrix: Water

Date Received: 05/09/17 10:25

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.206		0.0968	0.0985	1.00	0.0940	pCi/L	05/18/17 08:04	06/09/17 06:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		40 - 110					05/18/17 08:04	06/09/17 06:25	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.492		0.316	0.319	1.00	0.487	pCi/L	05/18/17 08:47	06/01/17 10:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		40 - 110					05/18/17 08:47	06/01/17 10:54	1
Y Carrier	85.6		40 - 110					05/18/17 08:47	06/01/17 10:54	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	0.698		0.330	0.334	5.00	0.487	pCi/L		06/12/17 11:55	1

Client Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10333 MW-15

Lab Sample ID: 400-137871-7

Date Collected: 05/02/17 15:04

Matrix: Water

Date Received: 05/09/17 10:25

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.129		0.0803	0.0812	1.00	0.0942	pCi/L	05/18/17 08:04	06/09/17 06:25	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		40 - 110					05/18/17 08:04	06/09/17 06:25	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.449	U	0.312	0.315	1.00	0.486	pCi/L	05/18/17 08:47	06/01/17 10:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		40 - 110					05/18/17 08:47	06/01/17 10:54	1
Y Carrier	84.9		40 - 110					05/18/17 08:47	06/01/17 10:54	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	0.578		0.322	0.325	5.00	0.486	pCi/L		06/12/17 11:55	1

Client Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10334 MW-15 DUP

Lab Sample ID: 400-137871-8

Date Collected: 05/02/17 15:04

Matrix: Water

Date Received: 05/09/17 10:25

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.206		0.124	0.126	1.00	0.164	pCi/L	05/18/17 10:42	06/09/17 06:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.8		40 - 110					05/18/17 10:42	06/09/17 06:28	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0691	U	0.295	0.295	1.00	0.514	pCi/L	05/18/17 12:14	06/02/17 10:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.8		40 - 110					05/18/17 12:14	06/02/17 10:48	1
Y Carrier	89.0		40 - 110					05/18/17 12:14	06/02/17 10:48	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	0.275	U	0.320	0.321	5.00	0.514	pCi/L		06/12/17 11:55	1

Client Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10335 MW-14

Lab Sample ID: 400-137871-9

Date Collected: 05/02/17 16:21

Matrix: Water

Date Received: 05/09/17 10:25

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0245	U	0.0708	0.0708	1.00	0.162	pCi/L	05/18/17 10:42	06/09/17 06:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.7		40 - 110					05/18/17 10:42	06/09/17 06:28	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.387	U	0.342	0.344	1.00	0.551	pCi/L	05/18/17 12:14	06/02/17 10:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.7		40 - 110					05/18/17 12:14	06/02/17 10:48	1
Y Carrier	84.5		40 - 110					05/18/17 12:14	06/02/17 10:48	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	0.363	U	0.350	0.351	5.00	0.551	pCi/L		06/12/17 11:55	1

Client Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10336 FB-1

Lab Sample ID: 400-137871-10

Date Collected: 05/02/17 17:30

Matrix: Water

Date Received: 05/09/17 10:25

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0387	U	0.0804	0.0805	1.00	0.147	pCi/L	05/18/17 10:42	06/09/17 06:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					05/18/17 10:42	06/09/17 06:28	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0452	U	0.280	0.280	1.00	0.491	pCi/L	05/18/17 12:14	06/02/17 10:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.8		40 - 110					05/18/17 12:14	06/02/17 10:48	1
Y Carrier	89.7		40 - 110					05/18/17 12:14	06/02/17 10:48	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	0.0839	U	0.291	0.291	5.00	0.491	pCi/L		06/12/17 11:55	1

Client Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10337 EB-1

Lab Sample ID: 400-137871-11

Date Collected: 05/02/17 17:40

Matrix: Water

Date Received: 05/09/17 10:25

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		0.104	0.105	1.00	0.137	pCi/L	05/18/17 10:42	06/09/17 06:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110					05/18/17 10:42	06/09/17 06:28	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0149	U	0.259	0.259	1.00	0.466	pCi/L	05/18/17 12:14	06/02/17 10:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110					05/18/17 12:14	06/02/17 10:48	1
Y Carrier	90.8		40 - 110					05/18/17 12:14	06/02/17 10:48	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	0.138	U	0.279	0.280	5.00	0.466	pCi/L		06/12/17 11:55	1

Client Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10338 MW-13

Lab Sample ID: 400-137871-12

Date Collected: 05/03/17 08:31

Matrix: Water

Date Received: 05/09/17 10:25

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.282		0.135	0.137	1.00	0.153	pCi/L	05/18/17 10:42	06/09/17 06:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					05/18/17 10:42	06/09/17 06:28	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.550		0.332	0.336	1.00	0.507	pCi/L	05/18/17 12:14	06/02/17 10:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					05/18/17 12:14	06/02/17 10:49	1
Y Carrier	85.6		40 - 110					05/18/17 12:14	06/02/17 10:49	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	0.832		0.359	0.363	5.00	0.507	pCi/L		06/12/17 11:55	1

Client Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10339 MW-12

Lab Sample ID: 400-137871-13

Date Collected: 05/03/17 09:31

Matrix: Water

Date Received: 05/09/17 10:25

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.410		0.149	0.154	1.00	0.142	pCi/L	05/18/17 10:42	06/09/17 06:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110					05/18/17 10:42	06/09/17 06:28	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.230	U	0.285	0.285	1.00	0.471	pCi/L	05/18/17 12:14	06/02/17 10:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110					05/18/17 12:14	06/02/17 10:49	1
Y Carrier	84.5		40 - 110					05/18/17 12:14	06/02/17 10:49	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	0.639		0.321	0.324	5.00	0.471	pCi/L		06/12/17 11:55	1

Client Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10340 MW-11

Lab Sample ID: 400-137871-14

Date Collected: 05/03/17 10:35

Matrix: Water

Date Received: 05/09/17 10:25

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		0.126	0.129	1.00	0.121	pCi/L	05/18/17 10:42	06/09/17 06:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					05/18/17 10:42	06/09/17 06:28	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.209	U	0.253	0.254	1.00	0.419	pCi/L	05/18/17 12:14	06/02/17 10:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					05/18/17 12:14	06/02/17 10:49	1
Y Carrier	86.4		40 - 110					05/18/17 12:14	06/02/17 10:49	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	0.515		0.283	0.285	5.00	0.419	pCi/L		06/12/17 11:55	1

Client Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10341 MW-10

Lab Sample ID: 400-137871-15

Date Collected: 05/03/17 11:30

Matrix: Water

Date Received: 05/09/17 10:25

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		0.154	0.157	1.00	0.179	pCi/L	05/18/17 10:42	06/09/17 06:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.1		40 - 110					05/18/17 10:42	06/09/17 06:29	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.704		0.308	0.315	1.00	0.439	pCi/L	05/18/17 12:14	06/02/17 10:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.1		40 - 110					05/18/17 12:14	06/02/17 10:49	1
Y Carrier	88.6		40 - 110					05/18/17 12:14	06/02/17 10:49	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	1.07		0.345	0.352	5.00	0.439	pCi/L		06/12/17 11:55	1

Client Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10342 MW-9

Lab Sample ID: 400-137871-16

Date Collected: 05/03/17 12:24

Matrix: Water

Date Received: 05/09/17 10:25

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.484		0.166	0.172	1.00	0.155	pCi/L	05/18/17 10:42	06/09/17 06:29	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.6		40 - 110					05/18/17 10:42	06/09/17 06:29	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.844		0.297	0.307	1.00	0.385	pCi/L	05/18/17 12:14	06/02/17 10:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.6		40 - 110					05/18/17 12:14	06/02/17 10:49	1
Y Carrier	87.1		40 - 110					05/18/17 12:14	06/02/17 10:49	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	1.33		0.340	0.352	5.00	0.385	pCi/L		06/12/17 11:55	1

Client Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10343 FB-2

Lab Sample ID: 400-137871-17

Date Collected: 05/03/17 12:40

Matrix: Water

Date Received: 05/09/17 10:25

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0276	U	0.0889	0.0889	1.00	0.168	pCi/L	05/18/17 10:42	06/09/17 08:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					05/18/17 10:42	06/09/17 08:39	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.353	U	0.273	0.275	1.00	0.428	pCi/L	05/18/17 12:14	06/02/17 10:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					05/18/17 12:14	06/02/17 10:51	1
Y Carrier	87.9		40 - 110					05/18/17 12:14	06/02/17 10:51	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.380	U	0.287	0.289	5.00	0.428	pCi/L		06/12/17 11:55	1

Client Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10344 MW-5

Lab Sample ID: 400-137871-18

Date Collected: 05/03/17 08:05

Matrix: Water

Date Received: 05/09/17 10:25

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		0.143	0.147	1.00	0.153	pCi/L	05/18/17 10:42	06/09/17 08:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.7		40 - 110					05/18/17 10:42	06/09/17 08:40	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.13		0.340	0.356	1.00	0.433	pCi/L	05/18/17 12:14	06/02/17 10:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.7		40 - 110					05/18/17 12:14	06/02/17 10:51	1
Y Carrier	89.3		40 - 110					05/18/17 12:14	06/02/17 10:51	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.48		0.369	0.385	5.00	0.433	pCi/L		06/12/17 11:55	1

Client Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10345 MW-8

Lab Sample ID: 400-137871-19

Date Collected: 05/03/17 08:58

Matrix: Water

Date Received: 05/09/17 10:25

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0939	U	0.102	0.102	1.00	0.162	pCi/L	05/18/17 10:42	06/09/17 08:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					05/18/17 10:42	06/09/17 08:40	1

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		0.280	0.285	1.00	0.404	pCi/L	05/18/17 12:14	06/02/17 10:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					05/18/17 12:14	06/02/17 10:51	1
Y Carrier	88.2		40 - 110					05/18/17 12:14	06/02/17 10:51	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.648		0.298	0.302	5.00	0.404	pCi/L		06/12/17 11:55	1

Client Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10346 MW-7

Lab Sample ID: 400-137871-20

Date Collected: 05/03/17 09:45

Matrix: Water

Date Received: 05/09/17 10:25

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.122	U	0.108	0.109	1.00	0.164	pCi/L	05/18/17 10:42	06/09/17 08:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					05/18/17 10:42	06/09/17 08:40	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.409	U	0.298	0.300	1.00	0.465	pCi/L	05/18/17 12:14	06/02/17 10:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					05/18/17 12:14	06/02/17 10:51	1
Y Carrier	89.0		40 - 110					05/18/17 12:14	06/02/17 10:51	1

Method: Ra226_Ra228 - Combined Radium-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		0.317	0.319	5.00	0.465	pCi/L		06/12/17 11:55	1

Client Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10347 MW-6

Lab Sample ID: 400-137871-21

Date Collected: 05/03/17 10:30

Matrix: Water

Date Received: 05/09/17 10:25

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.147	U	0.109	0.110	1.00	0.151	pCi/L	05/18/17 10:42	06/09/17 08:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					05/18/17 10:42	06/09/17 08:40	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.300	U	0.269	0.270	1.00	0.431	pCi/L	05/18/17 12:14	06/02/17 10:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					05/18/17 12:14	06/02/17 10:51	1
Y Carrier	89.0		40 - 110					05/18/17 12:14	06/02/17 10:51	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.447		0.290	0.292	5.00	0.431	pCi/L		06/12/17 11:55	1

Definitions/Glossary

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

TestAmerica Job ID: 400-137871-1
SDG: Barry 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 Barry

TestAmerica Job ID: 400-137871-1
SDG: Barry Ash Pond (7)

Client Sample ID: AX10327 MW-4

Lab Sample ID: 400-137871-1

Date Collected: 05/02/17 08:24

Matrix: Water

Date Received: 05/09/17 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			309201	05/18/17 08:04	LDE	TAL SL
Total/NA	Analysis	9315		1	312820	06/09/17 06:23	RTM	TAL SL
Total/NA	Prep	PrecSep_0			309297	05/18/17 08:47	LDE	TAL SL
Total/NA	Analysis	9320		1	311425	06/01/17 10:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	313033	06/12/17 11:55	RTM	TAL SL

Client Sample ID: AX10328 MW-4 DUP

Lab Sample ID: 400-137871-2

Date Collected: 05/02/17 08:24

Matrix: Water

Date Received: 05/09/17 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			309201	05/18/17 08:04	LDE	TAL SL
Total/NA	Analysis	9315		1	312820	06/09/17 06:23	RTM	TAL SL
Total/NA	Prep	PrecSep_0			309297	05/18/17 08:47	LDE	TAL SL
Total/NA	Analysis	9320		1	311426	06/01/17 10:53	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	313033	06/12/17 11:55	RTM	TAL SL

Client Sample ID: AX10329 MW-3

Lab Sample ID: 400-137871-3

Date Collected: 05/02/17 09:30

Matrix: Water

Date Received: 05/09/17 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			309201	05/18/17 08:04	LDE	TAL SL
Total/NA	Analysis	9315		1	312820	06/09/17 06:23	RTM	TAL SL
Total/NA	Prep	PrecSep_0			309297	05/18/17 08:47	LDE	TAL SL
Total/NA	Analysis	9320		1	311426	06/01/17 10:54	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	313033	06/12/17 11:55	RTM	TAL SL

Client Sample ID: AX10330 MW-2

Lab Sample ID: 400-137871-4

Date Collected: 05/02/17 10:49

Matrix: Water

Date Received: 05/09/17 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			309201	05/18/17 08:04	LDE	TAL SL
Total/NA	Analysis	9315		1	312820	06/09/17 06:24	RTM	TAL SL
Total/NA	Prep	PrecSep_0			309297	05/18/17 08:47	LDE	TAL SL
Total/NA	Analysis	9320		1	311426	06/01/17 10:54	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	313033	06/12/17 11:55	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-137871-1
SDG: Barry Ash Pond (7)

Client Sample ID: AX10331 MW-1

Lab Sample ID: 400-137871-5

Date Collected: 05/02/17 11:58

Matrix: Water

Date Received: 05/09/17 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			309201	05/18/17 08:04	LDE	TAL SL
Total/NA	Analysis	9315		1	312820	06/09/17 06:24	RTM	TAL SL
Total/NA	Prep	PrecSep_0			309297	05/18/17 08:47	LDE	TAL SL
Total/NA	Analysis	9320		1	311426	06/01/17 10:54	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	313033	06/12/17 11:55	RTM	TAL SL

Client Sample ID: AX10332 MW-16

Lab Sample ID: 400-137871-6

Date Collected: 05/02/17 13:42

Matrix: Water

Date Received: 05/09/17 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			309201	05/18/17 08:04	LDE	TAL SL
Total/NA	Analysis	9315		1	312820	06/09/17 06:25	RTM	TAL SL
Total/NA	Prep	PrecSep_0			309297	05/18/17 08:47	LDE	TAL SL
Total/NA	Analysis	9320		1	311426	06/01/17 10:54	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	313033	06/12/17 11:55	RTM	TAL SL

Client Sample ID: AX10333 MW-15

Lab Sample ID: 400-137871-7

Date Collected: 05/02/17 15:04

Matrix: Water

Date Received: 05/09/17 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			309201	05/18/17 08:04	LDE	TAL SL
Total/NA	Analysis	9315		1	312820	06/09/17 06:25	RTM	TAL SL
Total/NA	Prep	PrecSep_0			309297	05/18/17 08:47	LDE	TAL SL
Total/NA	Analysis	9320		1	311426	06/01/17 10:54	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	313033	06/12/17 11:55	RTM	TAL SL

Client Sample ID: AX10334 MW-15 DUP

Lab Sample ID: 400-137871-8

Date Collected: 05/02/17 15:04

Matrix: Water

Date Received: 05/09/17 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			309334	05/18/17 10:42	LDE	TAL SL
Total/NA	Analysis	9315		1	312822	06/09/17 06:28	RTM	TAL SL
Total/NA	Prep	PrecSep_0			309353	05/18/17 12:14	LDE	TAL SL
Total/NA	Analysis	9320		1	311619	06/02/17 10:48	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	313033	06/12/17 11:55	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10335 MW-14

Lab Sample ID: 400-137871-9

Date Collected: 05/02/17 16:21

Matrix: Water

Date Received: 05/09/17 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			309334	05/18/17 10:42	LDE	TAL SL
Total/NA	Analysis	9315		1	312822	06/09/17 06:28	RTM	TAL SL
Total/NA	Prep	PrecSep_0			309353	05/18/17 12:14	LDE	TAL SL
Total/NA	Analysis	9320		1	311619	06/02/17 10:48	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	313033	06/12/17 11:55	RTM	TAL SL

Client Sample ID: AX10336 FB-1

Lab Sample ID: 400-137871-10

Date Collected: 05/02/17 17:30

Matrix: Water

Date Received: 05/09/17 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			309334	05/18/17 10:42	LDE	TAL SL
Total/NA	Analysis	9315		1	312822	06/09/17 06:28	RTM	TAL SL
Total/NA	Prep	PrecSep_0			309353	05/18/17 12:14	LDE	TAL SL
Total/NA	Analysis	9320		1	311619	06/02/17 10:48	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	313033	06/12/17 11:55	RTM	TAL SL

Client Sample ID: AX10337 EB-1

Lab Sample ID: 400-137871-11

Date Collected: 05/02/17 17:40

Matrix: Water

Date Received: 05/09/17 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			309334	05/18/17 10:42	LDE	TAL SL
Total/NA	Analysis	9315		1	312822	06/09/17 06:28	RTM	TAL SL
Total/NA	Prep	PrecSep_0			309353	05/18/17 12:14	LDE	TAL SL
Total/NA	Analysis	9320		1	311619	06/02/17 10:48	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	313033	06/12/17 11:55	RTM	TAL SL

Client Sample ID: AX10338 MW-13

Lab Sample ID: 400-137871-12

Date Collected: 05/03/17 08:31

Matrix: Water

Date Received: 05/09/17 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			309334	05/18/17 10:42	LDE	TAL SL
Total/NA	Analysis	9315		1	312822	06/09/17 06:28	RTM	TAL SL
Total/NA	Prep	PrecSep_0			309353	05/18/17 12:14	LDE	TAL SL
Total/NA	Analysis	9320		1	311619	06/02/17 10:49	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	313033	06/12/17 11:55	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10339 MW-12

Lab Sample ID: 400-137871-13

Date Collected: 05/03/17 09:31

Matrix: Water

Date Received: 05/09/17 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			309334	05/18/17 10:42	LDE	TAL SL
Total/NA	Analysis	9315		1	312822	06/09/17 06:28	RTM	TAL SL
Total/NA	Prep	PrecSep_0			309353	05/18/17 12:14	LDE	TAL SL
Total/NA	Analysis	9320		1	311619	06/02/17 10:49	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	313033	06/12/17 11:55	RTM	TAL SL

Client Sample ID: AX10340 MW-11

Lab Sample ID: 400-137871-14

Date Collected: 05/03/17 10:35

Matrix: Water

Date Received: 05/09/17 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			309334	05/18/17 10:42	LDE	TAL SL
Total/NA	Analysis	9315		1	312822	06/09/17 06:28	RTM	TAL SL
Total/NA	Prep	PrecSep_0			309353	05/18/17 12:14	LDE	TAL SL
Total/NA	Analysis	9320		1	311619	06/02/17 10:49	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	313033	06/12/17 11:55	RTM	TAL SL

Client Sample ID: AX10341 MW-10

Lab Sample ID: 400-137871-15

Date Collected: 05/03/17 11:30

Matrix: Water

Date Received: 05/09/17 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			309334	05/18/17 10:42	LDE	TAL SL
Total/NA	Analysis	9315		1	312822	06/09/17 06:29	RTM	TAL SL
Total/NA	Prep	PrecSep_0			309353	05/18/17 12:14	LDE	TAL SL
Total/NA	Analysis	9320		1	311619	06/02/17 10:49	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	313033	06/12/17 11:55	RTM	TAL SL

Client Sample ID: AX10342 MW-9

Lab Sample ID: 400-137871-16

Date Collected: 05/03/17 12:24

Matrix: Water

Date Received: 05/09/17 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			309334	05/18/17 10:42	LDE	TAL SL
Total/NA	Analysis	9315		1	312822	06/09/17 06:29	RTM	TAL SL
Total/NA	Prep	PrecSep_0			309353	05/18/17 12:14	LDE	TAL SL
Total/NA	Analysis	9320		1	311619	06/02/17 10:49	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	313033	06/12/17 11:55	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Client Sample ID: AX10343 FB-2

Lab Sample ID: 400-137871-17

Date Collected: 05/03/17 12:40

Matrix: Water

Date Received: 05/09/17 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			309334	05/18/17 10:42	LDE	TAL SL
Total/NA	Analysis	9315		1	312822	06/09/17 08:39	RTM	TAL SL
Total/NA	Prep	PrecSep_0			309353	05/18/17 12:14	LDE	TAL SL
Total/NA	Analysis	9320		1	311619	06/02/17 10:51	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	313033	06/12/17 11:55	RTM	TAL SL

Client Sample ID: AX10344 MW-5

Lab Sample ID: 400-137871-18

Date Collected: 05/03/17 08:05

Matrix: Water

Date Received: 05/09/17 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			309334	05/18/17 10:42	LDE	TAL SL
Total/NA	Analysis	9315		1	312822	06/09/17 08:40	RTM	TAL SL
Total/NA	Prep	PrecSep_0			309353	05/18/17 12:14	LDE	TAL SL
Total/NA	Analysis	9320		1	311620	06/02/17 10:51	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	313033	06/12/17 11:55	RTM	TAL SL

Client Sample ID: AX10345 MW-8

Lab Sample ID: 400-137871-19

Date Collected: 05/03/17 08:58

Matrix: Water

Date Received: 05/09/17 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			309334	05/18/17 10:42	LDE	TAL SL
Total/NA	Analysis	9315		1	312822	06/09/17 08:40	RTM	TAL SL
Total/NA	Prep	PrecSep_0			309353	05/18/17 12:14	LDE	TAL SL
Total/NA	Analysis	9320		1	311620	06/02/17 10:51	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	313033	06/12/17 11:55	RTM	TAL SL

Client Sample ID: AX10346 MW-7

Lab Sample ID: 400-137871-20

Date Collected: 05/03/17 09:45

Matrix: Water

Date Received: 05/09/17 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			309334	05/18/17 10:42	LDE	TAL SL
Total/NA	Analysis	9315		1	312822	06/09/17 08:40	RTM	TAL SL
Total/NA	Prep	PrecSep_0			309353	05/18/17 12:14	LDE	TAL SL
Total/NA	Analysis	9320		1	311620	06/02/17 10:51	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	313033	06/12/17 11:55	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-137871-1
SDG: Barry Ash Pond (7)

Client Sample ID: AX10347 MW-6

Lab Sample ID: 400-137871-21

Date Collected: 05/03/17 10:30

Matrix: Water

Date Received: 05/09/17 10:25

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			309334	05/18/17 10:42	LDE	TAL SL
Total/NA	Analysis	9315		1	312822	06/09/17 08:40	RTM	TAL SL
Total/NA	Prep	PrecSep_0			309353	05/18/17 12:14	LDE	TAL SL
Total/NA	Analysis	9320		1	311620	06/02/17 10:51	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	313033	06/12/17 11:55	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 Barry

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

Rad

Prep Batch: 309201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137871-1	AX10327 MW-4	Total/NA	Water	PrecSep-21	
400-137871-2	AX10328 MW-4 DUP	Total/NA	Water	PrecSep-21	
400-137871-3	AX10329 MW-3	Total/NA	Water	PrecSep-21	
400-137871-4	AX10330 MW-2	Total/NA	Water	PrecSep-21	
400-137871-5	AX10331 MW-1	Total/NA	Water	PrecSep-21	
400-137871-6	AX10332 MW-16	Total/NA	Water	PrecSep-21	
400-137871-7	AX10333 MW-15	Total/NA	Water	PrecSep-21	
MB 160-309201/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-309201/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
600-148139-B-3-B MS	Matrix Spike	Total/NA	Water	PrecSep-21	
600-148139-B-3-C MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	
400-137871-3 DU	AX10329 MW-3	Total/NA	Water	PrecSep-21	

Prep Batch: 309297

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137871-1	AX10327 MW-4	Total/NA	Water	PrecSep_0	
400-137871-2	AX10328 MW-4 DUP	Total/NA	Water	PrecSep_0	
400-137871-3	AX10329 MW-3	Total/NA	Water	PrecSep_0	
400-137871-4	AX10330 MW-2	Total/NA	Water	PrecSep_0	
400-137871-5	AX10331 MW-1	Total/NA	Water	PrecSep_0	
400-137871-6	AX10332 MW-16	Total/NA	Water	PrecSep_0	
400-137871-7	AX10333 MW-15	Total/NA	Water	PrecSep_0	
MB 160-309297/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-309297/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
600-148139-B-3-E MS	Matrix Spike	Total/NA	Water	PrecSep_0	
600-148139-B-3-F MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	
400-137871-3 DU	AX10329 MW-3	Total/NA	Water	PrecSep_0	

Prep Batch: 309334

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137871-8	AX10334 MW-15 DUP	Total/NA	Water	PrecSep-21	
400-137871-9	AX10335 MW-14	Total/NA	Water	PrecSep-21	
400-137871-10	AX10336 FB-1	Total/NA	Water	PrecSep-21	
400-137871-11	AX10337 EB-1	Total/NA	Water	PrecSep-21	
400-137871-12	AX10338 MW-13	Total/NA	Water	PrecSep-21	
400-137871-13	AX10339 MW-12	Total/NA	Water	PrecSep-21	
400-137871-14	AX10340 MW-11	Total/NA	Water	PrecSep-21	
400-137871-15	AX10341 MW-10	Total/NA	Water	PrecSep-21	
400-137871-16	AX10342 MW-9	Total/NA	Water	PrecSep-21	
400-137871-17	AX10343 FB-2	Total/NA	Water	PrecSep-21	
400-137871-18	AX10344 MW-5	Total/NA	Water	PrecSep-21	
400-137871-19	AX10345 MW-8	Total/NA	Water	PrecSep-21	
400-137871-20	AX10346 MW-7	Total/NA	Water	PrecSep-21	
400-137871-21	AX10347 MW-6	Total/NA	Water	PrecSep-21	
MB 160-309334/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-309334/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-137871-12 DU	AX10338 MW-13	Total/NA	Water	PrecSep-21	

Prep Batch: 309353

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137871-8	AX10334 MW-15 DUP	Total/NA	Water	PrecSep_0	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-137871-1
SDG: Barry Ash Pond (7)

Rad (Continued)

Prep Batch: 309353 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137871-9	AX10335 MW-14	Total/NA	Water	PrecSep_0	
400-137871-10	AX10336 FB-1	Total/NA	Water	PrecSep_0	
400-137871-11	AX10337 EB-1	Total/NA	Water	PrecSep_0	
400-137871-12	AX10338 MW-13	Total/NA	Water	PrecSep_0	
400-137871-13	AX10339 MW-12	Total/NA	Water	PrecSep_0	
400-137871-14	AX10340 MW-11	Total/NA	Water	PrecSep_0	
400-137871-15	AX10341 MW-10	Total/NA	Water	PrecSep_0	
400-137871-16	AX10342 MW-9	Total/NA	Water	PrecSep_0	
400-137871-17	AX10343 FB-2	Total/NA	Water	PrecSep_0	
400-137871-18	AX10344 MW-5	Total/NA	Water	PrecSep_0	
400-137871-19	AX10345 MW-8	Total/NA	Water	PrecSep_0	
400-137871-20	AX10346 MW-7	Total/NA	Water	PrecSep_0	
400-137871-21	AX10347 MW-6	Total/NA	Water	PrecSep_0	
MB 160-309353/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-309353/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-137871-12 DU	AX10338 MW-13	Total/NA	Water	PrecSep_0	

QC Sample Results

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

TestAmerica Job ID: 400-137871-1
SDG: Barry Ash Pond (7)

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-309201/1-A
Matrix: Water
Analysis Batch: 312650

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 309201

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.03865	U	0.0551	0.0552	1.00	0.0937	pCi/L	05/18/17 08:04	06/09/17 06:19	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					05/18/17 08:04	06/09/17 06:19	1

Lab Sample ID: LCS 160-309201/2-A
Matrix: Water
Analysis Batch: 312650

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 309201

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	11.4	8.944		0.950	1.00	0.115	pCi/L	79	68 - 137
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	99.4		40 - 110						

Lab Sample ID: 600-148139-B-3-B MS
Matrix: Water
Analysis Batch: 312650

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 309201

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	0.362		11.4	9.245		0.982	1.00	0.0980	pCi/L	78	75 - 138
Carrier	MS %Yield	MS Qualifier	Limits								
Ba Carrier	92.6		40 - 110								

Lab Sample ID: 600-148139-B-3-C MSD
Matrix: Water
Analysis Batch: 312650

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 309201

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	0.362		11.4	9.948		1.04	1.00	0.0887	pCi/L	84	75 - 138	0.35	1
Carrier	MSD %Yield	MSD Qualifier	Limits										
Ba Carrier	95.0		40 - 110										

Lab Sample ID: 400-137871-3 DU
Matrix: Water
Analysis Batch: 312820

Client Sample ID: AX10329 MW-3
Prep Type: Total/NA
Prep Batch: 309201

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.0212	U	0.1074		0.0771	1.00	0.0980	pCi/L	0.58	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

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

Lab Sample ID: 400-137871-3 DU
Matrix: Water
Analysis Batch: 312820

Client Sample ID: AX10329 MW-3
Prep Type: Total/NA
Prep Batch: 309201

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	99.1		40 - 110

Lab Sample ID: MB 160-309334/1-A
Matrix: Water
Analysis Batch: 312822

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 309334

Analyte	MB MB		Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-226	0.08500	U	0.104	0.105	1.00	0.172	pCi/L	05/18/17 10:42	06/09/17 06:28	1
Carrier	%Yield	Qualifier	Limits							
Ba Carrier	92.3		40 - 110	Prepared	Analyzed	Dil Fac				
				05/18/17 10:42	06/09/17 06:28	1				

Lab Sample ID: LCS 160-309334/2-A
Matrix: Water
Analysis Batch: 312822

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 309334

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	
									%Rec	Limits
Radium-226	15.1	13.40		1.44	1.00	0.153	pCi/L	88	68 - 137	
Carrier	LCS	LCS	Limits							
Ba Carrier	95.3		40 - 110							

Lab Sample ID: 400-137871-12 DU
Matrix: Water
Analysis Batch: 312822

Client Sample ID: AX10338 MW-13
Prep Type: Total/NA
Prep Batch: 309334

Analyte	Sample Sample		DU DU		Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	Limit
	Result	Qual	Result	Qual						
Radium-226	0.282		0.3619		0.150	1.00	0.158	pCi/L	0.28	1
Carrier	DU	DU	Limits							
Ba Carrier	97.6		40 - 110							

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-309297/1-A
Matrix: Water
Analysis Batch: 311425

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 309297

Analyte	MB MB		Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier								
Radium-228	0.05444	U	0.204	0.204	1.00	0.357	pCi/L	05/18/17 08:47	06/01/17 10:51	1

QC Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

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

Lab Sample ID: MB 160-309297/1-A
Matrix: Water
Analysis Batch: 311425

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 309297

Carrier	MB %Yield	MB Qualifier	Limits
Ba Carrier	99.7		40 - 110
Y Carrier	83.4		40 - 110

Prepared	Analyzed	Dil Fac
05/18/17 08:47	06/01/17 10:51	1
05/18/17 08:47	06/01/17 10:51	1

Lab Sample ID: LCS 160-309297/2-A
Matrix: Water
Analysis Batch: 311425

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 309297

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	13.4	14.14		1.51	1.00	0.336	pCi/L	106	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	99.4		40 - 110
Y Carrier	83.4		40 - 110

Lab Sample ID: 600-148139-B-3-E MS
Matrix: Water
Analysis Batch: 311425

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 309297

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	0.612		13.4	14.14		1.52	1.00	0.369	pCi/L	101	45 - 150

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	92.6		40 - 110
Y Carrier	86.7		40 - 110

Lab Sample ID: 600-148139-B-3-F MSD
Matrix: Water
Analysis Batch: 311425

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 309297

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	0.612		13.4	14.82		1.62	1.00	0.515	pCi/L	106	45 - 150	0.22	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	95.0		40 - 110
Y Carrier	77.0		40 - 110

Lab Sample ID: 400-137871-3 DU
Matrix: Water
Analysis Batch: 311426

Client Sample ID: AX10329 MW-3
Prep Type: Total/NA
Prep Batch: 309297

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.128	U	0.04864	U	0.328	1.00	0.575	pCi/L	0.13	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

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

Lab Sample ID: 400-137871-3 DU
Matrix: Water
Analysis Batch: 311426

Client Sample ID: AX10329 MW-3
Prep Type: Total/NA
Prep Batch: 309297

	DU	DU	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	99.1		40 - 110
Y Carrier	75.9		40 - 110

Lab Sample ID: MB 160-309353/1-A
Matrix: Water
Analysis Batch: 311619

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 309353

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.09837	U	0.296	0.296	1.00	0.513	pCi/L	05/18/17 12:14	06/02/17 10:48	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110	05/18/17 12:14	06/02/17 10:48	1
Y Carrier	84.9		40 - 110	05/18/17 12:14	06/02/17 10:48	1

Lab Sample ID: LCS 160-309353/2-A
Matrix: Water
Analysis Batch: 311619

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 309353

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	17.8	18.76		1.99	1.00	0.453	pCi/L	105	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	95.3		40 - 110
Y Carrier	92.0		40 - 110

Lab Sample ID: 400-137871-12 DU
Matrix: Water
Analysis Batch: 311619

Client Sample ID: AX10338 MW-13
Prep Type: Total/NA
Prep Batch: 309353

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.550		0.5926		0.309	1.00	0.449	pCi/L	0.07	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	97.6		40 - 110
Y Carrier	85.6		40 - 110

QC Sample Results

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

TestAmerica Job ID: 400-137871-1
 SDG: Barry Ash Pond (7)

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

Lab Sample ID: 400-137871-3 DU
Matrix: Water
Analysis Batch: 313033

Client Sample ID: AX10329 MW-3
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	0.149	U	0.1560	U	0.337	5.00	0.575	pCi/L	0.01	

Lab Sample ID: 400-137871-12 DU
Matrix: Water
Analysis Batch: 313033

Client Sample ID: AX10338 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	0.832		0.9545		0.344	5.00	0.449	pCi/L	0.17	



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: Ben Rothschild		Lab P#: 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		Address: 744 County Rd 87 GSC #8		City: Calera		Page 1 of 2		
State: AL, Zip: 35040		PO #: 205-664-6121(Tel)		WO #: sgcopela@southernco.com		Job #: 400-137871		
Email: sgcopela@southernco.com		Project #: 40007143		Project Name: CCR		Preservation Codes:		
Site: Barry Ash Pond (7)		Due Date Requested:		TAT Requested (days): Routine		A - HCL M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Nitric Acid R - NaHSO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 X - EDTA Y - EDA Z - other (specify) Other:		
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of Containers	Special Instructions/Note:
AX10327	5/2/17	0824	G	Water	X	X	1	MW-4
AX10328	5/2/17	0824	G	Water	X	X	1	MW-4 Dup (Sample Duplicate)
AX10329	5/2/17	0930	G	Water	Y	X	3	MW-3
AX10330	5/2/17	1049	G	Water	X	X	1	MW-2
AX10331	5/2/17	1158	G	Water	X	X	1	MW-1
AX10332	5/2/17	1342	G	Water	X	X	1	MW-16
AX10333	5/2/17	1504	G	Water	X	X	1	MW-15
AX10334	5/2/17	1504	G	Water	X	X	1	MW-15 Dup (Sample Duplicate)
AX10335	5/2/17	1621	G	Water	X	X	1	MW-14
AX10336	5/2/17	1730	G	Water	X	X	1	FB-1 (Field Blank)
AX10337	5/2/17	1740	G	Water	X	X	1	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)								
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: _____ Time: _____ Method of Shipment: _____								
Relinquished by: Sarah Copeland Date/Time: 05/08/2017: 1330 Company: APC								
Relinquished by: _____ Date/Time: _____ Company: _____								
Relinquished by: _____ Date/Time: _____ Company: _____								
Custody Seals Intact: _____ Custody Seal No.: _____ 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



Client Information		Lab PM: <u>Whitmore, Cheyenne R</u>		Carrier Tracking No(s):		COC No: <u>400-56525-24537.1</u>	
Client Contact: <u>Sarah Copeland</u>		E-Mail: <u>cheyenne.whitmore@testamericainc.com</u>		Page: <u>Page 2 of 2</u>		Job # <u>400-137871</u>	
Company: <u>Alabama Power General Test Laboratory</u>		Due Date Requested:		Analysis Requested		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2SO4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 X - EDTA Y - EDA Z - other (specify) Other:	
Address: <u>744 County Rd. 87 GSC #8</u>		TAT Requested (days): <u>Routine</u>					
City: <u>Calera</u>							
State, Zip: <u>AL, 35040</u>							
PO #: <u>205-664-6121(Tel)</u>							
WO #: <u>sgcopela@southernco.com</u>				Total Number of containers		Special Instructions/Note:	
Project #: <u>40007143</u>							
CCR: <u>Barry Ash Pond (7)</u>							
Site: <u>Barry Ash Pond (7)</u>							
SSOW#:							
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/soil, BT=TISSUE, A=AP)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	
AX10338	5/3/17	0831	G	Water	X	X	MW-13
AX10339	5/3/17	0931	G	Water	X	X	MW-12
AX10340	5/3/17	1035	G	Water	X	X	MW-11
AX10341	5/3/17	1130	G	Water	X	X	MW-10
AX10342	5/3/17	1224	G	Water	X	X	MW-9
AX10343	5/3/17	1240	G	Water	X	X	FB-2 (Field Blank)
AX10344	5/3/17	0805	G	Water	X	X	MW-5
AX10345	5/3/17	0858	G	Water	X	X	MW-8
AX10346	5/3/17	0945	G	Water	X	X	MW-7
AX10347	5/3/17	1030	G	Water	X	X	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: <input type="checkbox"/> 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: _____				Time: _____ Method of Shipment: _____			
Relinquished by: <u>Sarah Copeland</u>				Date/Time: <u>05/08/2017, 1330</u>			
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:							
Received by: <u>[Signature]</u>				Date/Time: <u>5/9/2017 10:25</u>			
Received by: _____				Date/Time: _____			
Received by: _____				Date/Time: _____			
Company: <u>APC</u>				Company: <u>TA</u>			



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-137871-1
SDG Number: Barry Ash Pond (7)

Login Number: 137871

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 Barry

TestAmerica Job ID: 400-137871-1
 SDG: Barry 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	06-30-17
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	06-30-18
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

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	03-31-19
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	03-31-18

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

Accreditation/Certification Summary

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

TestAmerica Job ID: 400-137871-1
SDG: Barry 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.

TestAmerica Pensacola



Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

- Field Complete
- Lab Complete

Lab ETA 05/04/2017 08:30

Requested Complete Date	<input type="text" value="Routine"/>	Results To	<input type="text" value="Dustin Brooks, Greg Dyer"/>
Site Representative	<input type="text" value="Angie Jimmerson"/>	Requested By	<input type="text" value="Greg Dyer"/>
Collector	<input type="text" value="Ben Rothschild"/>	Location	<input type="text" value="Barry Ash Pond"/>
Analysis Requested	<input type="text" value="Bottle 1 (1L): Radiological"/>		
Comments	<input type="text" value="Radium duplicate collected at MW-3 and at MW-13
There is no temperature preservation requirement for Radium.
Sample dates were corrected upon receipt."/>		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-4	05/02/2017	08:24	1	Groundwater		AX10327
MW-4 DUP	05/02/2017	08:24	1	Sample Duplicate		AX10328
MW-3	05/02/2017	09:30	3	Groundwater		AX10329
MW-2	05/02/2017	10:49	1	Groundwater		AX10330
MW-1	05/02/2017	11:58	1	Groundwater		AX10331
MW-16	05/02/2017	13:42	1	Groundwater		AX10332
MW-15	05/02/2017	15:04	1	Groundwater		AX10333
MW-15 DUP	05/02/2017	15:04	1	Sample Duplicate		AX10334
MW-14	05/02/2017	16:21	1	Groundwater		AX10335
FB-1	05/02/2017	17:30	1	Field Blank		AX10336
EB-1	05/02/2017	17:40	1	Equipment Blank		AX10337
MW-13	05/03/2017	08:31	3	Groundwater		AX10338
MW-12	05/03/2017	09:31	1	Groundwater		AX10339
MW-11	05/03/2017	10:35	1	Groundwater		AX10340
MW-10	05/03/2017	11:30	1	Groundwater		AX10341
MW-9	05/03/2017	12:24	1	Groundwater		AX10342
FB-2	05/03/2017	12:40	1	Field Blank		AX10343

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: 2017.05.04 07:46:33 -05'00'</small>	<input type="text" value="05/04/2017 07:46"/>

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="NA"/>
		Thermometer ID
		<input type="text" value="NA"/>
		pH Strip ID
		<input type="text" value="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 : WMWBARAP_1102

Project/Site : Barry Ash Pond
Bucks, AL 36512

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:

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



Anions

Barry Ash Pond

WMWBARAP_1102

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 for these samples.

Job Narrative 400-139178-1 General Chemistry

Method(s) SM 4500 Cl- E: The native sample, matrix spike, and matrix spike duplicate (MS/MSD) associated with analytical batch 357866 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.



Metals ICP

Barry Ash Pond

WMWBARAP_1102

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>
AX13131	20170613AD	WMWBARAP_1102
AX13132	20170613AD	WMWBARAP_1102
AX13133	20170613AD	WMWBARAP_1102
AX13134	20170613AD	WMWBARAP_1102
AX13135	20170613AD	WMWBARAP_1102
AX13136	20170613AD	WMWBARAP_1102
AX13137	20170613AD	WMWBARAP_1102
AX13138	20170613AD	WMWBARAP_1102
AX13139	20170613AD	WMWBARAP_1102
AX13140	20170613AD	WMWBARAP_1102
AX13141	20170613AE	WMWBARAP_1102
AX13142	20170613AE	WMWBARAP_1102
AX13143	20170613AE	WMWBARAP_1102
AX13144	20170613AE	WMWBARAP_1102
AX13145	20170613AE	WMWBARAP_1102
AX13146	20170613AE	WMWBARAP_1102
AX13147	20170613AE	WMWBARAP_1102
AX13148	20170613AE	WMWBARAP_1102
AX13149	20170613AE	WMWBARAP_1102
AX13150	20170613AE	WMWBARAP_1102
AX13151	20170613AF	WMWBARAP_1102

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 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.
 - 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 any potential matrix effects.
 8. The raw data results include results corrected for dilution.



Metals ICPMS

Barry Ash Pond

WMWBARAP_1102

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>
AX13131	596654	WMWBARAP_1102
AX13132	596654	WMWBARAP_1102
AX13133	596654	WMWBARAP_1102
AX13134	596654	WMWBARAP_1102
AX13135	596654	WMWBARAP_1102
AX13136	596654	WMWBARAP_1102
AX13137	596654	WMWBARAP_1102
AX13138	596654	WMWBARAP_1102
AX13139	596654	WMWBARAP_1102
AX13140	596654	WMWBARAP_1102
AX13141	596655	WMWBARAP_1102
AX13142	596655	WMWBARAP_1102
AX13143	596655	WMWBARAP_1102
AX13144	596655	WMWBARAP_1102
AX13145	596655	WMWBARAP_1102
AX13146	596655	WMWBARAP_1102
AX13147	596655	WMWBARAP_1102
AX13148	596655	WMWBARAP_1102
AX13149	596655	WMWBARAP_1102
AX13150	596655	WMWBARAP_1102
AX13151	596656	WMWBARAP_1102

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

Barry Ash Pond

WMWBARAP_1102

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>
AX13131	596503	WMWBARAP_1102
AX13132	596503	WMWBARAP_1102
AX13133	596503	WMWBARAP_1102
AX13134	596503	WMWBARAP_1102
AX13135	596503	WMWBARAP_1102
AX13136	596503	WMWBARAP_1102
AX13137	596503	WMWBARAP_1102
AX13138	596503	WMWBARAP_1102
AX13139	596503	WMWBARAP_1102
AX13140	596503	WMWBARAP_1102
AX13141	596504	WMWBARAP_1102
AX13142	596504	WMWBARAP_1102
AX13143	596504	WMWBARAP_1102
AX13144	596504	WMWBARAP_1102
AX13145	596504	WMWBARAP_1102
AX13146	596504	WMWBARAP_1102
AX13147	596504	WMWBARAP_1102
AX13148	596504	WMWBARAP_1102
AX13149	596504	WMWBARAP_1102
AX13150	596504	WMWBARAP_1102
AX13151	596505	WMWBARAP_1102

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

Barry Ash Pond

WMWBARAP_1102

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>
AX13131	596477	WMWBARAP_1102
AX13132	596477	WMWBARAP_1102
AX13133	596477	WMWBARAP_1102
AX13134	596477	WMWBARAP_1102
AX13135	596477	WMWBARAP_1102
AX13136	596477	WMWBARAP_1102
AX13137	596477	WMWBARAP_1102
AX13138	596477	WMWBARAP_1102
AX13139	596477	WMWBARAP_1102
AX13140	597488	WMWBARAP_1102
AX13141	597488	WMWBARAP_1102
AX13142	597488	WMWBARAP_1102
AX13143	597488	WMWBARAP_1102
AX13144	597488	WMWBARAP_1102
AX13145	597488	WMWBARAP_1102
AX13146	597488	WMWBARAP_1102
AX13147	597489	WMWBARAP_1102
AX13148	597489	WMWBARAP_1102
AX13149	597489	WMWBARAP_1102
AX13150	597489	WMWBARAP_1102
AX13151	597489	WMWBARAP_1102

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. During the final weight process for batch596477, it was discovered that the beaker had been chipped after sample was dried. The chip was placed into the beaker and weighing was continued. The blank then passed criteria for the next two consecutive weights.

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



- All final weights of samples, standards, and blanks agreed within 0.5 mg of the previous weight with the exception of final weight one and two for the blank in batch 596477.
- 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 AX13134 and AX13148 which did not meet 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  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AX13131

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	0.0276	mg/L
* Beryllium, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/13/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/13/2017	EPA 200.7		2	0.10	0.5	0.834	mg/L
* Cadmium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	J 0.00217	mg/L
* Chromium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/14/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/13/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/13/2017	SM 2540C		1		25	41.3	mg/L
* Chloride, Total, by Test America	SGC	7/10/2017	SM 4500 Cl_E		1	0.60	2.00	12	mg/L
* Fluoride, Total, by Test America	SGC	7/10/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/10/2017	SM 4500 SO4_E		1	1.40	5.00	J 1.5	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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AX13131

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AX13140	Arsenic, Total	mg/L	0.0000143	0.0022	0.10	0.109	0.111	0.0990	0.085 to 0.115		95.3	70 to 130		1.63	20
AX13140	Mercury, Total by CVAA	mg/L	0.0000629	0.0005	0.004	0.00392	0.00390	0.00387	0.0034 to 0.0046		98.1	70 to 130		0.706	20
AX13140	Cobalt, Total	mg/L	-0.00000070	0.0044	0.10	0.107	0.109	0.104	0.085 to 0.115		107	70 to 130		1.65	20
AX13140	Lithium, Total	mg/L	-0.0000942	0.022	0.20	0.205	0.204	0.190	0.17 to 0.23		103	70 to 130		0.831	20
AX13140	Barium, Total	mg/L	0.0000687	0.0044	0.10	0.156	0.160	0.0916	0.085 to 0.115		86.8	70 to 130		2.46	20
AX13140	Cadmium, Total	mg/L	0.0000934	0.00044	0.10	0.0899	0.0915	0.0946	0.085 to 0.115		89.1	70 to 130		1.82	20
AX13140	Chromium, Total	mg/L	0.0000412	0.0044	0.10	0.109	0.110	0.103	0.085 to 0.115		101	70 to 130		0.870	20
AX13140	Beryllium, Total	mg/L	0.0000424	0.00132	0.10	0.0975	0.0985	0.107	0.085 to 0.115		96.5	70 to 130		1.02	20
AX13140	Thallium, Total	mg/L	0.0000369	0.00044	0.10	0.0992	0.101	0.0995	0.085 to 0.115		98.3	70 to 130		1.43	20
AX13140	Lead, Total	mg/L	0.0000351	0.0022	0.10	0.105	0.106	0.102	0.085 to 0.115		105	70 to 130		0.540	20
AX13140	Selenium, Total	mg/L	0.0000223	0.0044	0.10	0.0923	0.0928	0.0969	0.085 to 0.115		92.3	70 to 130		0.492	20
AX13140	Antimony, Total	mg/L	0.0000605	0.00132	0.10	0.0909	0.0925	0.0942	0.085 to 0.115		90.0	70 to 130		1.79	20
AX13140	Calcium, Total	mg/L	-0.0403	0.22	5.00	17.6	16.9	4.80	4.25 to 5.75		95.4	70 to 130		4.19	20
AX13140	Boron, Total	mg/L	-0.00367	0.044	1.00	0.999	0.949	0.943	0.85 to 1.15		97.1	70 to 130		5.07	20
AX13140	Molybdenum, Total	mg/L	0.0000192	0.0044	0.10	0.0924	0.0941	0.0927	0.085 to 0.115		92.4	70 to 130		1.85	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

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AX13131

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Limit
AX13139	Solids, Dissolved	mg/L	10.0	25				341	51.0	40 to 60			0.888 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



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AX13132

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	0.0275	mg/L
* Beryllium, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/13/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/13/2017	EPA 200.7		2	0.10	0.5	0.902	mg/L
* Cadmium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/14/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/13/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/13/2017	SM 2540C		1		25	36.7	mg/L
* Chloride, Total, by Test America	SGC	7/10/2017	SM 4500 Cl_E		1	0.60	2.00	8.3	mg/L
* Fluoride, Total, by Test America	SGC	7/10/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/10/2017	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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AX13132

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX13140	Arsenic, Total	mg/L	0.0000143	0.0022	0.10	0.109	0.111	0.0990	0.085 to 0.115		95.3	70 to 130	1.63	20
AX13140	Mercury, Total by CVAA	mg/L	0.0000629	0.0005	0.004	0.00392	0.00390	0.00387	0.0034 to 0.0046		98.1	70 to 130	0.706	20
AX13140	Cobalt, Total	mg/L	-0.00000070	0.0044	0.10	0.107	0.109	0.104	0.085 to 0.115		107	70 to 130	1.65	20
AX13140	Lithium, Total	mg/L	-0.0000942	0.022	0.20	0.205	0.204	0.190	0.17 to 0.23		103	70 to 130	0.831	20
AX13140	Barium, Total	mg/L	0.0000687	0.0044	0.10	0.156	0.160	0.0916	0.085 to 0.115		86.8	70 to 130	2.46	20
AX13140	Cadmium, Total	mg/L	0.0000934	0.00044	0.10	0.0899	0.0915	0.0946	0.085 to 0.115		89.1	70 to 130	1.82	20
AX13140	Chromium, Total	mg/L	0.0000412	0.0044	0.10	0.109	0.110	0.103	0.085 to 0.115		101	70 to 130	0.870	20
AX13140	Beryllium, Total	mg/L	0.0000424	0.00132	0.10	0.0975	0.0985	0.107	0.085 to 0.115		96.5	70 to 130	1.02	20
AX13140	Thallium, Total	mg/L	0.0000369	0.00044	0.10	0.0992	0.101	0.0995	0.085 to 0.115		98.3	70 to 130	1.43	20
AX13140	Antimony, Total	mg/L	0.0000605	0.00132	0.10	0.0909	0.0925	0.0942	0.085 to 0.115		90.0	70 to 130	1.79	20
AX13140	Calcium, Total	mg/L	-0.0403	0.22	5.00	17.6	16.9	4.80	4.25 to 5.75		95.4	70 to 130	4.19	20
AX13140	Boron, Total	mg/L	-0.00367	0.044	1.00	0.999	0.949	0.943	0.85 to 1.15		97.1	70 to 130	5.07	20
AX13140	Molybdenum, Total	mg/L	0.0000192	0.0044	0.10	0.0924	0.0941	0.0927	0.085 to 0.115		92.4	70 to 130	1.85	20
AX13140	Lead, Total	mg/L	0.0000351	0.0022	0.10	0.105	0.106	0.102	0.085 to 0.115		105	70 to 130	0.540	20
AX13140	Selenium, Total	mg/L	0.0000223	0.0044	0.10	0.0923	0.0928	0.0969	0.085 to 0.115		92.3	70 to 130	0.492	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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AX13132

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
								Duplicate	LFB	Limit	Rec	Limit	Prec
AX13139	Solids, Dissolved	mg/L	10.0	25				341	51.0	40 to 60			0.888
													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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AX13133

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	0.0527	mg/L
* Barium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	0.250	mg/L
* Beryllium, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/13/2017	EPA 200.7		2	0.02	0.1	1.56	mg/L
* Calcium, Total	HRG	6/13/2017	EPA 200.7		2	0.10	0.5	32.4	mg/L
* Cadmium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	J 0.00295	mg/L
* Mercury, Total by CVAA	ABB	6/14/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/13/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/13/2017	SM 2540C		1		25	433	mg/L
* Chloride, Total, by Test America	SGC	7/10/2017	SM 4500 Cl_E		1	0.60	2.00	27	mg/L
* Fluoride, Total, by Test America	SGC	7/10/2017	SM 4500 F_C		1	0.032	0.10	J 0.049	mg/L
* Sulfate, Total, by Test America	SGC	7/10/2017	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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AX13133

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AX13140	Arsenic, Total	mg/L	0.0000143	0.0022	0.10	0.109	0.111	0.0990	0.085 to 0.115		95.3	70 to 130		1.63	20
AX13140	Mercury, Total by CVAA	mg/L	0.0000629	0.0005	0.004	0.00392	0.00390	0.00387	0.0034 to 0.0046		98.1	70 to 130		0.706	20
AX13140	Cobalt, Total	mg/L	-0.00000070	0.0044	0.10	0.107	0.109	0.104	0.085 to 0.115		107	70 to 130		1.65	20
AX13140	Lithium, Total	mg/L	-0.0000942	0.022	0.20	0.205	0.204	0.190	0.17 to 0.23		103	70 to 130		0.831	20
AX13140	Barium, Total	mg/L	0.0000687	0.0044	0.10	0.156	0.160	0.0916	0.085 to 0.115		86.8	70 to 130		2.46	20
AX13140	Cadmium, Total	mg/L	0.0000934	0.00044	0.10	0.0899	0.0915	0.0946	0.085 to 0.115		89.1	70 to 130		1.82	20
AX13140	Chromium, Total	mg/L	0.0000412	0.0044	0.10	0.109	0.110	0.103	0.085 to 0.115		101	70 to 130		0.870	20
AX13140	Beryllium, Total	mg/L	0.0000424	0.00132	0.10	0.0975	0.0985	0.107	0.085 to 0.115		96.5	70 to 130		1.02	20
AX13140	Thallium, Total	mg/L	0.0000369	0.00044	0.10	0.0992	0.101	0.0995	0.085 to 0.115		98.3	70 to 130		1.43	20
AX13140	Antimony, Total	mg/L	0.0000605	0.00132	0.10	0.0909	0.0925	0.0942	0.085 to 0.115		90.0	70 to 130		1.79	20
AX13140	Calcium, Total	mg/L	-0.0403	0.22	5.00	17.6	16.9	4.80	4.25 to 5.75		95.4	70 to 130		4.19	20
AX13140	Lead, Total	mg/L	0.0000351	0.0022	0.10	0.105	0.106	0.102	0.085 to 0.115		105	70 to 130		0.540	20
AX13140	Selenium, Total	mg/L	0.0000223	0.0044	0.10	0.0923	0.0928	0.0969	0.085 to 0.115		92.3	70 to 130		0.492	20
AX13140	Boron, Total	mg/L	-0.00367	0.044	1.00	0.999	0.949	0.943	0.85 to 1.15		97.1	70 to 130		5.07	20
AX13140	Molybdenum, Total	mg/L	0.0000192	0.0044	0.10	0.0924	0.0941	0.0927	0.085 to 0.115		92.4	70 to 130		1.85	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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AX13133

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AX13139	Solids, Dissolved	mg/L	10.0	25				341	51.0	40 to 60			0.888	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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - FB-1

Laboratory ID Number: AX13134

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Beryllium, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/13/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/13/2017	EPA 200.7		2	0.10	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/14/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/13/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/13/2017	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total, by Test America	SGC	7/10/2017	SM 4500 Cl_E		1	0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	SGC	7/10/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/10/2017	SM 4500 SO4_E		1	1.40	5.00	U <1.4	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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - FB-1

Laboratory ID Number: AX13134

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AX13140	Arsenic, Total	mg/L	0.0000143	0.0022	0.10	0.109	0.111	0.0990	0.085 to 0.115		95.3	70 to 130		1.63	20
AX13140	Mercury, Total by CVAA	mg/L	0.0000629	0.0005	0.004	0.00392	0.00390	0.00387	0.0034 to 0.0046		98.1	70 to 130		0.706	20
AX13140	Cobalt, Total	mg/L	-0.000000070	0.0044	0.10	0.107	0.109	0.104	0.085 to 0.115		107	70 to 130		1.65	20
AX13140	Lithium, Total	mg/L	-0.0000942	0.022	0.20	0.205	0.204	0.190	0.17 to 0.23		103	70 to 130		0.831	20
AX13140	Beryllium, Total	mg/L	0.0000424	0.00132	0.10	0.0975	0.0985	0.107	0.085 to 0.115		96.5	70 to 130		1.02	20
AX13140	Thallium, Total	mg/L	0.0000369	0.00044	0.10	0.0992	0.101	0.0995	0.085 to 0.115		98.3	70 to 130		1.43	20
AX13140	Barium, Total	mg/L	0.00000687	0.0044	0.10	0.156	0.160	0.0916	0.085 to 0.115		86.8	70 to 130		2.46	20
AX13140	Cadmium, Total	mg/L	0.00000934	0.00044	0.10	0.0899	0.0915	0.0946	0.085 to 0.115		89.1	70 to 130		1.82	20
AX13140	Chromium, Total	mg/L	0.0000412	0.0044	0.10	0.109	0.110	0.103	0.085 to 0.115		101	70 to 130		0.870	20
AX13140	Lead, Total	mg/L	0.0000351	0.0022	0.10	0.105	0.106	0.102	0.085 to 0.115		105	70 to 130		0.540	20
AX13140	Selenium, Total	mg/L	0.0000223	0.0044	0.10	0.0923	0.0928	0.0969	0.085 to 0.115		92.3	70 to 130		0.492	20
AX13140	Antimony, Total	mg/L	0.0000605	0.00132	0.10	0.0909	0.0925	0.0942	0.085 to 0.115		90.0	70 to 130		1.79	20
AX13140	Calcium, Total	mg/L	-0.0403	0.22	5.00	17.6	16.9	4.80	4.25 to 5.75		95.4	70 to 130		4.19	20
AX13140	Boron, Total	mg/L	-0.00367	0.044	1.00	0.999	0.949	0.943	0.85 to 1.15		97.1	70 to 130		5.07	20
AX13140	Molybdenum, Total	mg/L	0.0000192	0.0044	0.10	0.0924	0.0941	0.0927	0.085 to 0.115		92.4	70 to 130		1.85	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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - FB-1

Laboratory ID Number: AX13134

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
								Duplicate	LFB	Limit	Rec	Limit	Prec
AX13139	Solids, Dissolved	mg/L	10.0	25				341	51.0	40 to 60			0.888
													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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AX13135

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	J 0.00175	mg/L
* Barium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	0.0219	mg/L
* Beryllium, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/13/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/13/2017	EPA 200.7		2	0.10	0.5	2.79	mg/L
* Cadmium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	J 0.00694	mg/L
* Chromium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/14/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/13/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/13/2017	SM 2540C		1		25	48.0	mg/L
* Chloride, Total, by Test America	SGC	7/10/2017	SM 4500 Cl_E		1	0.60	2.00	8.5	mg/L
* Fluoride, Total, by Test America	SGC	7/10/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	7/10/2017	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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AX13135

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AX13140	Arsenic, Total	mg/L	0.0000143	0.0022	0.10	0.109	0.111	0.0990	0.085 to 0.115		95.3	70 to 130		1.63	20
AX13140	Mercury, Total by CVAA	mg/L	0.0000629	0.0005	0.004	0.00392	0.00390	0.00387	0.0034 to 0.0046		98.1	70 to 130		0.706	20
AX13140	Cobalt, Total	mg/L	-0.000000070	0.0044	0.10	0.107	0.109	0.104	0.085 to 0.115		107	70 to 130		1.65	20
AX13140	Lithium, Total	mg/L	-0.0000942	0.022	0.20	0.205	0.204	0.190	0.17 to 0.23		103	70 to 130		0.831	20
AX13140	Beryllium, Total	mg/L	0.0000424	0.00132	0.10	0.0975	0.0985	0.107	0.085 to 0.115		96.5	70 to 130		1.02	20
AX13140	Thallium, Total	mg/L	0.0000369	0.00044	0.10	0.0992	0.101	0.0995	0.085 to 0.115		98.3	70 to 130		1.43	20
AX13140	Barium, Total	mg/L	0.00000687	0.0044	0.10	0.156	0.160	0.0916	0.085 to 0.115		86.8	70 to 130		2.46	20
AX13140	Cadmium, Total	mg/L	0.00000934	0.00044	0.10	0.0899	0.0915	0.0946	0.085 to 0.115		89.1	70 to 130		1.82	20
AX13140	Chromium, Total	mg/L	0.0000412	0.0044	0.10	0.109	0.110	0.103	0.085 to 0.115		101	70 to 130		0.870	20
AX13140	Lead, Total	mg/L	0.0000351	0.0022	0.10	0.105	0.106	0.102	0.085 to 0.115		105	70 to 130		0.540	20
AX13140	Selenium, Total	mg/L	0.0000223	0.0044	0.10	0.0923	0.0928	0.0969	0.085 to 0.115		92.3	70 to 130		0.492	20
AX13140	Antimony, Total	mg/L	0.0000605	0.00132	0.10	0.0909	0.0925	0.0942	0.085 to 0.115		90.0	70 to 130		1.79	20
AX13140	Calcium, Total	mg/L	-0.0403	0.22	5.00	17.6	16.9	4.80	4.25 to 5.75		95.4	70 to 130		4.19	20
AX13140	Boron, Total	mg/L	-0.00367	0.044	1.00	0.999	0.949	0.943	0.85 to 1.15		97.1	70 to 130		5.07	20
AX13140	Molybdenum, Total	mg/L	0.0000192	0.0044	0.10	0.0924	0.0941	0.0927	0.085 to 0.115		92.4	70 to 130		1.85	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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AX13135

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
								Duplicate	LFB	Limit	Rec	Limit	Prec
AX13139	Solids, Dissolved	mg/L	10.0	25				341	51.0	40 to 60			0.888
													5

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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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-2 Dup

Laboratory ID Number: AX13136

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	J 0.00164	mg/L
* Barium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	0.0202	mg/L
* Beryllium, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/13/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/13/2017	EPA 200.7		2	0.10	0.5	2.80	mg/L
* Cadmium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	J 0.00652	mg/L
* Chromium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/14/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/13/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/13/2017	SM 2540C		1		25	52.0	mg/L
* Chloride, Total, by Test America	SGC	7/10/2017	SM 4500 Cl_E		1	0.60	2.00	8.2	mg/L
* Fluoride, Total, by Test America	SGC	7/10/2017	SM 4500 F_C		1	0.032	0.10	J 0.038	mg/L
* Sulfate, Total, by Test America	SGC	7/10/2017	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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-2 Dup

Laboratory ID Number: AX13136

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AX13140	Arsenic, Total	mg/L	0.0000143	0.0022	0.10	0.109	0.111	0.0990	0.085 to 0.115		95.3	70 to 130		1.63	20
AX13140	Mercury, Total by CVAA	mg/L	0.0000629	0.0005	0.004	0.00392	0.00390	0.00387	0.0034 to 0.0046		98.1	70 to 130		0.706	20
AX13140	Cobalt, Total	mg/L	-0.000000070	0.0044	0.10	0.107	0.109	0.104	0.085 to 0.115		107	70 to 130		1.65	20
AX13140	Lithium, Total	mg/L	-0.0000942	0.022	0.20	0.205	0.204	0.190	0.17 to 0.23		103	70 to 130		0.831	20
AX13140	Barium, Total	mg/L	0.00000687	0.0044	0.10	0.156	0.160	0.0916	0.085 to 0.115		86.8	70 to 130		2.46	20
AX13140	Cadmium, Total	mg/L	0.00000934	0.00044	0.10	0.0899	0.0915	0.0946	0.085 to 0.115		89.1	70 to 130		1.82	20
AX13140	Chromium, Total	mg/L	0.0000412	0.0044	0.10	0.109	0.110	0.103	0.085 to 0.115		101	70 to 130		0.870	20
AX13140	Beryllium, Total	mg/L	0.0000424	0.00132	0.10	0.0975	0.0985	0.107	0.085 to 0.115		96.5	70 to 130		1.02	20
AX13140	Thallium, Total	mg/L	0.0000369	0.00044	0.10	0.0992	0.101	0.0995	0.085 to 0.115		98.3	70 to 130		1.43	20
AX13140	Antimony, Total	mg/L	0.0000605	0.00132	0.10	0.0909	0.0925	0.0942	0.085 to 0.115		90.0	70 to 130		1.79	20
AX13140	Calcium, Total	mg/L	-0.0403	0.22	5.00	17.6	16.9	4.80	4.25 to 5.75		95.4	70 to 130		4.19	20
AX13140	Lead, Total	mg/L	0.0000351	0.0022	0.10	0.105	0.106	0.102	0.085 to 0.115		105	70 to 130		0.540	20
AX13140	Selenium, Total	mg/L	0.0000223	0.0044	0.10	0.0923	0.0928	0.0969	0.085 to 0.115		92.3	70 to 130		0.492	20
AX13140	Boron, Total	mg/L	-0.00367	0.044	1.00	0.999	0.949	0.943	0.85 to 1.15		97.1	70 to 130		5.07	20
AX13140	Molybdenum, Total	mg/L	0.0000192	0.0044	0.10	0.0924	0.0941	0.0927	0.085 to 0.115		92.4	70 to 130		1.85	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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-2 Dup

Laboratory ID Number: AX13136

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Limit
AX13139	Solids, Dissolved	mg/L	10.0	25				341	51.0	40 to 60			0.888 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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AX13137

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/16/2017	EPA 200.8	5		0.0010	0.005	0.00982	mg/L
* Barium, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	0.0700	mg/L
* Beryllium, Total	JHK	6/16/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/13/2017	EPA 200.7	2		0.02	0.1	1.57	mg/L
* Calcium, Total	HRG	6/13/2017	EPA 200.7	2		0.10	0.5	13.6	mg/L
* Cadmium, Total	JHK	6/16/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/16/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	0.0172	mg/L
* Chromium, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/14/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/13/2017	EPA 200.7	2		0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/16/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/16/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/13/2017	SM 2540C	1			25	278	mg/L
* Chloride, Total, by Test America	SGC	7/10/2017	SM 4500 Cl_E	1		0.60	2.00	19	mg/L
* Fluoride, Total, by Test America	SGC	7/10/2017	SM 4500 F_C	1		0.032	0.10	J 0.053	mg/L
* Sulfate, Total, by Test America	SGC	7/10/2017	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

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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AX13137

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec Limit	
			MB	Limit					Limit	Rec	Limit	Prec		
AX13140	Arsenic, Total	mg/L	0.0000143	0.0022	0.10	0.109	0.111	0.0990	0.085 to 0.115		95.3	70 to 130	1.63	20
AX13140	Mercury, Total by CVAA	mg/L	0.0000629	0.0005	0.004	0.00392	0.00390	0.00387	0.0034 to 0.0046		98.1	70 to 130	0.706	20
AX13140	Cobalt, Total	mg/L	-0.00000070	0.0044	0.10	0.107	0.109	0.104	0.085 to 0.115		107	70 to 130	1.65	20
AX13140	Lithium, Total	mg/L	-0.0000942	0.022	0.20	0.205	0.204	0.190	0.17 to 0.23		103	70 to 130	0.831	20
AX13140	Barium, Total	mg/L	0.0000687	0.0044	0.10	0.156	0.160	0.0916	0.085 to 0.115		86.8	70 to 130	2.46	20
AX13140	Cadmium, Total	mg/L	0.0000934	0.00044	0.10	0.0899	0.0915	0.0946	0.085 to 0.115		89.1	70 to 130	1.82	20
AX13140	Chromium, Total	mg/L	0.0000412	0.0044	0.10	0.109	0.110	0.103	0.085 to 0.115		101	70 to 130	0.870	20
AX13140	Lead, Total	mg/L	0.0000351	0.0022	0.10	0.105	0.106	0.102	0.085 to 0.115		105	70 to 130	0.540	20
AX13140	Selenium, Total	mg/L	0.0000223	0.0044	0.10	0.0923	0.0928	0.0969	0.085 to 0.115		92.3	70 to 130	0.492	20
AX13140	Beryllium, Total	mg/L	0.0000424	0.00132	0.10	0.0975	0.0985	0.107	0.085 to 0.115		96.5	70 to 130	1.02	20
AX13140	Thallium, Total	mg/L	0.0000369	0.00044	0.10	0.0992	0.101	0.0995	0.085 to 0.115		98.3	70 to 130	1.43	20
AX13140	Antimony, Total	mg/L	0.0000605	0.00132	0.10	0.0909	0.0925	0.0942	0.085 to 0.115		90.0	70 to 130	1.79	20
AX13140	Calcium, Total	mg/L	-0.0403	0.22	5.00	17.6	16.9	4.80	4.25 to 5.75		95.4	70 to 130	4.19	20
AX13140	Boron, Total	mg/L	-0.00367	0.044	1.00	0.999	0.949	0.943	0.85 to 1.15		97.1	70 to 130	5.07	20
AX13140	Molybdenum, Total	mg/L	0.0000192	0.0044	0.10	0.0924	0.0941	0.0927	0.085 to 0.115		92.4	70 to 130	1.85	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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AX13137

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
								Duplicate	LFB	Limit	Rec	Limit	Prec
AX13139	Solids, Dissolved	mg/L	10.0	25				341	51.0	40 to 60			0.888
													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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AX13138

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/16/2017	EPA 200.8	5		0.0010	0.005	0.0158	mg/L
* Barium, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	0.0437	mg/L
* Beryllium, Total	JHK	6/16/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/13/2017	EPA 200.7	2		0.02	0.1	J 0.0535	mg/L
* Calcium, Total	HRG	6/13/2017	EPA 200.7	2		0.10	0.5	6.88	mg/L
* Cadmium, Total	JHK	6/16/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/16/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	0.0285	mg/L
* Chromium, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/14/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/13/2017	EPA 200.7	2		0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/16/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/16/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/13/2017	SM 2540C	1			25	187	mg/L
* Chloride, Total, by Test America	SGC	7/10/2017	SM 4500 Cl_E	1		0.60	2.00	35	mg/L
* Fluoride, Total, by Test America	SGC	7/10/2017	SM 4500 F_C	1		0.032	0.10	0.18	mg/L
* Sulfate, Total, by Test America	SGC	7/10/2017	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.

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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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AX13138

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AX13140	Arsenic, Total	mg/L	0.0000143	0.0022	0.10	0.109	0.111	0.0990	0.085 to 0.115		95.3	70 to 130		1.63	20
AX13140	Mercury, Total by CVAA	mg/L	0.0000629	0.0005	0.004	0.00392	0.00390	0.00387	0.0034 to 0.0046		98.1	70 to 130		0.706	20
AX13140	Cobalt, Total	mg/L	-0.00000070	0.0044	0.10	0.107	0.109	0.104	0.085 to 0.115		107	70 to 130		1.65	20
AX13140	Lithium, Total	mg/L	-0.0000942	0.022	0.20	0.205	0.204	0.190	0.17 to 0.23		103	70 to 130		0.831	20
AX13140	Barium, Total	mg/L	0.0000687	0.0044	0.10	0.156	0.160	0.0916	0.085 to 0.115		86.8	70 to 130		2.46	20
AX13140	Cadmium, Total	mg/L	0.0000934	0.00044	0.10	0.0899	0.0915	0.0946	0.085 to 0.115		89.1	70 to 130		1.82	20
AX13140	Chromium, Total	mg/L	0.0000412	0.0044	0.10	0.109	0.110	0.103	0.085 to 0.115		101	70 to 130		0.870	20
AX13140	Beryllium, Total	mg/L	0.0000424	0.00132	0.10	0.0975	0.0985	0.107	0.085 to 0.115		96.5	70 to 130		1.02	20
AX13140	Thallium, Total	mg/L	0.0000369	0.00044	0.10	0.0992	0.101	0.0995	0.085 to 0.115		98.3	70 to 130		1.43	20
AX13140	Antimony, Total	mg/L	0.0000605	0.00132	0.10	0.0909	0.0925	0.0942	0.085 to 0.115		90.0	70 to 130		1.79	20
AX13140	Calcium, Total	mg/L	-0.0403	0.22	5.00	17.6	16.9	4.80	4.25 to 5.75		95.4	70 to 130		4.19	20
AX13140	Boron, Total	mg/L	-0.00367	0.044	1.00	0.999	0.949	0.943	0.85 to 1.15		97.1	70 to 130		5.07	20
AX13140	Molybdenum, Total	mg/L	0.0000192	0.0044	0.10	0.0924	0.0941	0.0927	0.085 to 0.115		92.4	70 to 130		1.85	20
AX13140	Lead, Total	mg/L	0.0000351	0.0022	0.10	0.105	0.106	0.102	0.085 to 0.115		105	70 to 130		0.540	20
AX13140	Selenium, Total	mg/L	0.0000223	0.0044	0.10	0.0923	0.0928	0.0969	0.085 to 0.115		92.3	70 to 130		0.492	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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AX13138

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
								Duplicate	LFB	Limit	Rec	Limit	Prec
AX13139	Solids, Dissolved	mg/L	10.0	25				341	51.0	40 to 60			0.888
													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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AX13139

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/16/2017	EPA 200.8	5		0.0010	0.005	0.0129	mg/L
* Barium, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	0.0585	mg/L
* Beryllium, Total	JHK	6/16/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/13/2017	EPA 200.7	2		0.02	0.1	J 0.0428	mg/L
* Calcium, Total	HRG	6/13/2017	EPA 200.7	2		0.10	0.5	12.2	mg/L
* Cadmium, Total	JHK	6/16/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/16/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	J 0.00541	mg/L
* Mercury, Total by CVAA	ABB	6/14/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/13/2017	EPA 200.7	2		0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/16/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/16/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/13/2017	SM 2540C	1			25	335	mg/L
* Chloride, Total, by Test America	SGC	7/10/2017	SM 4500 Cl_E	1		0.60	2.00	44	mg/L
* Fluoride, Total, by Test America	SGC	7/10/2017	SM 4500 F_C	1		0.032	0.10	J 0.077	mg/L
* Sulfate, Total, by Test America	SGC	7/10/2017	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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AX13139

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	
			MB	Limit					Limit	Rec	Limit	Prec		
AX13140	Arsenic, Total	mg/L	0.0000143	0.0022	0.10	0.109	0.111	0.0990	0.085 to 0.115		95.3	70 to 130	1.63	20
AX13140	Mercury, Total by CVAA	mg/L	0.0000629	0.0005	0.004	0.00392	0.00390	0.00387	0.0034 to 0.0046		98.1	70 to 130	0.706	20
AX13140	Cobalt, Total	mg/L	-0.000000070	0.0044	0.10	0.107	0.109	0.104	0.085 to 0.115		107	70 to 130	1.65	20
AX13140	Lithium, Total	mg/L	-0.0000942	0.022	0.20	0.205	0.204	0.190	0.17 to 0.23		103	70 to 130	0.831	20
AX13140	Barium, Total	mg/L	0.00000687	0.0044	0.10	0.156	0.160	0.0916	0.085 to 0.115		86.8	70 to 130	2.46	20
AX13140	Cadmium, Total	mg/L	0.00000934	0.00044	0.10	0.0899	0.0915	0.0946	0.085 to 0.115		89.1	70 to 130	1.82	20
AX13140	Chromium, Total	mg/L	0.0000412	0.0044	0.10	0.109	0.110	0.103	0.085 to 0.115		101	70 to 130	0.870	20
AX13140	Lead, Total	mg/L	0.0000351	0.0022	0.10	0.105	0.106	0.102	0.085 to 0.115		105	70 to 130	0.540	20
AX13140	Selenium, Total	mg/L	0.0000223	0.0044	0.10	0.0923	0.0928	0.0969	0.085 to 0.115		92.3	70 to 130	0.492	20
AX13140	Antimony, Total	mg/L	0.0000605	0.00132	0.10	0.0909	0.0925	0.0942	0.085 to 0.115		90.0	70 to 130	1.79	20
AX13140	Calcium, Total	mg/L	-0.0403	0.22	5.00	17.6	16.9	4.80	4.25 to 5.75		95.4	70 to 130	4.19	20
AX13140	Boron, Total	mg/L	-0.00367	0.044	1.00	0.999	0.949	0.943	0.85 to 1.15		97.1	70 to 130	5.07	20
AX13140	Molybdenum, Total	mg/L	0.0000192	0.0044	0.10	0.0924	0.0941	0.0927	0.085 to 0.115		92.4	70 to 130	1.85	20
AX13140	Beryllium, Total	mg/L	0.0000424	0.00132	0.10	0.0975	0.0985	0.107	0.085 to 0.115		96.5	70 to 130	1.02	20
AX13140	Thallium, Total	mg/L	0.0000369	0.00044	0.10	0.0992	0.101	0.0995	0.085 to 0.115		98.3	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: 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: WMWBARAP
 Sample Date: 06-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AX13139

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
								Duplicate	LFB	Limit	Rec	Limit	Prec
AX13139	Solids, Dissolved	mg/L	10.0	25				341	51.0	40 to 60			0.888
													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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AX13140

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	0.0141	mg/L
* Barium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	0.0695	mg/L
* Beryllium, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	J 0.00103	mg/L
* Boron, Total	HRG	6/13/2017	EPA 200.7		2	0.02	0.1	J 0.0277	mg/L
* Calcium, Total	HRG	6/13/2017	EPA 200.7		2	0.10	0.5	12.8	mg/L
* Cadmium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	J 0.000770	mg/L
* Antimony, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	J 0.000857	mg/L
* Cobalt, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	J 0.00752	mg/L
* Mercury, Total by CVAA	ABB	6/14/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/13/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	J 0.000878	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/21/2017	SM 2540C		1		25	320	mg/L
* Chloride, Total, by Test America	SGC	7/10/2017	SM 4500 Cl_E		1	0.60	2.00	49	mg/L
* Fluoride, Total, by Test America	SGC	7/10/2017	SM 4500 F_C		1	0.032	0.10	J 0.070	mg/L
* Sulfate, Total, by Test America	SGC	7/10/2017	SM 4500 SO4_E		1	1.40	5.00	6.0	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AX13140

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	
			Limit	MB					Limit	Rec	Limit	Prec		
AX13140	Arsenic, Total	mg/L	0.0000143	0.0022	0.10	0.109	0.111	0.0990	0.085 to 0.115		95.3	70 to 130	1.63	20
AX13140	Mercury, Total by CVAA	mg/L	0.0000629	0.0005	0.004	0.00392	0.00390	0.00387	0.0034 to 0.0046		98.1	70 to 130	0.706	20
AX13140	Barium, Total	mg/L	0.00000687	0.0044	0.10	0.156	0.160	0.0916	0.085 to 0.115		86.8	70 to 130	2.46	20
AX13140	Cadmium, Total	mg/L	0.00000934	0.00044	0.10	0.0899	0.0915	0.0946	0.085 to 0.115		89.1	70 to 130	1.82	20
AX13140	Chromium, Total	mg/L	0.0000412	0.0044	0.10	0.109	0.110	0.103	0.085 to 0.115		101	70 to 130	0.870	20
AX13140	Beryllium, Total	mg/L	0.0000424	0.00132	0.10	0.0975	0.0985	0.107	0.085 to 0.115		96.5	70 to 130	1.02	20
AX13140	Thallium, Total	mg/L	0.0000369	0.00044	0.10	0.0992	0.101	0.0995	0.085 to 0.115		98.3	70 to 130	1.43	20
AX13140	Antimony, Total	mg/L	0.0000605	0.00132	0.10	0.0909	0.0925	0.0942	0.085 to 0.115		90.0	70 to 130	1.79	20
AX13140	Calcium, Total	mg/L	-0.0403	0.22	5.00	17.6	16.9	4.80	4.25 to 5.75		95.4	70 to 130	4.19	20
AX13140	Cobalt, Total	mg/L	-0.00000070	0.0044	0.10	0.107	0.109	0.104	0.085 to 0.115		107	70 to 130	1.65	20
AX13140	Lithium, Total	mg/L	-0.0000942	0.022	0.20	0.205	0.204	0.190	0.17 to 0.23		103	70 to 130	0.831	20
AX13140	Boron, Total	mg/L	-0.00367	0.044	1.00	0.999	0.949	0.943	0.85 to 1.15		97.1	70 to 130	5.07	20
AX13140	Molybdenum, Total	mg/L	0.0000192	0.0044	0.10	0.0924	0.0941	0.0927	0.085 to 0.115		92.4	70 to 130	1.85	20
AX13140	Lead, Total	mg/L	0.0000351	0.0022	0.10	0.105	0.106	0.102	0.085 to 0.115		105	70 to 130	0.540	20
AX13140	Selenium, Total	mg/L	0.0000223	0.0044	0.10	0.0923	0.0928	0.0969	0.085 to 0.115		92.3	70 to 130	0.492	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AX13140

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec		
			Limit	Limit			Duplicate	LFB	Limit	Limit		
AX13146	Solids, Dissolved	mg/L	0.00	25			277	51.0	40 to 60		3.99	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AX13141

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/16/2017	EPA 200.8	5		0.0010	0.005	0.0211	mg/L
* Barium, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	0.0682	mg/L
* Beryllium, Total	JHK	6/16/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/13/2017	EPA 200.7	2		0.02	0.1	J 0.0625	mg/L
* Calcium, Total	HRG	6/13/2017	EPA 200.7	2		0.10	0.5	21.2	mg/L
* Cadmium, Total	JHK	6/16/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/16/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	J 0.00262	mg/L
* Chromium, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	J 0.00372	mg/L
* Mercury, Total by CVAA	ABB	6/14/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/13/2017	EPA 200.7	2		0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/16/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/16/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/21/2017	SM 2540C	1			25	337	mg/L
* Chloride, Total, by Test America	SGC	7/10/2017	SM 4500 Cl_E	1		0.60	2.00	23	mg/L
* Fluoride, Total, by Test America	SGC	7/10/2017	SM 4500 F_C	1		0.032	0.10	J 0.060	mg/L
* Sulfate, Total, by Test America	SGC	7/10/2017	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AX13141

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX13150	Boron, Total	mg/L	-0.00408	0.044	1.00	1.03	1.02	0.936	0.85 to 1.15	97.6	70 to 130	0.661	20
AX13150	Thallium, Total	mg/L	0.0000369	0.00044	0.10	0.0997	0.103	0.0995	0.085 to 0.115	99.7	70 to 130	2.79	20
AX13150	Antimony, Total	mg/L	0.0000605	0.00132	0.10	0.0897	0.0919	0.0942	0.085 to 0.115	89.7	70 to 130	2.44	20
AX13150	Lithium, Total	mg/L	-0.000105	0.022	0.20	0.208	0.204	0.181	0.17 to 0.23	104	70 to 130	2.01	20
AX13150	Lead, Total	mg/L	0.0000351	0.0022	0.10	0.104	0.107	0.102	0.085 to 0.115	104	70 to 130	2.81	20
AX13150	Mercury, Total by CVAA	mg/L	0.0000550	0.0005	0.004	0.00384	0.00388	0.00387	0.0034 to 0.0046	96.1	70 to 130	0.901	20
AX13150	Arsenic, Total	mg/L	0.0000143	0.0022	0.10	0.124	0.128	0.0990	0.085 to 0.115	96.0	70 to 130	2.55	20
AX13150	Calcium, Total	mg/L	-0.0450	0.22	5.00	19.4	19.6	4.72	4.25 to 5.75	95.2	70 to 130	0.617	20
AX13150	Beryllium, Total	mg/L	0.0000424	0.00132	0.10	0.0963	0.0998	0.107	0.085 to 0.115	96.3	70 to 130	3.60	20
AX13150	Cadmium, Total	mg/L	0.00000934	0.00044	0.10	0.0889	0.0919	0.0946	0.085 to 0.115	88.9	70 to 130	3.40	20
AX13150	Selenium, Total	mg/L	0.0000223	0.0044	0.10	0.0905	0.0938	0.0969	0.085 to 0.115	90.5	70 to 130	3.49	20
AX13150	Barium, Total	mg/L	0.00000687	0.0044	0.10	0.214	0.220	0.0916	0.085 to 0.115	88.0	70 to 130	3.01	20
AX13150	Chromium, Total	mg/L	0.0000412	0.0044	0.10	0.102	0.105	0.103	0.085 to 0.115	102	70 to 130	2.78	20
AX13150	Cobalt, Total	mg/L	-0.000000070	0.0044	0.10	0.109	0.113	0.104	0.085 to 0.115	109	70 to 130	3.29	20
AX13150	Molybdenum, Total	mg/L	0.0000192	0.0044	0.10	0.0920	0.0944	0.0927	0.085 to 0.115	92.0	70 to 130	2.62	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AX13141

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX13146	Solids, Dissolved	mg/L	0.00	25			277	51.0	40 to 60	3.99	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-12 Dup

Laboratory ID Number: AX13142

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	0.0211	mg/L
* Barium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	0.0692	mg/L
* Beryllium, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/13/2017	EPA 200.7		2	0.02	0.1	J 0.0573	mg/L
* Calcium, Total	HRG	6/13/2017	EPA 200.7		2	0.10	0.5	21.1	mg/L
* Cadmium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	J 0.00281	mg/L
* Chromium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	J 0.00368	mg/L
* Mercury, Total by CVAA	ABB	6/14/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/13/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/21/2017	SM 2540C		1		25	335	mg/L
* Chloride, Total, by Test America	SGC	7/10/2017	SM 4500 Cl_E		1	0.60	2.00	23	mg/L
* Fluoride, Total, by Test America	SGC	7/10/2017	SM 4500 F_C		1	0.032	0.10	J 0.060	mg/L
* Sulfate, Total, by Test America	SGC	7/10/2017	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-12 Dup

Laboratory ID Number: AX13142

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB Limit	Rec		Prec	Prec Limit	
			MB	Limit					Rec	Limit			
AX13150	Boron, Total	mg/L	-0.00408	0.044	1.00	1.03	1.02	0.936	0.85 to 1.15	97.6	70 to 130	0.661	20
AX13150	Thallium, Total	mg/L	0.0000369	0.00044	0.10	0.0997	0.103	0.0995	0.085 to 0.115	99.7	70 to 130	2.79	20
AX13150	Antimony, Total	mg/L	0.0000605	0.00132	0.10	0.0897	0.0919	0.0942	0.085 to 0.115	89.7	70 to 130	2.44	20
AX13150	Lithium, Total	mg/L	-0.000105	0.022	0.20	0.208	0.204	0.181	0.17 to 0.23	104	70 to 130	2.01	20
AX13150	Lead, Total	mg/L	0.0000351	0.0022	0.10	0.104	0.107	0.102	0.085 to 0.115	104	70 to 130	2.81	20
AX13150	Mercury, Total by CVAA	mg/L	0.0000550	0.0005	0.004	0.00384	0.00388	0.00387	0.0034 to 0.0046	96.1	70 to 130	0.901	20
AX13150	Beryllium, Total	mg/L	0.0000424	0.00132	0.10	0.0963	0.0998	0.107	0.085 to 0.115	96.3	70 to 130	3.60	20
AX13150	Cadmium, Total	mg/L	0.00000934	0.00044	0.10	0.0889	0.0919	0.0946	0.085 to 0.115	88.9	70 to 130	3.40	20
AX13150	Selenium, Total	mg/L	0.0000223	0.0044	0.10	0.0905	0.0938	0.0969	0.085 to 0.115	90.5	70 to 130	3.49	20
AX13150	Arsenic, Total	mg/L	0.0000143	0.0022	0.10	0.124	0.128	0.0990	0.085 to 0.115	96.0	70 to 130	2.55	20
AX13150	Calcium, Total	mg/L	-0.0450	0.22	5.00	19.4	19.6	4.72	4.25 to 5.75	95.2	70 to 130	0.617	20
AX13150	Barium, Total	mg/L	0.00000687	0.0044	0.10	0.214	0.220	0.0916	0.085 to 0.115	88.0	70 to 130	3.01	20
AX13150	Chromium, Total	mg/L	0.0000412	0.0044	0.10	0.102	0.105	0.103	0.085 to 0.115	102	70 to 130	2.78	20
AX13150	Cobalt, Total	mg/L	-0.000000070	0.0044	0.10	0.109	0.113	0.104	0.085 to 0.115	109	70 to 130	3.29	20
AX13150	Molybdenum, Total	mg/L	0.0000192	0.0044	0.10	0.0920	0.0944	0.0927	0.085 to 0.115	92.0	70 to 130	2.62	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-12 Dup

Laboratory ID Number: AX13142

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec		
				Limit			Duplicate	LFB	Limit	Limit	Prec	Limit
AX13146	Solids, Dissolved	mg/L	0.00	25			277	51.0	40 to 60		3.99	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

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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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AX13143

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	0.0145	mg/L
* Barium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	0.0864	mg/L
* Beryllium, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/13/2017	EPA 200.7		2	0.02	0.1	J 0.0468	mg/L
* Calcium, Total	HRG	6/13/2017	EPA 200.7		2	0.10	0.5	25.2	mg/L
* Cadmium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	J 0.00233	mg/L
* Mercury, Total by CVAA	ABB	6/14/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/13/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/21/2017	SM 2540C		1		25	367	mg/L
* Chloride, Total, by Test America	SGC	7/10/2017	SM 4500 Cl_E		1	0.60	2.00	24	mg/L
* Fluoride, Total, by Test America	SGC	7/10/2017	SM 4500 F_C		1	0.032	0.10	J 0.060	mg/L
* Sulfate, Total, by Test America	SGC	7/10/2017	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

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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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AX13143

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec
			MB	Limit					Limit	Rec	Limit	Prec	
AX13150	Boron, Total	mg/L	-0.00408	0.044	1.00	1.03	1.02	0.936	0.85 to 1.15	97.6	70 to 130	0.661	20
AX13150	Thallium, Total	mg/L	0.0000369	0.00044	0.10	0.0997	0.103	0.0995	0.085 to 0.115	99.7	70 to 130	2.79	20
AX13150	Lead, Total	mg/L	0.0000351	0.0022	0.10	0.104	0.107	0.102	0.085 to 0.115	104	70 to 130	2.81	20
AX13150	Mercury, Total by CVAA	mg/L	0.0000550	0.0005	0.004	0.00384	0.00388	0.00387	0.0034 to 0.0046	96.1	70 to 130	0.901	20
AX13150	Antimony, Total	mg/L	0.0000605	0.00132	0.10	0.0897	0.0919	0.0942	0.085 to 0.115	89.7	70 to 130	2.44	20
AX13150	Lithium, Total	mg/L	-0.000105	0.022	0.20	0.208	0.204	0.181	0.17 to 0.23	104	70 to 130	2.01	20
AX13150	Beryllium, Total	mg/L	0.0000424	0.00132	0.10	0.0963	0.0998	0.107	0.085 to 0.115	96.3	70 to 130	3.60	20
AX13150	Cadmium, Total	mg/L	0.00000934	0.00044	0.10	0.0889	0.0919	0.0946	0.085 to 0.115	88.9	70 to 130	3.40	20
AX13150	Selenium, Total	mg/L	0.0000223	0.0044	0.10	0.0905	0.0938	0.0969	0.085 to 0.115	90.5	70 to 130	3.49	20
AX13150	Arsenic, Total	mg/L	0.0000143	0.0022	0.10	0.124	0.128	0.0990	0.085 to 0.115	96.0	70 to 130	2.55	20
AX13150	Calcium, Total	mg/L	-0.0450	0.22	5.00	19.4	19.6	4.72	4.25 to 5.75	95.2	70 to 130	0.617	20
AX13150	Barium, Total	mg/L	0.00000687	0.0044	0.10	0.214	0.220	0.0916	0.085 to 0.115	88.0	70 to 130	3.01	20
AX13150	Chromium, Total	mg/L	0.0000412	0.0044	0.10	0.102	0.105	0.103	0.085 to 0.115	102	70 to 130	2.78	20
AX13150	Cobalt, Total	mg/L	-0.000000070	0.0044	0.10	0.109	0.113	0.104	0.085 to 0.115	109	70 to 130	3.29	20
AX13150	Molybdenum, Total	mg/L	0.0000192	0.0044	0.10	0.0920	0.0944	0.0927	0.085 to 0.115	92.0	70 to 130	2.62	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AX13143

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX13146	Solids, Dissolved	mg/L	0.00	25			277	51.0	40 to 60	3.99	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AX13144

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	0.0303	mg/L
* Barium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	0.0632	mg/L
* Beryllium, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/13/2017	EPA 200.7		2	0.02	0.1	1.52	mg/L
* Calcium, Total	HRG	6/13/2017	EPA 200.7		2	0.10	0.5	51.4	mg/L
* Cadmium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/14/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/13/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/21/2017	SM 2540C		1		50	340	mg/L
* Chloride, Total, by Test America	SGC	7/10/2017	SM 4500 Cl_E		1	0.60	2.00	22	mg/L
* Fluoride, Total, by Test America	SGC	7/10/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	SGC	7/10/2017	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AX13144

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX13150	Boron, Total	mg/L	-0.00408	0.044	1.00	1.03	1.02	0.936	0.85 to 1.15	97.6	70 to 130	0.661	20
AX13150	Thallium, Total	mg/L	0.0000369	0.00044	0.10	0.0997	0.103	0.0995	0.085 to 0.115	99.7	70 to 130	2.79	20
AX13150	Antimony, Total	mg/L	0.0000605	0.00132	0.10	0.0897	0.0919	0.0942	0.085 to 0.115	89.7	70 to 130	2.44	20
AX13150	Lithium, Total	mg/L	-0.000105	0.022	0.20	0.208	0.204	0.181	0.17 to 0.23	104	70 to 130	2.01	20
AX13150	Lead, Total	mg/L	0.0000351	0.0022	0.10	0.104	0.107	0.102	0.085 to 0.115	104	70 to 130	2.81	20
AX13150	Mercury, Total by CVAA	mg/L	0.0000550	0.0005	0.004	0.00384	0.00388	0.00387	0.0034 to 0.0046	96.1	70 to 130	0.901	20
AX13150	Beryllium, Total	mg/L	0.0000424	0.00132	0.10	0.0963	0.0998	0.107	0.085 to 0.115	96.3	70 to 130	3.60	20
AX13150	Cadmium, Total	mg/L	0.00000934	0.00044	0.10	0.0889	0.0919	0.0946	0.085 to 0.115	88.9	70 to 130	3.40	20
AX13150	Selenium, Total	mg/L	0.0000223	0.0044	0.10	0.0905	0.0938	0.0969	0.085 to 0.115	90.5	70 to 130	3.49	20
AX13150	Arsenic, Total	mg/L	0.0000143	0.0022	0.10	0.124	0.128	0.0990	0.085 to 0.115	96.0	70 to 130	2.55	20
AX13150	Calcium, Total	mg/L	-0.0450	0.22	5.00	19.4	19.6	4.72	4.25 to 5.75	95.2	70 to 130	0.617	20
AX13150	Barium, Total	mg/L	0.00000687	0.0044	0.10	0.214	0.220	0.0916	0.085 to 0.115	88.0	70 to 130	3.01	20
AX13150	Chromium, Total	mg/L	0.0000412	0.0044	0.10	0.102	0.105	0.103	0.085 to 0.115	102	70 to 130	2.78	20
AX13150	Cobalt, Total	mg/L	-0.000000070	0.0044	0.10	0.109	0.113	0.104	0.085 to 0.115	109	70 to 130	3.29	20
AX13150	Molybdenum, Total	mg/L	0.0000192	0.0044	0.10	0.0920	0.0944	0.0927	0.085 to 0.115	92.0	70 to 130	2.62	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AX13144

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX13146	Solids, Dissolved	mg/L	0.00	25			277	51.0	40 to 60	3.99	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - EB-1

Laboratory ID Number: AX13145

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Beryllium, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/13/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/13/2017	EPA 200.7		2	0.10	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/14/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/13/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/21/2017	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total, by Test America	SGC	7/10/2017	SM 4500 Cl_E		1	0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	SGC	7/10/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/10/2017	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - EB-1

Laboratory ID Number: AX13145

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX13150	Boron, Total	mg/L	-0.00408	0.044	1.00	1.03	1.02	0.936	0.85 to 1.15	97.6	70 to 130	0.661	20
AX13150	Thallium, Total	mg/L	0.0000369	0.00044	0.10	0.0997	0.103	0.0995	0.085 to 0.115	99.7	70 to 130	2.79	20
AX13150	Antimony, Total	mg/L	0.0000605	0.00132	0.10	0.0897	0.0919	0.0942	0.085 to 0.115	89.7	70 to 130	2.44	20
AX13150	Lithium, Total	mg/L	-0.000105	0.022	0.20	0.208	0.204	0.181	0.17 to 0.23	104	70 to 130	2.01	20
AX13150	Beryllium, Total	mg/L	0.0000424	0.00132	0.10	0.0963	0.0998	0.107	0.085 to 0.115	96.3	70 to 130	3.60	20
AX13150	Cadmium, Total	mg/L	0.00000934	0.00044	0.10	0.0889	0.0919	0.0946	0.085 to 0.115	88.9	70 to 130	3.40	20
AX13150	Selenium, Total	mg/L	0.0000223	0.0044	0.10	0.0905	0.0938	0.0969	0.085 to 0.115	90.5	70 to 130	3.49	20
AX13150	Lead, Total	mg/L	0.0000351	0.0022	0.10	0.104	0.107	0.102	0.085 to 0.115	104	70 to 130	2.81	20
AX13150	Mercury, Total by CVAA	mg/L	0.0000550	0.0005	0.004	0.00384	0.00388	0.00387	0.0034 to 0.0046	96.1	70 to 130	0.901	20
AX13150	Arsenic, Total	mg/L	0.0000143	0.0022	0.10	0.124	0.128	0.0990	0.085 to 0.115	96.0	70 to 130	2.55	20
AX13150	Calcium, Total	mg/L	-0.0450	0.22	5.00	19.4	19.6	4.72	4.25 to 5.75	95.2	70 to 130	0.617	20
AX13150	Barium, Total	mg/L	0.00000687	0.0044	0.10	0.214	0.220	0.0916	0.085 to 0.115	88.0	70 to 130	3.01	20
AX13150	Chromium, Total	mg/L	0.0000412	0.0044	0.10	0.102	0.105	0.103	0.085 to 0.115	102	70 to 130	2.78	20
AX13150	Cobalt, Total	mg/L	-0.000000070	0.0044	0.10	0.109	0.113	0.104	0.085 to 0.115	109	70 to 130	3.29	20
AX13150	Molybdenum, Total	mg/L	0.0000192	0.0044	0.10	0.0920	0.0944	0.0927	0.085 to 0.115	92.0	70 to 130	2.62	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - EB-1

Laboratory ID Number: AX13145

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX13146	Solids, Dissolved	mg/L	0.00	25			277	51.0	40 to 60	3.99	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AX13146

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	0.0423	mg/L
* Barium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	0.111	mg/L
* Beryllium, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/13/2017	EPA 200.7		2	0.02	0.1	2.25	mg/L
* Calcium, Total	HRG	6/13/2017	EPA 200.7		2	0.10	0.5	40.3	mg/L
* Cadmium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/14/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/13/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/21/2017	SM 2540C		1		25	300	mg/L
* Chloride, Total, by Test America	SGC	7/10/2017	SM 4500 Cl_E		1	0.60	2.00	27	mg/L
* Fluoride, Total, by Test America	SGC	7/10/2017	SM 4500 F_C		1	0.032	0.10	J 0.060	mg/L
* Sulfate, Total, by Test America	SGC	7/10/2017	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AX13146

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit					Limit	Rec	Limit	Prec		
AX13150	Boron, Total	mg/L	-0.00408	0.044	1.00	1.03	1.02	0.936	0.85 to 1.15	97.6	70 to 130	0.661	20	
AX13150	Thallium, Total	mg/L	0.0000369	0.00044	0.10	0.0997	0.103	0.0995	0.085 to 0.115	99.7	70 to 130	2.79	20	
AX13150	Lead, Total	mg/L	0.0000351	0.0022	0.10	0.104	0.107	0.102	0.085 to 0.115	104	70 to 130	2.81	20	
AX13150	Mercury, Total by CVAA	mg/L	0.0000550	0.0005	0.004	0.00384	0.00388	0.00387	0.0034 to 0.0046	96.1	70 to 130	0.901	20	
AX13150	Beryllium, Total	mg/L	0.0000424	0.00132	0.10	0.0963	0.0998	0.107	0.085 to 0.115	96.3	70 to 130	3.60	20	
AX13150	Cadmium, Total	mg/L	0.00000934	0.00044	0.10	0.0889	0.0919	0.0946	0.085 to 0.115	88.9	70 to 130	3.40	20	
AX13150	Selenium, Total	mg/L	0.0000223	0.0044	0.10	0.0905	0.0938	0.0969	0.085 to 0.115	90.5	70 to 130	3.49	20	
AX13150	Antimony, Total	mg/L	0.0000605	0.00132	0.10	0.0897	0.0919	0.0942	0.085 to 0.115	89.7	70 to 130	2.44	20	
AX13150	Lithium, Total	mg/L	-0.000105	0.022	0.20	0.208	0.204	0.181	0.17 to 0.23	104	70 to 130	2.01	20	
AX13150	Arsenic, Total	mg/L	0.0000143	0.0022	0.10	0.124	0.128	0.0990	0.085 to 0.115	96.0	70 to 130	2.55	20	
AX13150	Calcium, Total	mg/L	-0.0450	0.22	5.00	19.4	19.6	4.72	4.25 to 5.75	95.2	70 to 130	0.617	20	
AX13150	Barium, Total	mg/L	0.00000687	0.0044	0.10	0.214	0.220	0.0916	0.085 to 0.115	88.0	70 to 130	3.01	20	
AX13150	Chromium, Total	mg/L	0.0000412	0.0044	0.10	0.102	0.105	0.103	0.085 to 0.115	102	70 to 130	2.78	20	
AX13150	Cobalt, Total	mg/L	-0.000000070	0.0044	0.10	0.109	0.113	0.104	0.085 to 0.115	109	70 to 130	3.29	20	
AX13150	Molybdenum, Total	mg/L	0.0000192	0.0044	0.10	0.0920	0.0944	0.0927	0.085 to 0.115	92.0	70 to 130	2.62	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AX13146

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
								Duplicate	LFB	Limit	Rec	Limit	Prec
AX13146	Solids, Dissolved	mg/L	0.00	25				277	51.0	40 to 60			3.99
													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



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AX13147

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	0.0203	mg/L
* Barium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	0.0540	mg/L
* Beryllium, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/13/2017	EPA 200.7		2	0.02	0.1	J 0.0227	mg/L
* Calcium, Total	HRG	6/13/2017	EPA 200.7		2	0.10	0.5	8.99	mg/L
* Cadmium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	0.0173	mg/L
* Chromium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/14/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/13/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/21/2017	SM 2540C		1		25	134	mg/L
* Chloride, Total, by Test America	SGC	7/10/2017	SM 4500 Cl_E		1	0.60	2.00	14	mg/L
* Fluoride, Total, by Test America	SGC	7/10/2017	SM 4500 F_C		1	0.032	0.10	J 0.080	mg/L
* Sulfate, Total, by Test America	SGC	7/10/2017	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AX13147

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AX13150	Thallium, Total	mg/L	0.0000369	0.00044	0.10	0.0997	0.103	0.0995	0.085 to 0.115		99.7	70 to 130		2.79	20
AX13150	Boron, Total	mg/L	-0.00408	0.044	1.00	1.03	1.02	0.936	0.85 to 1.15		97.6	70 to 130		0.661	20
AX13150	Antimony, Total	mg/L	0.0000605	0.00132	0.10	0.0897	0.0919	0.0942	0.085 to 0.115		89.7	70 to 130		2.44	20
AX13150	Lithium, Total	mg/L	-0.000105	0.022	0.20	0.208	0.204	0.181	0.17 to 0.23		104	70 to 130		2.01	20
AX13150	Arsenic, Total	mg/L	0.0000143	0.0022	0.10	0.124	0.128	0.0990	0.085 to 0.115		96.0	70 to 130		2.55	20
AX13150	Calcium, Total	mg/L	-0.0450	0.22	5.00	19.4	19.6	4.72	4.25 to 5.75		95.2	70 to 130		0.617	20
AX13150	Beryllium, Total	mg/L	0.0000424	0.00132	0.10	0.0963	0.0998	0.107	0.085 to 0.115		96.3	70 to 130		3.60	20
AX13150	Cadmium, Total	mg/L	0.00000934	0.00044	0.10	0.0889	0.0919	0.0946	0.085 to 0.115		88.9	70 to 130		3.40	20
AX13150	Selenium, Total	mg/L	0.0000223	0.0044	0.10	0.0905	0.0938	0.0969	0.085 to 0.115		90.5	70 to 130		3.49	20
AX13150	Barium, Total	mg/L	0.00000687	0.0044	0.10	0.214	0.220	0.0916	0.085 to 0.115		88.0	70 to 130		3.01	20
AX13150	Chromium, Total	mg/L	0.0000412	0.0044	0.10	0.102	0.105	0.103	0.085 to 0.115		102	70 to 130		2.78	20
AX13150	Cobalt, Total	mg/L	-0.000000070	0.0044	0.10	0.109	0.113	0.104	0.085 to 0.115		109	70 to 130		3.29	20
AX13150	Molybdenum, Total	mg/L	0.0000192	0.0044	0.10	0.0920	0.0944	0.0927	0.085 to 0.115		92.0	70 to 130		2.62	20
AX13150	Lead, Total	mg/L	0.0000351	0.0022	0.10	0.104	0.107	0.102	0.085 to 0.115		104	70 to 130		2.81	20
AX13150	Mercury, Total by CVAA	mg/L	0.0000550	0.0005	0.004	0.00384	0.00388	0.00387	0.0034 to 0.0046		96.1	70 to 130		0.901	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AX13147

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
								Duplicate	LFB	Limit	Rec	Limit	Limit
AX13150	Solids, Dissolved	mg/L	0.00	25				255	51.0	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: 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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - FB-2

Laboratory ID Number: AX13148

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Beryllium, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/13/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/13/2017	EPA 200.7		2	0.10	0.5	U Not Detected	mg/L
* Cadmium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/14/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/13/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/21/2017	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total, by Test America	SGC	7/10/2017	SM 4500 Cl_E		1	0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	SGC	7/10/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/10/2017	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

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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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - FB-2

Laboratory ID Number: AX13148

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX13150	Boron, Total	mg/L	-0.00408	0.044	1.00	1.03	1.02	0.936	0.85 to 1.15	97.6	70 to 130	0.661	20
AX13150	Thallium, Total	mg/L	0.0000369	0.00044	0.10	0.0997	0.103	0.0995	0.085 to 0.115	99.7	70 to 130	2.79	20
AX13150	Arsenic, Total	mg/L	0.0000143	0.0022	0.10	0.124	0.128	0.0990	0.085 to 0.115	96.0	70 to 130	2.55	20
AX13150	Calcium, Total	mg/L	-0.0450	0.22	5.00	19.4	19.6	4.72	4.25 to 5.75	95.2	70 to 130	0.617	20
AX13150	Beryllium, Total	mg/L	0.0000424	0.00132	0.10	0.0963	0.0998	0.107	0.085 to 0.115	96.3	70 to 130	3.60	20
AX13150	Cadmium, Total	mg/L	0.00000934	0.00044	0.10	0.0889	0.0919	0.0946	0.085 to 0.115	88.9	70 to 130	3.40	20
AX13150	Selenium, Total	mg/L	0.0000223	0.0044	0.10	0.0905	0.0938	0.0969	0.085 to 0.115	90.5	70 to 130	3.49	20
AX13150	Lead, Total	mg/L	0.0000351	0.0022	0.10	0.104	0.107	0.102	0.085 to 0.115	104	70 to 130	2.81	20
AX13150	Mercury, Total by CVAA	mg/L	0.0000550	0.0005	0.004	0.00384	0.00388	0.00387	0.0034 to 0.0046	96.1	70 to 130	0.901	20
AX13150	Antimony, Total	mg/L	0.0000605	0.00132	0.10	0.0897	0.0919	0.0942	0.085 to 0.115	89.7	70 to 130	2.44	20
AX13150	Lithium, Total	mg/L	-0.000105	0.022	0.20	0.208	0.204	0.181	0.17 to 0.23	104	70 to 130	2.01	20
AX13150	Barium, Total	mg/L	0.00000687	0.0044	0.10	0.214	0.220	0.0916	0.085 to 0.115	88.0	70 to 130	3.01	20
AX13150	Chromium, Total	mg/L	0.0000412	0.0044	0.10	0.102	0.105	0.103	0.085 to 0.115	102	70 to 130	2.78	20
AX13150	Cobalt, Total	mg/L	-0.000000070	0.0044	0.10	0.109	0.113	0.104	0.085 to 0.115	109	70 to 130	3.29	20
AX13150	Molybdenum, Total	mg/L	0.0000192	0.0044	0.10	0.0920	0.0944	0.0927	0.085 to 0.115	92.0	70 to 130	2.62	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - FB-2

Laboratory ID Number: AX13148

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec		
			Limit	Limit			Duplicate	LFB	Limit	Limit		
AX13150	Solids, Dissolved	mg/L	0.00	25			255	51.0	40 to 60		0.00	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



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AX13149

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/16/2017	EPA 200.8	5		0.0010	0.005	0.0395	mg/L
* Barium, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	0.128	mg/L
* Beryllium, Total	JHK	6/16/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/13/2017	EPA 200.7	2		0.02	0.1	1.41	mg/L
* Calcium, Total	HRG	6/13/2017	EPA 200.7	2		0.10	0.5	34.7	mg/L
* Cadmium, Total	JHK	6/16/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/16/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/14/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/13/2017	EPA 200.7	2		0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/16/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/16/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/21/2017	SM 2540C	1			25	284	mg/L
* Chloride, Total, by Test America	SGC	7/10/2017	SM 4500 Cl_E	1		0.60	2.00	24	mg/L
* Fluoride, Total, by Test America	SGC	7/10/2017	SM 4500 F_C	1		0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	SGC	7/10/2017	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AX13149

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB Limit	Rec		Prec Limit		
			MB	Limit					Rec	Limit			
AX13150	Boron, Total	mg/L	-0.00408	0.044	1.00	1.03	1.02	0.936	0.85 to 1.15	97.6	70 to 130	0.661	20
AX13150	Thallium, Total	mg/L	0.0000369	0.00044	0.10	0.0997	0.103	0.0995	0.085 to 0.115	99.7	70 to 130	2.79	20
AX13150	Lead, Total	mg/L	0.0000351	0.0022	0.10	0.104	0.107	0.102	0.085 to 0.115	104	70 to 130	2.81	20
AX13150	Mercury, Total by CVAA	mg/L	0.0000550	0.0005	0.004	0.00384	0.00388	0.00387	0.0034 to 0.0046	96.1	70 to 130	0.901	20
AX13150	Antimony, Total	mg/L	0.0000605	0.00132	0.10	0.0897	0.0919	0.0942	0.085 to 0.115	89.7	70 to 130	2.44	20
AX13150	Lithium, Total	mg/L	-0.000105	0.022	0.20	0.208	0.204	0.181	0.17 to 0.23	104	70 to 130	2.01	20
AX13150	Beryllium, Total	mg/L	0.0000424	0.00132	0.10	0.0963	0.0998	0.107	0.085 to 0.115	96.3	70 to 130	3.60	20
AX13150	Cadmium, Total	mg/L	0.00000934	0.00044	0.10	0.0889	0.0919	0.0946	0.085 to 0.115	88.9	70 to 130	3.40	20
AX13150	Selenium, Total	mg/L	0.0000223	0.0044	0.10	0.0905	0.0938	0.0969	0.085 to 0.115	90.5	70 to 130	3.49	20
AX13150	Arsenic, Total	mg/L	0.0000143	0.0022	0.10	0.124	0.128	0.0990	0.085 to 0.115	96.0	70 to 130	2.55	20
AX13150	Calcium, Total	mg/L	-0.0450	0.22	5.00	19.4	19.6	4.72	4.25 to 5.75	95.2	70 to 130	0.617	20
AX13150	Barium, Total	mg/L	0.00000687	0.0044	0.10	0.214	0.220	0.0916	0.085 to 0.115	88.0	70 to 130	3.01	20
AX13150	Chromium, Total	mg/L	0.0000412	0.0044	0.10	0.102	0.105	0.103	0.085 to 0.115	102	70 to 130	2.78	20
AX13150	Cobalt, Total	mg/L	-0.000000070	0.0044	0.10	0.109	0.113	0.104	0.085 to 0.115	109	70 to 130	3.29	20
AX13150	Molybdenum, Total	mg/L	0.0000192	0.0044	0.10	0.0920	0.0944	0.0927	0.085 to 0.115	92.0	70 to 130	2.62	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AX13149

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX13150	Solids, Dissolved	mg/L	0.00	25			255	51.0	40 to 60		0.00
											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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AX13150

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/16/2017	EPA 200.8	5		0.0010	0.005	0.0283	mg/L
* Barium, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	0.126	mg/L
* Beryllium, Total	JHK	6/16/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/13/2017	EPA 200.7	2		0.02	0.1	J 0.0518	mg/L
* Calcium, Total	HRG	6/13/2017	EPA 200.7	2		0.10	0.5	14.7	mg/L
* Cadmium, Total	JHK	6/16/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/16/2017	EPA 200.8	5		0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/14/2017	EPA 245.1	1		0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/13/2017	EPA 200.7	2		0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/16/2017	EPA 200.8	5		0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/16/2017	EPA 200.8	5		0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/16/2017	EPA 200.8	5		0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/21/2017	SM 2540C	1			25	255	mg/L
* Chloride, Total, by Test America	SGC	7/10/2017	SM 4500 Cl_E	1		0.60	2.00	21	mg/L
* Fluoride, Total, by Test America	SGC	7/10/2017	SM 4500 F_C	1		0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	SGC	7/10/2017	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AX13150

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			MB	Limit				Limit	Rec	Limit	Prec		
AX13150	Boron, Total	mg/L	-0.00408	0.044	1.00	1.03	1.02	0.936	0.85 to 1.15	97.6	70 to 130	0.661	20
AX13150	Thallium, Total	mg/L	0.0000369	0.00044	0.10	0.0997	0.103	0.0995	0.085 to 0.115	99.7	70 to 130	2.79	20
AX13150	Beryllium, Total	mg/L	0.0000424	0.00132	0.10	0.0963	0.0998	0.107	0.085 to 0.115	96.3	70 to 130	3.60	20
AX13150	Cadmium, Total	mg/L	0.00000934	0.00044	0.10	0.0889	0.0919	0.0946	0.085 to 0.115	88.9	70 to 130	3.40	20
AX13150	Selenium, Total	mg/L	0.0000223	0.0044	0.10	0.0905	0.0938	0.0969	0.085 to 0.115	90.5	70 to 130	3.49	20
AX13150	Lead, Total	mg/L	0.0000351	0.0022	0.10	0.104	0.107	0.102	0.085 to 0.115	104	70 to 130	2.81	20
AX13150	Mercury, Total by CVAA	mg/L	0.0000550	0.0005	0.004	0.00384	0.00388	0.00387	0.0034 to 0.0046	96.1	70 to 130	0.901	20
AX13150	Antimony, Total	mg/L	0.0000605	0.00132	0.10	0.0897	0.0919	0.0942	0.085 to 0.115	89.7	70 to 130	2.44	20
AX13150	Lithium, Total	mg/L	-0.000105	0.022	0.20	0.208	0.204	0.181	0.17 to 0.23	104	70 to 130	2.01	20
AX13150	Arsenic, Total	mg/L	0.0000143	0.0022	0.10	0.124	0.128	0.0990	0.085 to 0.115	96.0	70 to 130	2.55	20
AX13150	Calcium, Total	mg/L	-0.0450	0.22	5.00	19.4	19.6	4.72	4.25 to 5.75	95.2	70 to 130	0.617	20
AX13150	Barium, Total	mg/L	0.00000687	0.0044	0.10	0.214	0.220	0.0916	0.085 to 0.115	88.0	70 to 130	3.01	20
AX13150	Chromium, Total	mg/L	0.0000412	0.0044	0.10	0.102	0.105	0.103	0.085 to 0.115	102	70 to 130	2.78	20
AX13150	Cobalt, Total	mg/L	-0.000000070	0.0044	0.10	0.109	0.113	0.104	0.085 to 0.115	109	70 to 130	3.29	20
AX13150	Molybdenum, Total	mg/L	0.0000192	0.0044	0.10	0.0920	0.0944	0.0927	0.085 to 0.115	92.0	70 to 130	2.62	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
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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AX13150

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec		
			Limit	Limit			Duplicate	LFB	Limit	Limit		
AX13150	Solids, Dissolved	mg/L	0.00	25			255	51.0	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: 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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AX13151

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Arsenic, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Barium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	0.0256	mg/L
* Beryllium, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Boron, Total	HRG	6/13/2017	EPA 200.7		2	0.02	0.1	U Not Detected	mg/L
* Calcium, Total	HRG	6/13/2017	EPA 200.7		2	0.10	0.5	1.98	mg/L
* Cadmium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
* Antimony, Total	JHK	6/16/2017	EPA 200.8		5	0.00060	0.003	U Not Detected	mg/L
* Cobalt, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Chromium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Mercury, Total by CVAA	ABB	6/14/2017	EPA 245.1		1	0.00025	0.0005	U Not Detected	mg/L
* Lithium, Total	HRG	6/13/2017	EPA 200.7		2	0.010	0.05	U Not Detected	mg/L
* Molybdenum, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Lead, Total	JHK	6/16/2017	EPA 200.8		5	0.0010	0.005	U Not Detected	mg/L
* Selenium, Total	JHK	6/16/2017	EPA 200.8		5	0.0020	0.01	U Not Detected	mg/L
* Thallium, Total	JHK	6/16/2017	EPA 200.8		5	0.00020	0.001	U Not Detected	mg/L
General Characteristics									
* Solids, Dissolved	KRC	6/21/2017	SM 2540C		1		25	45.3	mg/L
* Chloride, Total, by Test America	SGC	7/10/2017	SM 4500 Cl_E		1	0.60	2.00	5.9	mg/L
* Fluoride, Total, by Test America	SGC	7/10/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/10/2017	SM 4500 SO4_E		1	1.40	5.00	J 1.5	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: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AX13151

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec	Limit	
			MB	Limit					Limit	Rec	Limit	Prec			
AX13151	Cobalt, Total	mg/L	0.00000564	0.0044	0.10	0.105	0.108	0.106	0.085 to 0.115		105	70 to 130		2.84	20
AX13151	Selenium, Total	mg/L	-0.00000352	0.0044	0.10	0.0898	0.0914	0.0970	0.085 to 0.115		89.8	70 to 130		1.84	20
AX13151	Barium, Total	mg/L	0.00000804	0.0044	0.10	0.111	0.113	0.0930	0.085 to 0.115		85.8	70 to 130		1.58	20
AX13151	Chromium, Total	mg/L	0.0000446	0.0044	0.10	0.100	0.103	0.103	0.085 to 0.115		100	70 to 130		2.45	20
AX13151	Lithium, Total	mg/L	-0.0000869	0.022	0.20	0.192	0.192	0.186	0.17 to 0.23		96.2	70 to 130		0.237	20
AX13151	Mercury, Total by CVAA	mg/L	0.0000545	0.0005	0.004	0.00396	0.00395	0.00390	0.0034 to 0.0046		99.0	70 to 130		0.228	20
AX13151	Molybdenum, Total	mg/L	0.0000224	0.0044	0.10	0.0887	0.0915	0.0941	0.085 to 0.115		88.7	70 to 130		3.12	20
AX13151	Arsenic, Total	mg/L	0.0000209	0.0022	0.10	0.0945	0.0963	0.101	0.085 to 0.115		94.5	70 to 130		1.81	20
AX13151	Boron, Total	mg/L	-0.00388	0.044	1.00	0.945	0.946	0.961	0.85 to 1.15		94.5	70 to 130		0.118	20
AX13151	Lead, Total	mg/L	0.0000356	0.0022	0.10	0.103	0.103	0.107	0.085 to 0.115		103	70 to 130		0.452	20
AX13151	Calcium, Total	mg/L	-0.0448	0.22	5.00	6.89	6.92	4.74	4.25 to 5.75		98.3	70 to 130		0.348	20
AX13151	Thallium, Total	mg/L	0.0000386	0.00044	0.10	0.0985	0.0995	0.104	0.085 to 0.115		98.5	70 to 130		1.04	20
AX13151	Antimony, Total	mg/L	0.0000538	0.00132	0.10	0.0889	0.0896	0.0959	0.085 to 0.115		88.9	70 to 130		0.841	20
AX13151	Beryllium, Total	mg/L	0.0000375	0.00132	0.10	0.0959	0.0975	0.107	0.085 to 0.115		95.9	70 to 130		1.66	20
AX13151	Cadmium, Total	mg/L	0.0000139	0.00044	0.10	0.0889	0.0899	0.0956	0.085 to 0.115		88.9	70 to 130		1.16	20

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Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 07-Jun-17
 Customer ID:
 Delivery Date: 08-Jun-17

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AX13151

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec		
								Duplicate	LFB	Limit	Rec	Limit	Limit	
AX13150	Solids, Dissolved	mg/L	0.00		25			255	51.0	40 to 60			0.00	5

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

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

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

Laboratory certification ID: E571114

Issued By: State of Florida, Department of Health

Expiration: June 30, 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 06/08/2017 11:00

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Angie Jimmerson	Requested By	Greg Dyer
Collector	Nick Pitts	Location	Barry 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 TestAmerica, Pensacola		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-4	06/06/2017	08:50	4	Groundwater		AX13131
MW-3	06/06/2017	09:42	4	Groundwater		AX13132
MW-1	06/06/2017	10:55	4	Groundwater		AX13133
FB-1	06/06/2017	10:23	4	Field Blank		AX13134
MW-2	06/06/2017	11:53	4	Groundwater		AX13135
MW-2 Dup	06/06/2017	11:53	4	Sample Duplicate		AX13136
MW-16	06/06/2017	13:02	4	Groundwater		AX13137
MW-15	06/06/2017	14:00	4	Groundwater		AX13138
MW-14	06/06/2017	15:12	4	Groundwater		AX13139
MW-13	06/07/2017	08:50	4	Groundwater		AX13140
MW-12	06/07/2017	09:48	4	Groundwater		AX13141
MW-12 Dup	06/07/2017	09:48	4	Sample Duplicate		AX13142
MW-11	06/07/2017	11:00	4	Groundwater		AX13143
MW-10	06/07/2017	12:08	4	Groundwater		AX13144
EB-1	06/07/2017	12:30	4	Equipment Blank		AX13145
MW-9	06/07/2017	13:15	4	Groundwater		AX13146
MW-7	06/07/2017	15:00	4	Groundwater		AX13147
FB-2	06/07/2017	14:08	4	Field Blank		AX13148

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: 2017.06.08 15:11:30 -0500</small>	06/08/2017 15:10

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
		0.6 degrees C
		Thermometer ID
		6035-30997-2-2
		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: 400-139178-1

TestAmerica Sample Delivery Group: Barry Ash Pond (8)

Client Project/Site: CCR Plant Barry

For:

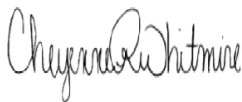
Alabama Power General Test Laboratory

744 County Rd 87

GSC #8

Calera, Alabama 35040

Attn: Sarah Copeland



Authorized for release by:

6/29/2017 3:02:43 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 Barry

TestAmerica Job ID: 400-139178-1
SDG: Barry Ash Pond (8)

Job ID: 400-139178-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-139178-1

General Chemistry

Method(s) SM 4500 Cl- E: The native sample, matrix spike, and matrix spike duplicate (MS/MSD) associated with analytical batch 357866 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.

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Detection Summary

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

TestAmerica Job ID: 400-139178-1
SDG: Barry Ash Pond (8)

Client Sample ID: AX13131 MW-4

Lab Sample ID: 400-139178-1

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
Sulfate	1.5	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX13132 MW-3

Lab Sample ID: 400-139178-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	8.3		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: AX13133 MW-1

Lab Sample ID: 400-139178-3

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	0.049	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX13134 FB-1

Lab Sample ID: 400-139178-4

No Detections.

Client Sample ID: AX13135 MW-2

Lab Sample ID: 400-139178-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	8.5		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.040	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX13136 MW-2 DUP

Lab Sample ID: 400-139178-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	8.2		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.038	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX13137 MW-16

Lab Sample ID: 400-139178-7

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	0.053	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX13138 MW-15

Lab Sample ID: 400-139178-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	35		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.18		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX13139 MW-14

Lab Sample ID: 400-139178-9

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	0.077	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX13140 MW-13

Lab Sample ID: 400-139178-10

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-139178-1
SDG: Barry Ash Pond (8)

Client Sample ID: AX13140 MW-13 (Continued)

Lab Sample ID: 400-139178-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	49		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	6.0		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX13141 MW-12

Lab Sample ID: 400-139178-11

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	0.060	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX13142 MW-12 DUP

Lab Sample ID: 400-139178-12

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	0.060	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX13143 MW-11

Lab Sample ID: 400-139178-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	24		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

Client Sample ID: AX13144 MW-10

Lab Sample ID: 400-139178-14

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

Client Sample ID: AX13145 EB-1

Lab Sample ID: 400-139178-15

No Detections.

Client Sample ID: AX13146 MW-9

Lab Sample ID: 400-139178-16

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
Fluoride	0.060	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX13147 MW-7

Lab Sample ID: 400-139178-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	14		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.080	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX13148 FB-2

Lab Sample ID: 400-139178-18

No Detections.

Client Sample ID: AX13149 MW-8

Lab Sample ID: 400-139178-19

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-139178-1
SDG: Barry Ash Pond (8)

Client Sample ID: AX13149 MW-8 (Continued)

Lab Sample ID: 400-139178-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	24		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: AX13150 MW-5

Lab Sample ID: 400-139178-20

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

Client Sample ID: AX13151 MW-6

Lab Sample ID: 400-139178-21

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
Sulfate	1.5	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

Method Summary

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

TestAmerica Job ID: 400-139178-1
SDG: Barry 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



Sample Summary

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

TestAmerica Job ID: 400-139178-1
SDG: Barry Ash Pond (8)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-139178-1	AX13131 MW-4	Water	06/06/17 08:50	06/13/17 08:53
400-139178-2	AX13132 MW-3	Water	06/06/17 09:42	06/13/17 08:53
400-139178-3	AX13133 MW-1	Water	06/06/17 10:55	06/13/17 08:53
400-139178-4	AX13134 FB-1	Water	06/06/17 10:23	06/13/17 08:53
400-139178-5	AX13135 MW-2	Water	06/06/17 11:53	06/13/17 08:53
400-139178-6	AX13136 MW-2 DUP	Water	06/06/17 11:53	06/13/17 08:53
400-139178-7	AX13137 MW-16	Water	06/06/17 13:02	06/13/17 08:53
400-139178-8	AX13138 MW-15	Water	06/06/17 14:00	06/13/17 08:53
400-139178-9	AX13139 MW-14	Water	06/06/17 15:12	06/13/17 08:53
400-139178-10	AX13140 MW-13	Water	06/07/17 08:50	06/13/17 08:53
400-139178-11	AX13141 MW-12	Water	06/07/17 09:48	06/13/17 08:53
400-139178-12	AX13142 MW-12 DUP	Water	06/07/17 09:48	06/13/17 08:53
400-139178-13	AX13143 MW-11	Water	06/07/17 11:00	06/13/17 08:53
400-139178-14	AX13144 MW-10	Water	06/07/17 12:08	06/13/17 08:53
400-139178-15	AX13145 EB-1	Water	06/07/17 12:30	06/13/17 08:53
400-139178-16	AX13146 MW-9	Water	06/07/17 13:15	06/13/17 08:53
400-139178-17	AX13147 MW-7	Water	06/07/17 15:00	06/13/17 08:53
400-139178-18	AX13148 FB-2	Water	06/07/17 14:08	06/13/17 08:53
400-139178-19	AX13149 MW-8	Water	06/07/17 12:39	06/13/17 08:53
400-139178-20	AX13150 MW-5	Water	06/07/17 13:40	06/13/17 08:53
400-139178-21	AX13151 MW-6	Water	06/07/17 14:35	06/13/17 08:53

Client Sample Results

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

TestAmerica Job ID: 400-139178-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13131 MW-4

Lab Sample ID: 400-139178-1

Date Collected: 06/06/17 08:50

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		2.0	0.60	mg/L			06/20/17 17:07	1
Fluoride	<0.032		0.10	0.032	mg/L			06/24/17 10:12	1
Sulfate	1.5	J	5.0	1.4	mg/L			06/20/17 15:22	1

Client Sample ID: AX13132 MW-3

Lab Sample ID: 400-139178-2

Date Collected: 06/06/17 09:42

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.3		2.0	0.60	mg/L			06/20/17 17:07	1
Fluoride	<0.032		0.10	0.032	mg/L			06/24/17 10:14	1
Sulfate	<1.4		5.0	1.4	mg/L			06/20/17 15:22	1

Client Sample ID: AX13133 MW-1

Lab Sample ID: 400-139178-3

Date Collected: 06/06/17 10:55

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27		2.0	0.60	mg/L			06/20/17 17:07	1
Fluoride	0.049	J	0.10	0.032	mg/L			06/24/17 10:22	1
Sulfate	<1.4		5.0	1.4	mg/L			06/20/17 15:22	1

Client Sample ID: AX13134 FB-1

Lab Sample ID: 400-139178-4

Date Collected: 06/06/17 10:23

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			06/20/17 17:07	1
Fluoride	<0.032		0.10	0.032	mg/L			06/24/17 10:32	1
Sulfate	<1.4		5.0	1.4	mg/L			06/20/17 15:22	1

Client Sample ID: AX13135 MW-2

Lab Sample ID: 400-139178-5

Date Collected: 06/06/17 11:53

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.5		2.0	0.60	mg/L			06/20/17 17:07	1
Fluoride	0.040	J	0.10	0.032	mg/L			06/24/17 11:24	1
Sulfate	<1.4		5.0	1.4	mg/L			06/20/17 15:24	1

Client Sample Results

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

TestAmerica Job ID: 400-139178-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13136 MW-2 DUP

Lab Sample ID: 400-139178-6

Date Collected: 06/06/17 11:53

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.2		2.0	0.60	mg/L			06/20/17 17:07	1
Fluoride	0.038	J	0.10	0.032	mg/L			06/24/17 10:40	1
Sulfate	<1.4		5.0	1.4	mg/L			06/20/17 15:24	1

Client Sample ID: AX13137 MW-16

Lab Sample ID: 400-139178-7

Date Collected: 06/06/17 13:02

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19		2.0	0.60	mg/L			06/20/17 17:08	1
Fluoride	0.053	J	0.10	0.032	mg/L			06/24/17 10:38	1
Sulfate	<1.4		5.0	1.4	mg/L			06/20/17 15:24	1

Client Sample ID: AX13138 MW-15

Lab Sample ID: 400-139178-8

Date Collected: 06/06/17 14:00

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	35		2.0	0.60	mg/L			06/20/17 17:08	1
Fluoride	0.18		0.10	0.032	mg/L			06/24/17 10:36	1
Sulfate	<1.4		5.0	1.4	mg/L			06/20/17 15:24	1

Client Sample ID: AX13139 MW-14

Lab Sample ID: 400-139178-9

Date Collected: 06/06/17 15:12

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44		2.0	0.60	mg/L			06/21/17 13:25	1
Fluoride	0.077	J	0.10	0.032	mg/L			06/24/17 10:34	1
Sulfate	<1.4		5.0	1.4	mg/L			06/21/17 15:00	1

Client Sample ID: AX13140 MW-13

Lab Sample ID: 400-139178-10

Date Collected: 06/07/17 08:50

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	49		2.0	0.60	mg/L			06/21/17 13:25	1
Fluoride	0.070	J	0.10	0.032	mg/L			06/27/17 16:59	1
Sulfate	6.0		5.0	1.4	mg/L			06/21/17 15:00	1

Client Sample ID: AX13141 MW-12

Lab Sample ID: 400-139178-11

Date Collected: 06/07/17 09:48

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23		2.0	0.60	mg/L			06/21/17 13:25	1

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-139178-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13141 MW-12

Lab Sample ID: 400-139178-11

Date Collected: 06/07/17 09:48

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.060	J	0.10	0.032	mg/L			06/24/17 11:33	1
Sulfate	<1.4		5.0	1.4	mg/L			06/21/17 15:00	1

Client Sample ID: AX13142 MW-12 DUP

Lab Sample ID: 400-139178-12

Date Collected: 06/07/17 09:48

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23		2.0	0.60	mg/L			06/21/17 13:25	1
Fluoride	0.060	J	0.10	0.032	mg/L			06/24/17 11:31	1
Sulfate	<1.4		5.0	1.4	mg/L			06/21/17 15:00	1

Client Sample ID: AX13143 MW-11

Lab Sample ID: 400-139178-13

Date Collected: 06/07/17 11:00

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24		2.0	0.60	mg/L			06/21/17 13:25	1
Fluoride	0.060	J	0.10	0.032	mg/L			06/24/17 11:29	1
Sulfate	<1.4		5.0	1.4	mg/L			06/21/17 15:00	1

Client Sample ID: AX13144 MW-10

Lab Sample ID: 400-139178-14

Date Collected: 06/07/17 12:08

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22		2.0	0.60	mg/L			06/21/17 13:25	1
Fluoride	0.040	J	0.10	0.032	mg/L			06/24/17 11:26	1
Sulfate	<1.4		5.0	1.4	mg/L			06/21/17 15:00	1

Client Sample ID: AX13145 EB-1

Lab Sample ID: 400-139178-15

Date Collected: 06/07/17 12:30

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			06/21/17 13:25	1
Fluoride	<0.032		0.10	0.032	mg/L			06/24/17 11:36	1
Sulfate	<1.4		5.0	1.4	mg/L			06/21/17 15:00	1

Client Sample ID: AX13146 MW-9

Lab Sample ID: 400-139178-16

Date Collected: 06/07/17 13:15

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27		2.0	0.60	mg/L			06/21/17 13:25	1
Fluoride	0.060	J	0.10	0.032	mg/L			06/24/17 11:45	1

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-139178-1
SDG: Barry Ash Pond (8)

Client Sample ID: AX13146 MW-9

Lab Sample ID: 400-139178-16

Date Collected: 06/07/17 13:15

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.4		5.0	1.4	mg/L			06/21/17 15:00	1

Client Sample ID: AX13147 MW-7

Lab Sample ID: 400-139178-17

Date Collected: 06/07/17 15:00

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14		2.0	0.60	mg/L			06/21/17 13:25	1
Fluoride	0.080	J	0.10	0.032	mg/L			06/24/17 11:38	1
Sulfate	<1.4		5.0	1.4	mg/L			06/21/17 15:00	1

Client Sample ID: AX13148 FB-2

Lab Sample ID: 400-139178-18

Date Collected: 06/07/17 14:08

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			06/21/17 13:25	1
Fluoride	<0.032		0.10	0.032	mg/L			06/24/17 11:53	1
Sulfate	<1.4		5.0	1.4	mg/L			06/21/17 15:00	1

Client Sample ID: AX13149 MW-8

Lab Sample ID: 400-139178-19

Date Collected: 06/07/17 12:39

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24		2.0	0.60	mg/L			06/21/17 13:27	1
Fluoride	0.050	J	0.10	0.032	mg/L			06/24/17 11:51	1
Sulfate	<1.4		5.0	1.4	mg/L			06/21/17 15:03	1

Client Sample ID: AX13150 MW-5

Lab Sample ID: 400-139178-20

Date Collected: 06/07/17 13:40

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21		2.0	0.60	mg/L			06/21/17 13:27	1
Fluoride	0.050	J	0.10	0.032	mg/L			06/24/17 12:05	1
Sulfate	<1.4		5.0	1.4	mg/L			06/21/17 15:03	1

Client Sample ID: AX13151 MW-6

Lab Sample ID: 400-139178-21

Date Collected: 06/07/17 14:35

Matrix: Water

Date Received: 06/13/17 08:53

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.9		2.0	0.60	mg/L			06/21/17 13:27	1
Fluoride	<0.032		0.10	0.032	mg/L			06/24/17 11:17	1
Sulfate	1.5	J	5.0	1.4	mg/L			06/21/17 15:03	1

TestAmerica Pensacola

Definitions/Glossary

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

TestAmerica Job ID: 400-139178-1
SDG: Barry 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.
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 Barry

TestAmerica Job ID: 400-139178-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13131 MW-4

Lab Sample ID: 400-139178-1

Date Collected: 06/06/17 08:50

Matrix: Water

Date Received: 06/13/17 08:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	357751	06/20/17 17:07	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	358226	06/24/17 10:12	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	357730	06/20/17 15:22	JLB	TAL PEN

Client Sample ID: AX13132 MW-3

Lab Sample ID: 400-139178-2

Date Collected: 06/06/17 09:42

Matrix: Water

Date Received: 06/13/17 08:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	357751	06/20/17 17:07	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	358226	06/24/17 10:14	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	357730	06/20/17 15:22	JLB	TAL PEN

Client Sample ID: AX13133 MW-1

Lab Sample ID: 400-139178-3

Date Collected: 06/06/17 10:55

Matrix: Water

Date Received: 06/13/17 08:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	357751	06/20/17 17:07	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	358226	06/24/17 10:22	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	357730	06/20/17 15:22	JLB	TAL PEN

Client Sample ID: AX13134 FB-1

Lab Sample ID: 400-139178-4

Date Collected: 06/06/17 10:23

Matrix: Water

Date Received: 06/13/17 08:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	357751	06/20/17 17:07	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	358226	06/24/17 10:32	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	357730	06/20/17 15:22	JLB	TAL PEN

Client Sample ID: AX13135 MW-2

Lab Sample ID: 400-139178-5

Date Collected: 06/06/17 11:53

Matrix: Water

Date Received: 06/13/17 08:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	357751	06/20/17 17:07	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	358231	06/24/17 11:24	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	357730	06/20/17 15:24	JLB	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-139178-1
SDG: Barry Ash Pond (8)

Client Sample ID: AX13136 MW-2 DUP

Lab Sample ID: 400-139178-6

Date Collected: 06/06/17 11:53

Matrix: Water

Date Received: 06/13/17 08:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	357751	06/20/17 17:07	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	358226	06/24/17 10:40	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	357730	06/20/17 15:24	JLB	TAL PEN

Client Sample ID: AX13137 MW-16

Lab Sample ID: 400-139178-7

Date Collected: 06/06/17 13:02

Matrix: Water

Date Received: 06/13/17 08:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	357751	06/20/17 17:08	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	358226	06/24/17 10:38	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	357730	06/20/17 15:24	JLB	TAL PEN

Client Sample ID: AX13138 MW-15

Lab Sample ID: 400-139178-8

Date Collected: 06/06/17 14:00

Matrix: Water

Date Received: 06/13/17 08:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	357751	06/20/17 17:08	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	358226	06/24/17 10:36	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	357730	06/20/17 15:24	JLB	TAL PEN

Client Sample ID: AX13139 MW-14

Lab Sample ID: 400-139178-9

Date Collected: 06/06/17 15:12

Matrix: Water

Date Received: 06/13/17 08:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	357866	06/21/17 13:25	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	358226	06/24/17 10:34	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	357892	06/21/17 15:00	JLB	TAL PEN

Client Sample ID: AX13140 MW-13

Lab Sample ID: 400-139178-10

Date Collected: 06/07/17 08:50

Matrix: Water

Date Received: 06/13/17 08:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	357866	06/21/17 13:25	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	358604	06/27/17 16:59	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	357892	06/21/17 15:00	JLB	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-139178-1
SDG: Barry Ash Pond (8)

Client Sample ID: AX13141 MW-12

Lab Sample ID: 400-139178-11

Date Collected: 06/07/17 09:48

Matrix: Water

Date Received: 06/13/17 08:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	357866	06/21/17 13:25	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	358231	06/24/17 11:33	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	357892	06/21/17 15:00	JLB	TAL PEN

Client Sample ID: AX13142 MW-12 DUP

Lab Sample ID: 400-139178-12

Date Collected: 06/07/17 09:48

Matrix: Water

Date Received: 06/13/17 08:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	357866	06/21/17 13:25	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	358231	06/24/17 11:31	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	357892	06/21/17 15:00	JLB	TAL PEN

Client Sample ID: AX13143 MW-11

Lab Sample ID: 400-139178-13

Date Collected: 06/07/17 11:00

Matrix: Water

Date Received: 06/13/17 08:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	357866	06/21/17 13:25	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	358231	06/24/17 11:29	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	357892	06/21/17 15:00	JLB	TAL PEN

Client Sample ID: AX13144 MW-10

Lab Sample ID: 400-139178-14

Date Collected: 06/07/17 12:08

Matrix: Water

Date Received: 06/13/17 08:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	357866	06/21/17 13:25	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	358231	06/24/17 11:26	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	357892	06/21/17 15:00	JLB	TAL PEN

Client Sample ID: AX13145 EB-1

Lab Sample ID: 400-139178-15

Date Collected: 06/07/17 12:30

Matrix: Water

Date Received: 06/13/17 08:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	357866	06/21/17 13:25	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	358231	06/24/17 11:36	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	357892	06/21/17 15:00	JLB	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-139178-1
SDG: Barry Ash Pond (8)

Client Sample ID: AX13146 MW-9

Lab Sample ID: 400-139178-16

Date Collected: 06/07/17 13:15

Matrix: Water

Date Received: 06/13/17 08:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	357866	06/21/17 13:25	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	358231	06/24/17 11:45	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	357892	06/21/17 15:00	JLB	TAL PEN

Client Sample ID: AX13147 MW-7

Lab Sample ID: 400-139178-17

Date Collected: 06/07/17 15:00

Matrix: Water

Date Received: 06/13/17 08:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	357866	06/21/17 13:25	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	358231	06/24/17 11:38	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	357892	06/21/17 15:00	JLB	TAL PEN

Client Sample ID: AX13148 FB-2

Lab Sample ID: 400-139178-18

Date Collected: 06/07/17 14:08

Matrix: Water

Date Received: 06/13/17 08:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	357866	06/21/17 13:25	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	358231	06/24/17 11:53	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	357892	06/21/17 15:00	JLB	TAL PEN

Client Sample ID: AX13149 MW-8

Lab Sample ID: 400-139178-19

Date Collected: 06/07/17 12:39

Matrix: Water

Date Received: 06/13/17 08:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	357866	06/21/17 13:27	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	358231	06/24/17 11:51	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	357892	06/21/17 15:03	JLB	TAL PEN

Client Sample ID: AX13150 MW-5

Lab Sample ID: 400-139178-20

Date Collected: 06/07/17 13:40

Matrix: Water

Date Received: 06/13/17 08:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	357866	06/21/17 13:27	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	358231	06/24/17 12:05	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	357892	06/21/17 15:03	JLB	TAL PEN

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-139178-1
SDG: Barry Ash Pond (8)

Client Sample ID: AX13151 MW-6

Lab Sample ID: 400-139178-21

Date Collected: 06/07/17 14:35

Matrix: Water

Date Received: 06/13/17 08:53

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	357866	06/21/17 13:27	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	358231	06/24/17 11:17	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	357892	06/21/17 15:03	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 Barry

TestAmerica Job ID: 400-139178-1
SDG: Barry Ash Pond (8)

General Chemistry

Analysis Batch: 357730

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139178-1	AX13131 MW-4	Total/NA	Water	SM 4500 SO4 E	
400-139178-2	AX13132 MW-3	Total/NA	Water	SM 4500 SO4 E	
400-139178-3	AX13133 MW-1	Total/NA	Water	SM 4500 SO4 E	
400-139178-4	AX13134 FB-1	Total/NA	Water	SM 4500 SO4 E	
400-139178-5	AX13135 MW-2	Total/NA	Water	SM 4500 SO4 E	
400-139178-6	AX13136 MW-2 DUP	Total/NA	Water	SM 4500 SO4 E	
400-139178-7	AX13137 MW-16	Total/NA	Water	SM 4500 SO4 E	
400-139178-8	AX13138 MW-15	Total/NA	Water	SM 4500 SO4 E	
MB 400-357730/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-357730/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-357730/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-139172-A-10 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-139172-A-10 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 357751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139178-1	AX13131 MW-4	Total/NA	Water	SM 4500 Cl- E	
400-139178-2	AX13132 MW-3	Total/NA	Water	SM 4500 Cl- E	
400-139178-3	AX13133 MW-1	Total/NA	Water	SM 4500 Cl- E	
400-139178-4	AX13134 FB-1	Total/NA	Water	SM 4500 Cl- E	
400-139178-5	AX13135 MW-2	Total/NA	Water	SM 4500 Cl- E	
400-139178-6	AX13136 MW-2 DUP	Total/NA	Water	SM 4500 Cl- E	
400-139178-7	AX13137 MW-16	Total/NA	Water	SM 4500 Cl- E	
400-139178-8	AX13138 MW-15	Total/NA	Water	SM 4500 Cl- E	
MB 400-357751/16	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-357751/17	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-357751/13	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-139424-A-1 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-139424-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 357866

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139178-9	AX13139 MW-14	Total/NA	Water	SM 4500 Cl- E	
400-139178-10	AX13140 MW-13	Total/NA	Water	SM 4500 Cl- E	
400-139178-11	AX13141 MW-12	Total/NA	Water	SM 4500 Cl- E	
400-139178-12	AX13142 MW-12 DUP	Total/NA	Water	SM 4500 Cl- E	
400-139178-13	AX13143 MW-11	Total/NA	Water	SM 4500 Cl- E	
400-139178-14	AX13144 MW-10	Total/NA	Water	SM 4500 Cl- E	
400-139178-15	AX13145 EB-1	Total/NA	Water	SM 4500 Cl- E	
400-139178-16	AX13146 MW-9	Total/NA	Water	SM 4500 Cl- E	
400-139178-17	AX13147 MW-7	Total/NA	Water	SM 4500 Cl- E	
400-139178-18	AX13148 FB-2	Total/NA	Water	SM 4500 Cl- E	
400-139178-19	AX13149 MW-8	Total/NA	Water	SM 4500 Cl- E	
400-139178-20	AX13150 MW-5	Total/NA	Water	SM 4500 Cl- E	
400-139178-21	AX13151 MW-6	Total/NA	Water	SM 4500 Cl- E	
MB 400-357866/16	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-357866/17	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-357866/13	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-139178-10 MS	AX13140 MW-13	Total/NA	Water	SM 4500 Cl- E	
400-139178-10 MSD	AX13140 MW-13	Total/NA	Water	SM 4500 Cl- E	
400-139178-16 MS	AX13146 MW-9	Total/NA	Water	SM 4500 Cl- E	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-139178-1
 SDG: Barry Ash Pond (8)

General Chemistry (Continued)

Analysis Batch: 357866 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139178-16 MSD	AX13146 MW-9	Total/NA	Water	SM 4500 Cl- E	
400-139178-21 MS	AX13151 MW-6	Total/NA	Water	SM 4500 Cl- E	
400-139178-21 MSD	AX13151 MW-6	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 357892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139178-9	AX13139 MW-14	Total/NA	Water	SM 4500 SO4 E	
400-139178-10	AX13140 MW-13	Total/NA	Water	SM 4500 SO4 E	
400-139178-11	AX13141 MW-12	Total/NA	Water	SM 4500 SO4 E	
400-139178-12	AX13142 MW-12 DUP	Total/NA	Water	SM 4500 SO4 E	
400-139178-13	AX13143 MW-11	Total/NA	Water	SM 4500 SO4 E	
400-139178-14	AX13144 MW-10	Total/NA	Water	SM 4500 SO4 E	
400-139178-15	AX13145 EB-1	Total/NA	Water	SM 4500 SO4 E	
400-139178-16	AX13146 MW-9	Total/NA	Water	SM 4500 SO4 E	
400-139178-17	AX13147 MW-7	Total/NA	Water	SM 4500 SO4 E	
400-139178-18	AX13148 FB-2	Total/NA	Water	SM 4500 SO4 E	
400-139178-19	AX13149 MW-8	Total/NA	Water	SM 4500 SO4 E	
400-139178-20	AX13150 MW-5	Total/NA	Water	SM 4500 SO4 E	
400-139178-21	AX13151 MW-6	Total/NA	Water	SM 4500 SO4 E	
MB 400-357892/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-357892/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-357892/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-139178-10 MS	AX13140 MW-13	Total/NA	Water	SM 4500 SO4 E	
400-139178-10 MSD	AX13140 MW-13	Total/NA	Water	SM 4500 SO4 E	
400-139178-16 MS	AX13146 MW-9	Total/NA	Water	SM 4500 SO4 E	
400-139178-16 MSD	AX13146 MW-9	Total/NA	Water	SM 4500 SO4 E	
400-139178-21 MS	AX13151 MW-6	Total/NA	Water	SM 4500 SO4 E	
400-139178-21 MSD	AX13151 MW-6	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 358226

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139178-1	AX13131 MW-4	Total/NA	Water	SM 4500 F C	
400-139178-2	AX13132 MW-3	Total/NA	Water	SM 4500 F C	
400-139178-3	AX13133 MW-1	Total/NA	Water	SM 4500 F C	
400-139178-4	AX13134 FB-1	Total/NA	Water	SM 4500 F C	
400-139178-6	AX13136 MW-2 DUP	Total/NA	Water	SM 4500 F C	
400-139178-7	AX13137 MW-16	Total/NA	Water	SM 4500 F C	
400-139178-8	AX13138 MW-15	Total/NA	Water	SM 4500 F C	
400-139178-9	AX13139 MW-14	Total/NA	Water	SM 4500 F C	
MB 400-358226/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-358226/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-139172-A-14 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-139172-A-14 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-139178-3 DU	AX13133 MW-1	Total/NA	Water	SM 4500 F C	

Analysis Batch: 358231

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139178-5	AX13135 MW-2	Total/NA	Water	SM 4500 F C	
400-139178-11	AX13141 MW-12	Total/NA	Water	SM 4500 F C	
400-139178-12	AX13142 MW-12 DUP	Total/NA	Water	SM 4500 F C	
400-139178-13	AX13143 MW-11	Total/NA	Water	SM 4500 F C	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-139178-1
SDG: Barry Ash Pond (8)

General Chemistry (Continued)

Analysis Batch: 358231 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139178-14	AX13144 MW-10	Total/NA	Water	SM 4500 F C	
400-139178-15	AX13145 EB-1	Total/NA	Water	SM 4500 F C	
400-139178-16	AX13146 MW-9	Total/NA	Water	SM 4500 F C	
400-139178-17	AX13147 MW-7	Total/NA	Water	SM 4500 F C	
400-139178-18	AX13148 FB-2	Total/NA	Water	SM 4500 F C	
400-139178-19	AX13149 MW-8	Total/NA	Water	SM 4500 F C	
400-139178-20	AX13150 MW-5	Total/NA	Water	SM 4500 F C	
400-139178-21	AX13151 MW-6	Total/NA	Water	SM 4500 F C	
MB 400-358231/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-358231/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-139178-16 MS	AX13146 MW-9	Total/NA	Water	SM 4500 F C	
400-139178-16 MSD	AX13146 MW-9	Total/NA	Water	SM 4500 F C	
400-139178-21 MS	AX13151 MW-6	Total/NA	Water	SM 4500 F C	
400-139178-21 MSD	AX13151 MW-6	Total/NA	Water	SM 4500 F C	

Analysis Batch: 358604

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139178-10	AX13140 MW-13	Total/NA	Water	SM 4500 F C	
MB 400-358604/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-358604/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-139178-10 MS	AX13140 MW-13	Total/NA	Water	SM 4500 F C	
400-139178-10 MSD	AX13140 MW-13	Total/NA	Water	SM 4500 F C	
400-139305-A-9 DU	Duplicate	Total/NA	Water	SM 4500 F C	

QC Sample Results

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

TestAmerica Job ID: 400-139178-1
 SDG: Barry Ash Pond (8)

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-357751/16
Matrix: Water
Analysis Batch: 357751

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			06/20/17 16:20	1

Lab Sample ID: LCS 400-357751/17
Matrix: Water
Analysis Batch: 357751

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	32.5		mg/L		108	90 - 110

Lab Sample ID: MRL 400-357751/13
Matrix: Water
Analysis Batch: 357751

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	1.27	J	mg/L		63	50 - 150

Lab Sample ID: 400-139424-A-1 MS
Matrix: Water
Analysis Batch: 357751

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	14		10.0	24.5		mg/L		108	73 - 120

Lab Sample ID: 400-139424-A-1 MSD
Matrix: Water
Analysis Batch: 357751

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	14		10.0	24.6		mg/L		109	73 - 120	0	8

Lab Sample ID: MB 400-357866/16
Matrix: Water
Analysis Batch: 357866

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			06/21/17 11:27	1

Lab Sample ID: LCS 400-357866/17
Matrix: Water
Analysis Batch: 357866

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 400-357866/13
Matrix: Water
Analysis Batch: 357866

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	1.09	J	mg/L		54	50 - 150

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-139178-1
 SDG: Barry Ash Pond (8)

Lab Sample ID: 400-139178-10 MS
Matrix: Water
Analysis Batch: 357866

Client Sample ID: AX13140 MW-13
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	49		10.0	56.9	4	mg/L		82	73 - 120

Lab Sample ID: 400-139178-10 MSD
Matrix: Water
Analysis Batch: 357866

Client Sample ID: AX13140 MW-13
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	49		10.0	57.0	4	mg/L		82	73 - 120	0	8

Lab Sample ID: 400-139178-16 MS
Matrix: Water
Analysis Batch: 357866

Client Sample ID: AX13146 MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	27		10.0	36.7		mg/L		99	73 - 120

Lab Sample ID: 400-139178-16 MSD
Matrix: Water
Analysis Batch: 357866

Client Sample ID: AX13146 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	27		10.0	36.5		mg/L		97	73 - 120	0	8

Lab Sample ID: 400-139178-21 MS
Matrix: Water
Analysis Batch: 357866

Client Sample ID: AX13151 MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.9		10.0	17.7		mg/L		118	73 - 120

Lab Sample ID: 400-139178-21 MSD
Matrix: Water
Analysis Batch: 357866

Client Sample ID: AX13151 MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	5.9		10.0	17.5		mg/L		116	73 - 120	1	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-358226/3
Matrix: Water
Analysis Batch: 358226

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			06/24/17 09:45	1

QC Sample Results

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

TestAmerica Job ID: 400-139178-1
 SDG: Barry Ash Pond (8)

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: LCS 400-358226/4
Matrix: Water
Analysis Batch: 358226

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: 400-139172-A-14 MS
Matrix: Water
Analysis Batch: 358226

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	0.11		1.00	1.10		mg/L		99	75 - 125

Lab Sample ID: 400-139172-A-14 MSD
Matrix: Water
Analysis Batch: 358226

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	0.11		1.00	1.08		mg/L		97	75 - 125	2	4

Lab Sample ID: 400-139178-3 DU
Matrix: Water
Analysis Batch: 358226

Client Sample ID: AX13133 MW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride	0.049	J	0.0480	J	mg/L		2	4

Lab Sample ID: MB 400-358231/3
Matrix: Water
Analysis Batch: 358231

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			06/24/17 11:09	1

Lab Sample ID: LCS 400-358231/4
Matrix: Water
Analysis Batch: 358231

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: 400-139178-16 MS
Matrix: Water
Analysis Batch: 358231

Client Sample ID: AX13146 MW-9
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	1.02		mg/L		96	75 - 125

Lab Sample ID: 400-139178-16 MSD
Matrix: Water
Analysis Batch: 358231

Client Sample ID: AX13146 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	0.060	J	1.00	1.00		mg/L		94	75 - 125	2	4

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-139178-1
 SDG: Barry Ash Pond (8)

Lab Sample ID: 400-139178-21 MS
Matrix: Water
Analysis Batch: 358231

Client Sample ID: AX13151 MW-6
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	1.00		mg/L		100	75 - 125

Lab Sample ID: 400-139178-21 MSD
Matrix: Water
Analysis Batch: 358231

Client Sample ID: AX13151 MW-6
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	1.00		mg/L		100	75 - 125	0	4

Lab Sample ID: MB 400-358604/3
Matrix: Water
Analysis Batch: 358604

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			06/27/17 16:45	1

Lab Sample ID: LCS 400-358604/4
Matrix: Water
Analysis Batch: 358604

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	4.02		mg/L		101	90 - 110

Lab Sample ID: 400-139178-10 MS
Matrix: Water
Analysis Batch: 358604

Client Sample ID: AX13140 MW-13
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	1.02		mg/L		95	75 - 125

Lab Sample ID: 400-139178-10 MSD
Matrix: Water
Analysis Batch: 358604

Client Sample ID: AX13140 MW-13
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	0	4

Lab Sample ID: 400-139305-A-9 DU
Matrix: Water
Analysis Batch: 358604

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride	0.070	J	0.0700	J	mg/L		0	4

QC Sample Results

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

TestAmerica Job ID: 400-139178-1
 SDG: Barry Ash Pond (8)

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-357730/6
Matrix: Water
Analysis Batch: 357730

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			06/20/17 14:44	1

Lab Sample ID: LCS 400-357730/7
Matrix: Water
Analysis Batch: 357730

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 400-357730/3
Matrix: Water
Analysis Batch: 357730

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	4.16	J	mg/L		83	50 - 150

Lab Sample ID: 400-139172-A-10 MS
Matrix: Water
Analysis Batch: 357730

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	22		10.0	32.5		mg/L		107	77 - 128

Lab Sample ID: 400-139172-A-10 MSD
Matrix: Water
Analysis Batch: 357730

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	22		10.0	32.2		mg/L		104	77 - 128	1	5

Lab Sample ID: MB 400-357892/6
Matrix: Water
Analysis Batch: 357892

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			06/21/17 14:40	1

Lab Sample ID: LCS 400-357892/7
Matrix: Water
Analysis Batch: 357892

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	15.8		mg/L		106	90 - 110

Lab Sample ID: MRL 400-357892/3
Matrix: Water
Analysis Batch: 357892

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	4.37	J	mg/L		87	50 - 150

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-139178-1
 SDG: Barry Ash Pond (8)

Lab Sample ID: 400-139178-10 MS
Matrix: Water
Analysis Batch: 357892

Client Sample ID: AX13140 MW-13
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	6.0		10.0	14.9		mg/L		89	77 - 128

Lab Sample ID: 400-139178-10 MSD
Matrix: Water
Analysis Batch: 357892

Client Sample ID: AX13140 MW-13
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	6.0		10.0	15.0		mg/L		90	77 - 128	1	5

Lab Sample ID: 400-139178-16 MS
Matrix: Water
Analysis Batch: 357892

Client Sample ID: AX13146 MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	<1.4		10.0	9.78		mg/L		98	77 - 128

Lab Sample ID: 400-139178-16 MSD
Matrix: Water
Analysis Batch: 357892

Client Sample ID: AX13146 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	<1.4		10.0	9.72		mg/L		97	77 - 128	1	5

Lab Sample ID: 400-139178-21 MS
Matrix: Water
Analysis Batch: 357892

Client Sample ID: AX13151 MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	1.5	J	10.0	10.9		mg/L		94	77 - 128

Lab Sample ID: 400-139178-21 MSD
Matrix: Water
Analysis Batch: 357892

Client Sample ID: AX13151 MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	1.5	J	10.0	11.0		mg/L		94	77 - 128	0	5

Chain of Custody Record

Client Information		Sampler: Nick Pitts/ Anthony Goggins Lab PM: Whitmire, Cheyenne R Client Contact: Sarah Copeland E-Mail: cheyenne.whitmire@testamericainc.com Camer Tracking No(s):	
Company: Alabama Power General Test Laboratory Address: 744 County Rd 87 GSC #8 City: Callera State, zip: AL, 35040 Phone: 205-664-6121(Tel) Email: sgcopela@southernco.com Project Name: CCR Site: Barry Ash Pond (8)		Due Date Requested: TAT Requested (days): PO #: WO #: Project #: 40007143 SSOW#:	
Analysis Requested			
Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> N Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> X SM 4500 F.C. <input checked="" type="checkbox"/> X SM 4500 Cl.E. <input checked="" type="checkbox"/> X SM 4500 SO4.E. <input checked="" type="checkbox"/> X		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)		Total Number of containers MW-10: 1 EB-1 (Equipment Blank): 1 MW-9: 1 MW-7: 1 FB-2 (Field Blank): 1 MW-8: 1 MW-5: 1 MW-5: 1	
Special Instructions/Note:			
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:			
<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Method of Shipment:	
Empty Kit Relinquished by: Sarah Copeland Relinquished by: Sarah Copeland Relinquished by: Relinquished by:		Date: Date/Time: 06/12/2017; 0930 Date/Time: Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks:	



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-139178-1
SDG Number: Barry Ash Pond (8)

Login Number: 139178

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	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	4.5°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <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 Barry

TestAmerica Job ID: 400-139178-1
 SDG: Barry 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	06-30-17
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	06-30-18
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	06-30-17
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	06-30-18

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: 400-139177-1

TestAmerica Sample Delivery Group: Barry Ash Pond (8)

Client Project/Site: CCR Plant Barry

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 5:56:45 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 Barry

TestAmerica Job ID: 400-139177-1
SDG: Barry Ash Pond (8)

Job ID: 400-139177-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-139177-1

RAD

Method(s) PrecSep_0: Radium 228 Prep Batch 160-314196. The following samples were reduced due to limited volume: AX13152 MW-4 (400-139177-1), AX13153 MW-2 (400-139177-2), AX13154 MW-1 (400-139177-3), AX13155 FB-1 (400-139177-4), AX13156 MW-2 (400-139177-5), AX13157 MW-2 DUP (400-139177-6), AX13158 MW-16 (400-139177-7), AX13159 MW-15 (400-139177-8), AX13160 MW-14 (400-139177-9), AX13160 MW-14 (400-139177-9[DU]), AX13161 MW-13 (400-139177-10), AX13162 MW-12 (400-139177-11), AX13163 MW-12 DUP (400-139177-12), AX13164 MW-11 (400-139177-13), AX13164 MW-11 (400-139177-13[DU]), AX13165 MW-10 (400-139177-14), AX13166 EB-1 (400-139177-15), AX13167 MW-9 (400-139177-16), AX13168 MW-7 (400-139177-17), AX13169 FB-2 (400-139177-18), AX13170 MW-8 (400-139177-19) and AX13171 MW-5 (400-139177-20).

Method(s) PrecSep_0: Radium 228 Prep Batch 160-314280. Insufficient sample volume was available to perform a sample duplicate (DU). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision. AX13172 MW-6 (400-139177-21)

Method(s) PrecSep_0: Radium 228 Prep Batch 160-314280. The following sample was reduced due to limited volume: AX13172 MW-6 (400-139177-21).

Method(s) PrecSep-21: Radium 226 Prep Batch 160-314192. The following samples were reduced due to limited volume: AX13152 MW-4 (400-139177-1), AX13153 MW-2 (400-139177-2), AX13154 MW-1 (400-139177-3), AX13155 FB-1 (400-139177-4), AX13156 MW-2 (400-139177-5), AX13157 MW-2 DUP (400-139177-6), AX13158 MW-16 (400-139177-7), AX13159 MW-15 (400-139177-8), AX13160 MW-14 (400-139177-9), AX13160 MW-14 (400-139177-9[DU]), AX13161 MW-13 (400-139177-10), AX13162 MW-12 (400-139177-11), AX13163 MW-12 DUP (400-139177-12), AX13164 MW-11 (400-139177-13), AX13164 MW-11 (400-139177-13[DU]), AX13165 MW-10 (400-139177-14), AX13166 EB-1 (400-139177-15), AX13167 MW-9 (400-139177-16), AX13168 MW-7 (400-139177-17), AX13169 FB-2 (400-139177-18), AX13170 MW-8 (400-139177-19) and AX13171 MW-5 (400-139177-20).

Method(s) PrecSep-21: Radium 226 Prep Batch 160-314266. The following sample was reduced due to limited volume: AX13172 MW-6 (400-139177-21).

Method Summary

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

TestAmerica Job ID: 400-139177-1
SDG: Barry 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 Barry

TestAmerica Job ID: 400-139177-1
SDG: Barry Ash Pond (8)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-139177-1	AX13152 MW-4	Water	06/06/17 08:50	06/12/17 14:27
400-139177-2	AX13153 MW-3	Water	06/06/17 09:42	06/12/17 14:27
400-139177-3	AX13154 MW-1	Water	06/06/17 10:55	06/12/17 14:27
400-139177-4	AX13155 FB-1	Water	06/06/17 10:23	06/12/17 14:27
400-139177-5	AX13156 MW-2	Water	06/06/17 11:53	06/12/17 14:27
400-139177-6	AX13157 MW-2 DUP	Water	06/06/17 11:53	06/12/17 14:27
400-139177-7	AX13158 MW-16	Water	06/06/17 13:02	06/12/17 14:27
400-139177-8	AX13159 MW-15	Water	06/06/17 14:00	06/12/17 14:27
400-139177-9	AX13160 MW-14	Water	06/06/17 15:12	06/12/17 14:27
400-139177-10	AX13161 MW-13	Water	06/07/17 08:50	06/12/17 14:27
400-139177-11	AX13162 MW-12	Water	06/07/17 09:48	06/12/17 14:27
400-139177-12	AX13163 MW-12 DUP	Water	06/07/17 09:48	06/12/17 14:27
400-139177-13	AX13164 MW-11	Water	06/07/17 11:00	06/12/17 14:27
400-139177-14	AX13165 MW-10	Water	06/07/17 12:08	06/12/17 14:27
400-139177-15	AX13166 EB-1	Water	06/07/17 12:30	06/12/17 14:27
400-139177-16	AX13167 MW-9	Water	06/07/17 13:15	06/12/17 14:27
400-139177-17	AX13168 MW-7	Water	06/07/17 15:00	06/12/17 14:27
400-139177-18	AX13169 FB-2	Water	06/07/17 14:08	06/12/17 14:27
400-139177-19	AX13170 MW-8	Water	06/07/17 12:39	06/12/17 14:27
400-139177-20	AX13171 MW-5	Water	06/07/17 13:40	06/12/17 14:27
400-139177-21	AX13172 MW-6	Water	06/07/17 14:35	06/12/17 14:27

Client Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13152 MW-4

Lab Sample ID: 400-139177-1

Date Collected: 06/06/17 08:50

Matrix: Water

Date Received: 06/12/17 14:27

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.141		0.0913	0.0922	1.00	0.123	pCi/L	06/20/17 07:44	07/12/17 05:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		40 - 110					06/20/17 07:44	07/12/17 05:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0426	U	0.270	0.270	1.00	0.477	pCi/L	06/20/17 08:14	06/28/17 14:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		40 - 110					06/20/17 08:14	06/28/17 14:38	1
Y Carrier	86.4		40 - 110					06/20/17 08:14	06/28/17 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	0.183	U	0.285	0.285	5.00	0.477	pCi/L		07/12/17 13:37	1

Client Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13153 MW-3

Lab Sample ID: 400-139177-2

Date Collected: 06/06/17 09:42

Matrix: Water

Date Received: 06/12/17 14:27

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.191		0.0948	0.0964	1.00	0.104	pCi/L	06/20/17 07:44	07/12/17 05:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					06/20/17 07:44	07/12/17 05:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.000	U	0.283	0.283	1.00	0.505	pCi/L	06/20/17 08:14	06/28/17 14:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					06/20/17 08:14	06/28/17 14:38	1
Y Carrier	88.2		40 - 110					06/20/17 08:14	06/28/17 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	0.191	U	0.299	0.299	5.00	0.505	pCi/L		07/12/17 13:37	1

Client Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13154 MW-1

Lab Sample ID: 400-139177-3

Date Collected: 06/06/17 10:55

Matrix: Water

Date Received: 06/12/17 14:27

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.837		0.189	0.204	1.00	0.125	pCi/L	06/20/17 07:44	07/12/17 05:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.1		40 - 110					06/20/17 07:44	07/12/17 05:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.406	U	0.374	0.376	1.00	0.603	pCi/L	06/20/17 08:14	06/28/17 14:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.1		40 - 110					06/20/17 08:14	06/28/17 14:38	1
Y Carrier	87.9		40 - 110					06/20/17 08:14	06/28/17 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	1.24		0.419	0.427	5.00	0.603	pCi/L		07/12/17 13:37	1

Client Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13155 FB-1

Lab Sample ID: 400-139177-4

Date Collected: 06/06/17 10:23

Matrix: Water

Date Received: 06/12/17 14:27

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.00428	U	0.0441	0.0441	1.00	0.101	pCi/L	06/20/17 07:44	07/12/17 05:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110					06/20/17 07:44	07/12/17 05:51	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	0.281	0.282	1.00	0.479	pCi/L	06/20/17 08:14	06/28/17 14:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110					06/20/17 08:14	06/28/17 14:38	1
Y Carrier	92.3		40 - 110					06/20/17 08:14	06/28/17 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	0.142	U	0.285	0.285	5.00	0.479	pCi/L		07/12/17 13:37	1

Client Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13156 MW-2

Lab Sample ID: 400-139177-5

Date Collected: 06/06/17 11:53

Matrix: Water

Date Received: 06/12/17 14:27

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		0.0644	0.0651	1.00	0.0661	pCi/L	06/20/17 07:44	07/12/17 05:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/20/17 07:44	07/12/17 05:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0236	U	0.247	0.247	1.00	0.450	pCi/L	06/20/17 08:14	06/28/17 14:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/20/17 08:14	06/28/17 14:50	1
Y Carrier	88.2		40 - 110					06/20/17 08:14	06/28/17 14:50	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0830	U	0.255	0.256	5.00	0.450	pCi/L		07/12/17 13:37	1

Client Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13157 MW-2 DUP

Lab Sample ID: 400-139177-6

Date Collected: 06/06/17 11:53

Matrix: Water

Date Received: 06/12/17 14:27

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0562	U	0.0743	0.0745	1.00	0.124	pCi/L	06/20/17 07:44	07/12/17 05:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					06/20/17 07:44	07/12/17 05:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.265	U	0.223	0.224	1.00	0.453	pCi/L	06/20/17 08:14	06/28/17 14:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					06/20/17 08:14	06/28/17 14:50	1
Y Carrier	90.1		40 - 110					06/20/17 08:14	06/28/17 14:50	1

Method: Ra226_Ra228 - Combined Radium-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	0.235	0.236	5.00	0.453	pCi/L		07/12/17 13:37	1

Client Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13158 MW-16

Lab Sample ID: 400-139177-7

Date Collected: 06/06/17 13:02

Matrix: Water

Date Received: 06/12/17 14:27

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.179		0.0870	0.0885	1.00	0.0914	pCi/L	06/20/17 07:44	07/12/17 05:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.4		40 - 110					06/20/17 07:44	07/12/17 05:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.369	U	0.260	0.262	1.00	0.402	pCi/L	06/20/17 08:14	06/28/17 14:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.4		40 - 110					06/20/17 08:14	06/28/17 14:50	1
Y Carrier	92.0		40 - 110					06/20/17 08:14	06/28/17 14:50	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.548		0.274	0.277	5.00	0.402	pCi/L		07/12/17 13:37	1

Client Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13159 MW-15

Lab Sample ID: 400-139177-8

Date Collected: 06/06/17 14:00

Matrix: Water

Date Received: 06/12/17 14:27

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		0.0895	0.0906	1.00	0.110	pCi/L	06/20/17 07:44	07/12/17 05:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		40 - 110					06/20/17 07:44	07/12/17 05:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0299	U	0.270	0.270	1.00	0.490	pCi/L	06/20/17 08:14	06/28/17 14:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.2		40 - 110					06/20/17 08:14	06/28/17 14:50	1
Y Carrier	88.6		40 - 110					06/20/17 08:14	06/28/17 14:50	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.128	U	0.285	0.285	5.00	0.490	pCi/L		07/12/17 13:37	1

Client Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13160 MW-14

Lab Sample ID: 400-139177-9

Date Collected: 06/06/17 15:12

Matrix: Water

Date Received: 06/12/17 14:27

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.178		0.0942	0.0956	1.00	0.110	pCi/L	06/20/17 07:44	07/12/17 05:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.8		40 - 110					06/20/17 07:44	07/12/17 05:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0196	U	0.254	0.254	1.00	0.456	pCi/L	06/20/17 08:14	06/28/17 14:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.8		40 - 110					06/20/17 08:14	06/28/17 14:50	1
Y Carrier	89.3		40 - 110					06/20/17 08:14	06/28/17 14:50	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.198	U	0.271	0.271	5.00	0.456	pCi/L		07/12/17 13:37	1

Client Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13161 MW-13

Lab Sample ID: 400-139177-10

Date Collected: 06/07/17 08:50

Matrix: Water

Date Received: 06/12/17 14:27

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.263		0.108	0.111	1.00	0.107	pCi/L	06/20/17 07:44	07/12/17 05:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.2		40 - 110					06/20/17 07:44	07/12/17 05:52	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.489		0.311	0.315	1.00	0.476	pCi/L	06/20/17 08:14	06/28/17 14:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.2		40 - 110					06/20/17 08:14	06/28/17 14:50	1
Y Carrier	86.4		40 - 110					06/20/17 08:14	06/28/17 14:50	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.752		0.330	0.334	5.00	0.476	pCi/L		07/12/17 13:37	1

Client Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13162 MW-12

Lab Sample ID: 400-139177-11

Date Collected: 06/07/17 09:48

Matrix: Water

Date Received: 06/12/17 14:27

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.264		0.102	0.105	1.00	0.0921	pCi/L	06/20/17 07:44	07/12/17 05:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/20/17 07:44	07/12/17 05:52	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.441		0.270	0.273	1.00	0.402	pCi/L	06/20/17 08:14	06/28/17 14:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/20/17 08:14	06/28/17 14:50	1
Y Carrier	86.7		40 - 110					06/20/17 08:14	06/28/17 14:50	1

Method: Ra226_Ra228 - Combined Radium-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		0.288	0.292	5.00	0.402	pCi/L		07/12/17 13:37	1

Client Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13163 MW-12 DUP

Lab Sample ID: 400-139177-12

Date Collected: 06/07/17 09:48

Matrix: Water

Date Received: 06/12/17 14:27

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		0.109	0.111	1.00	0.126	pCi/L	06/20/17 07:44	07/12/17 05:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/20/17 07:44	07/12/17 05:52	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.239	U	0.263	0.264	1.00	0.432	pCi/L	06/20/17 08:14	06/28/17 14:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/20/17 08:14	06/28/17 14:50	1
Y Carrier	89.7		40 - 110					06/20/17 08:14	06/28/17 14:50	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.481		0.285	0.287	5.00	0.432	pCi/L		07/12/17 13:37	1

Client Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13164 MW-11

Lab Sample ID: 400-139177-13

Date Collected: 06/07/17 11:00

Matrix: Water

Date Received: 06/12/17 14:27

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.312		0.120	0.123	1.00	0.125	pCi/L	06/20/17 07:44	07/12/17 05:52	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					06/20/17 07:44	07/12/17 05:52	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.725		0.333	0.340	1.00	0.482	pCi/L	06/20/17 08:14	06/28/17 14:49	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.4		40 - 110					06/20/17 08:14	06/28/17 14:49	1
Y Carrier	92.3		40 - 110					06/20/17 08:14	06/28/17 14:49	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	1.04		0.354	0.361	5.00	0.482	pCi/L		07/12/17 13:37	1

Client Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13165 MW-10

Lab Sample ID: 400-139177-14

Date Collected: 06/07/17 12:08

Matrix: Water

Date Received: 06/12/17 14:27

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.283		0.120	0.123	1.00	0.132	pCi/L	06/20/17 07:44	07/12/17 05:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.7		40 - 110					06/20/17 07:44	07/12/17 05:53	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0288	U	0.300	0.300	1.00	0.547	pCi/L	06/20/17 08:14	06/28/17 14:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.7		40 - 110					06/20/17 08:14	06/28/17 14:35	1
Y Carrier	82.2		40 - 110					06/20/17 08:14	06/28/17 14:35	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	0.254	U	0.324	0.325	5.00	0.547	pCi/L		07/12/17 13:37	1

Client Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13166 EB-1

Lab Sample ID: 400-139177-15

Date Collected: 06/07/17 12:30

Matrix: Water

Date Received: 06/12/17 14:27

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.00946	U	0.0481	0.0481	1.00	0.110	pCi/L	06/20/17 07:44	07/12/17 05:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110					06/20/17 07:44	07/12/17 05:53	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.145	U	0.322	0.323	1.00	0.590	pCi/L	06/20/17 08:14	06/28/17 14:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.9		40 - 110					06/20/17 08:14	06/28/17 14:35	1
Y Carrier	89.3		40 - 110					06/20/17 08:14	06/28/17 14:35	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	-0.154	U	0.326	0.326	5.00	0.590	pCi/L		07/12/17 13:37	1

Client Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13167 MW-9

Lab Sample ID: 400-139177-16

Date Collected: 06/07/17 13:15

Matrix: Water

Date Received: 06/12/17 14:27

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		0.127	0.132	1.00	0.105	pCi/L	06/20/17 07:44	07/12/17 05:53	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					06/20/17 07:44	07/12/17 05:53	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.379	U	0.310	0.312	1.00	0.493	pCi/L	06/20/17 08:14	06/28/17 14:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					06/20/17 08:14	06/28/17 14:35	1
Y Carrier	89.3		40 - 110					06/20/17 08:14	06/28/17 14:35	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	0.758		0.335	0.339	5.00	0.493	pCi/L		07/12/17 13:37	1

Client Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13168 MW-7

Lab Sample ID: 400-139177-17

Date Collected: 06/07/17 15:00

Matrix: Water

Date Received: 06/12/17 14:27

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0810	U	0.0851	0.0855	1.00	0.136	pCi/L	06/20/17 07:44	07/12/17 05:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.6		40 - 110					06/20/17 07:44	07/12/17 05:48	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.313	U	0.264	0.265	1.00	0.522	pCi/L	06/20/17 08:14	06/28/17 14:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.6		40 - 110					06/20/17 08:14	06/28/17 14:35	1
Y Carrier	90.5		40 - 110					06/20/17 08:14	06/28/17 14:35	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	-0.231	U	0.277	0.279	5.00	0.522	pCi/L		07/12/17 13:37	1

Client Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13169 FB-2

Lab Sample ID: 400-139177-18

Date Collected: 06/07/17 14:08

Matrix: Water

Date Received: 06/12/17 14:27

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0422	U	0.0559	0.0560	1.00	0.0934	pCi/L	06/20/17 07:44	07/12/17 05:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					06/20/17 07:44	07/12/17 05:48	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.147	U	0.226	0.226	1.00	0.432	pCi/L	06/20/17 08:14	06/28/17 14:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					06/20/17 08:14	06/28/17 14:35	1
Y Carrier	93.8		40 - 110					06/20/17 08:14	06/28/17 14:35	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	-0.104	U	0.233	0.233	5.00	0.432	pCi/L		07/12/17 13:37	1

Client Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13170 MW-8

Lab Sample ID: 400-139177-19

Date Collected: 06/07/17 12:39

Matrix: Water

Date Received: 06/12/17 14:27

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		0.110	0.114	1.00	0.103	pCi/L	06/20/17 07:44	07/12/17 05:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					06/20/17 07:44	07/12/17 05:48	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.102	U	0.342	0.342	1.00	0.589	pCi/L	06/20/17 08:14	06/28/17 14:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					06/20/17 08:14	06/28/17 14:35	1
Y Carrier	88.6		40 - 110					06/20/17 08:14	06/28/17 14:35	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	0.408	U	0.360	0.361	5.00	0.589	pCi/L		07/12/17 13:37	1

Client Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13171 MW-5

Lab Sample ID: 400-139177-20

Date Collected: 06/07/17 13:40

Matrix: Water

Date Received: 06/12/17 14:27

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.497		0.138	0.145	1.00	0.115	pCi/L	06/20/17 07:44	07/12/17 05:48	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/20/17 07:44	07/12/17 05:48	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.417	U	0.323	0.325	1.00	0.512	pCi/L	06/20/17 08:14	06/28/17 14:35	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/20/17 08:14	06/28/17 14:35	1
Y Carrier	88.6		40 - 110					06/20/17 08:14	06/28/17 14:35	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	0.915		0.351	0.356	5.00	0.512	pCi/L		07/12/17 13:37	1

Client Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13172 MW-6

Lab Sample ID: 400-139177-21

Date Collected: 06/07/17 14:35

Matrix: Water

Date Received: 06/12/17 14:27

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0262	U	0.0600	0.0600	1.00	0.111	pCi/L	06/20/17 09:28	07/12/17 08:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		40 - 110					06/20/17 09:28	07/12/17 08:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.545		0.353	0.356	1.00	0.544	pCi/L	06/20/17 09:58	06/28/17 11:11	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		40 - 110					06/20/17 09:58	06/28/17 11:11	1
Y Carrier	87.5		40 - 110					06/20/17 09:58	06/28/17 11:11	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	0.572		0.358	0.361	5.00	0.544	pCi/L		07/12/17 13:37	1

Definitions/Glossary

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

TestAmerica Job ID: 400-139177-1
SDG: Barry 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 Barry

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13152 MW-4

Lab Sample ID: 400-139177-1

Date Collected: 06/06/17 08:50

Matrix: Water

Date Received: 06/12/17 14:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			314192	06/20/17 07:44	LDE	TAL SL
Total/NA	Analysis	9315		1	316993	07/12/17 05:51	ALD	TAL SL
Total/NA	Prep	PrecSep_0			314196	06/20/17 08:14	LDE	TAL SL
Total/NA	Analysis	9320		1	315637	06/28/17 14:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	317058	07/12/17 13:37	RTM	TAL SL

Client Sample ID: AX13153 MW-3

Lab Sample ID: 400-139177-2

Date Collected: 06/06/17 09:42

Matrix: Water

Date Received: 06/12/17 14:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			314192	06/20/17 07:44	LDE	TAL SL
Total/NA	Analysis	9315		1	316993	07/12/17 05:51	ALD	TAL SL
Total/NA	Prep	PrecSep_0			314196	06/20/17 08:14	LDE	TAL SL
Total/NA	Analysis	9320		1	315637	06/28/17 14:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	317058	07/12/17 13:37	RTM	TAL SL

Client Sample ID: AX13154 MW-1

Lab Sample ID: 400-139177-3

Date Collected: 06/06/17 10:55

Matrix: Water

Date Received: 06/12/17 14:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			314192	06/20/17 07:44	LDE	TAL SL
Total/NA	Analysis	9315		1	316993	07/12/17 05:51	ALD	TAL SL
Total/NA	Prep	PrecSep_0			314196	06/20/17 08:14	LDE	TAL SL
Total/NA	Analysis	9320		1	315637	06/28/17 14:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	317058	07/12/17 13:37	RTM	TAL SL

Client Sample ID: AX13155 FB-1

Lab Sample ID: 400-139177-4

Date Collected: 06/06/17 10:23

Matrix: Water

Date Received: 06/12/17 14:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			314192	06/20/17 07:44	LDE	TAL SL
Total/NA	Analysis	9315		1	316993	07/12/17 05:51	ALD	TAL SL
Total/NA	Prep	PrecSep_0			314196	06/20/17 08:14	LDE	TAL SL
Total/NA	Analysis	9320		1	315637	06/28/17 14:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	317058	07/12/17 13:37	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-139177-1
SDG: Barry Ash Pond (8)

Client Sample ID: AX13156 MW-2

Lab Sample ID: 400-139177-5

Date Collected: 06/06/17 11:53

Matrix: Water

Date Received: 06/12/17 14:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			314192	06/20/17 07:44	LDE	TAL SL
Total/NA	Analysis	9315		1	316993	07/12/17 05:51	ALD	TAL SL
Total/NA	Prep	PrecSep_0			314196	06/20/17 08:14	LDE	TAL SL
Total/NA	Analysis	9320		1	315637	06/28/17 14:50	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	317058	07/12/17 13:37	RTM	TAL SL

Client Sample ID: AX13157 MW-2 DUP

Lab Sample ID: 400-139177-6

Date Collected: 06/06/17 11:53

Matrix: Water

Date Received: 06/12/17 14:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			314192	06/20/17 07:44	LDE	TAL SL
Total/NA	Analysis	9315		1	316993	07/12/17 05:51	ALD	TAL SL
Total/NA	Prep	PrecSep_0			314196	06/20/17 08:14	LDE	TAL SL
Total/NA	Analysis	9320		1	315637	06/28/17 14:50	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	317058	07/12/17 13:37	RTM	TAL SL

Client Sample ID: AX13158 MW-16

Lab Sample ID: 400-139177-7

Date Collected: 06/06/17 13:02

Matrix: Water

Date Received: 06/12/17 14:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			314192	06/20/17 07:44	LDE	TAL SL
Total/NA	Analysis	9315		1	316993	07/12/17 05:51	ALD	TAL SL
Total/NA	Prep	PrecSep_0			314196	06/20/17 08:14	LDE	TAL SL
Total/NA	Analysis	9320		1	315637	06/28/17 14:50	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	317058	07/12/17 13:37	RTM	TAL SL

Client Sample ID: AX13159 MW-15

Lab Sample ID: 400-139177-8

Date Collected: 06/06/17 14:00

Matrix: Water

Date Received: 06/12/17 14:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			314192	06/20/17 07:44	LDE	TAL SL
Total/NA	Analysis	9315		1	316993	07/12/17 05:51	ALD	TAL SL
Total/NA	Prep	PrecSep_0			314196	06/20/17 08:14	LDE	TAL SL
Total/NA	Analysis	9320		1	315637	06/28/17 14:50	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	317058	07/12/17 13:37	RTM	TAL SL

TestAmerica Pensacola

Lab Chronicle

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

TestAmerica Job ID: 400-139177-1
SDG: Barry Ash Pond (8)

Client Sample ID: AX13160 MW-14

Lab Sample ID: 400-139177-9

Date Collected: 06/06/17 15:12

Matrix: Water

Date Received: 06/12/17 14:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			314192	06/20/17 07:44	LDE	TAL SL
Total/NA	Analysis	9315		1	316993	07/12/17 05:51	ALD	TAL SL
Total/NA	Prep	PrecSep_0			314196	06/20/17 08:14	LDE	TAL SL
Total/NA	Analysis	9320		1	315637	06/28/17 14:50	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	317058	07/12/17 13:37	RTM	TAL SL

Client Sample ID: AX13161 MW-13

Lab Sample ID: 400-139177-10

Date Collected: 06/07/17 08:50

Matrix: Water

Date Received: 06/12/17 14:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			314192	06/20/17 07:44	LDE	TAL SL
Total/NA	Analysis	9315		1	316993	07/12/17 05:52	ALD	TAL SL
Total/NA	Prep	PrecSep_0			314196	06/20/17 08:14	LDE	TAL SL
Total/NA	Analysis	9320		1	315637	06/28/17 14:50	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	317058	07/12/17 13:37	RTM	TAL SL

Client Sample ID: AX13162 MW-12

Lab Sample ID: 400-139177-11

Date Collected: 06/07/17 09:48

Matrix: Water

Date Received: 06/12/17 14:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			314192	06/20/17 07:44	LDE	TAL SL
Total/NA	Analysis	9315		1	316993	07/12/17 05:52	ALD	TAL SL
Total/NA	Prep	PrecSep_0			314196	06/20/17 08:14	LDE	TAL SL
Total/NA	Analysis	9320		1	315637	06/28/17 14:50	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	317058	07/12/17 13:37	RTM	TAL SL

Client Sample ID: AX13163 MW-12 DUP

Lab Sample ID: 400-139177-12

Date Collected: 06/07/17 09:48

Matrix: Water

Date Received: 06/12/17 14:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			314192	06/20/17 07:44	LDE	TAL SL
Total/NA	Analysis	9315		1	316993	07/12/17 05:52	ALD	TAL SL
Total/NA	Prep	PrecSep_0			314196	06/20/17 08:14	LDE	TAL SL
Total/NA	Analysis	9320		1	315637	06/28/17 14:50	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	317058	07/12/17 13:37	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Client Sample ID: AX13164 MW-11

Lab Sample ID: 400-139177-13

Date Collected: 06/07/17 11:00

Matrix: Water

Date Received: 06/12/17 14:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			314192	06/20/17 07:44	LDE	TAL SL
Total/NA	Analysis	9315		1	316993	07/12/17 05:52	ALD	TAL SL
Total/NA	Prep	PrecSep_0			314196	06/20/17 08:14	LDE	TAL SL
Total/NA	Analysis	9320		1	315637	06/28/17 14:49	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	317058	07/12/17 13:37	RTM	TAL SL

Client Sample ID: AX13165 MW-10

Lab Sample ID: 400-139177-14

Date Collected: 06/07/17 12:08

Matrix: Water

Date Received: 06/12/17 14:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			314192	06/20/17 07:44	LDE	TAL SL
Total/NA	Analysis	9315		1	316993	07/12/17 05:53	ALD	TAL SL
Total/NA	Prep	PrecSep_0			314196	06/20/17 08:14	LDE	TAL SL
Total/NA	Analysis	9320		1	315636	06/28/17 14:35	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	317058	07/12/17 13:37	RTM	TAL SL

Client Sample ID: AX13166 EB-1

Lab Sample ID: 400-139177-15

Date Collected: 06/07/17 12:30

Matrix: Water

Date Received: 06/12/17 14:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			314192	06/20/17 07:44	LDE	TAL SL
Total/NA	Analysis	9315		1	316993	07/12/17 05:53	ALD	TAL SL
Total/NA	Prep	PrecSep_0			314196	06/20/17 08:14	LDE	TAL SL
Total/NA	Analysis	9320		1	315636	06/28/17 14:35	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	317058	07/12/17 13:37	RTM	TAL SL

Client Sample ID: AX13167 MW-9

Lab Sample ID: 400-139177-16

Date Collected: 06/07/17 13:15

Matrix: Water

Date Received: 06/12/17 14:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			314192	06/20/17 07:44	LDE	TAL SL
Total/NA	Analysis	9315		1	316993	07/12/17 05:53	ALD	TAL SL
Total/NA	Prep	PrecSep_0			314196	06/20/17 08:14	LDE	TAL SL
Total/NA	Analysis	9320		1	315636	06/28/17 14:35	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	317058	07/12/17 13:37	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-139177-1
SDG: Barry Ash Pond (8)

Client Sample ID: AX13168 MW-7

Lab Sample ID: 400-139177-17

Date Collected: 06/07/17 15:00

Matrix: Water

Date Received: 06/12/17 14:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			314192	06/20/17 07:44	LDE	TAL SL
Total/NA	Analysis	9315		1	316994	07/12/17 05:48	ALD	TAL SL
Total/NA	Prep	PrecSep_0			314196	06/20/17 08:14	LDE	TAL SL
Total/NA	Analysis	9320		1	315636	06/28/17 14:35	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	317058	07/12/17 13:37	RTM	TAL SL

Client Sample ID: AX13169 FB-2

Lab Sample ID: 400-139177-18

Date Collected: 06/07/17 14:08

Matrix: Water

Date Received: 06/12/17 14:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			314192	06/20/17 07:44	LDE	TAL SL
Total/NA	Analysis	9315		1	316994	07/12/17 05:48	ALD	TAL SL
Total/NA	Prep	PrecSep_0			314196	06/20/17 08:14	LDE	TAL SL
Total/NA	Analysis	9320		1	315636	06/28/17 14:35	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	317058	07/12/17 13:37	RTM	TAL SL

Client Sample ID: AX13170 MW-8

Lab Sample ID: 400-139177-19

Date Collected: 06/07/17 12:39

Matrix: Water

Date Received: 06/12/17 14:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			314192	06/20/17 07:44	LDE	TAL SL
Total/NA	Analysis	9315		1	316994	07/12/17 05:48	ALD	TAL SL
Total/NA	Prep	PrecSep_0			314196	06/20/17 08:14	LDE	TAL SL
Total/NA	Analysis	9320		1	315636	06/28/17 14:35	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	317058	07/12/17 13:37	RTM	TAL SL

Client Sample ID: AX13171 MW-5

Lab Sample ID: 400-139177-20

Date Collected: 06/07/17 13:40

Matrix: Water

Date Received: 06/12/17 14:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			314192	06/20/17 07:44	LDE	TAL SL
Total/NA	Analysis	9315		1	316994	07/12/17 05:48	ALD	TAL SL
Total/NA	Prep	PrecSep_0			314196	06/20/17 08:14	LDE	TAL SL
Total/NA	Analysis	9320		1	315636	06/28/17 14:35	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	317058	07/12/17 13:37	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-139177-1
SDG: Barry Ash Pond (8)

Client Sample ID: AX13172 MW-6

Lab Sample ID: 400-139177-21

Date Collected: 06/07/17 14:35

Matrix: Water

Date Received: 06/12/17 14:27

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			314266	06/20/17 09:28	MBC	TAL SL
Total/NA	Analysis	9315		1	316994	07/12/17 08:51	ALD	TAL SL
Total/NA	Prep	PrecSep_0			314280	06/20/17 09:58	LDE	TAL SL
Total/NA	Analysis	9320		1	315637	06/28/17 11:11	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	317058	07/12/17 13:37	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 Barry

TestAmerica Job ID: 400-139177-1
SDG: Barry Ash Pond (8)

Rad

Prep Batch: 314192

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139177-1	AX13152 MW-4	Total/NA	Water	PrecSep-21	
400-139177-2	AX13153 MW-3	Total/NA	Water	PrecSep-21	
400-139177-3	AX13154 MW-1	Total/NA	Water	PrecSep-21	
400-139177-4	AX13155 FB-1	Total/NA	Water	PrecSep-21	
400-139177-5	AX13156 MW-2	Total/NA	Water	PrecSep-21	
400-139177-6	AX13157 MW-2 DUP	Total/NA	Water	PrecSep-21	
400-139177-7	AX13158 MW-16	Total/NA	Water	PrecSep-21	
400-139177-8	AX13159 MW-15	Total/NA	Water	PrecSep-21	
400-139177-9	AX13160 MW-14	Total/NA	Water	PrecSep-21	
400-139177-10	AX13161 MW-13	Total/NA	Water	PrecSep-21	
400-139177-11	AX13162 MW-12	Total/NA	Water	PrecSep-21	
400-139177-12	AX13163 MW-12 DUP	Total/NA	Water	PrecSep-21	
400-139177-13	AX13164 MW-11	Total/NA	Water	PrecSep-21	
400-139177-14	AX13165 MW-10	Total/NA	Water	PrecSep-21	
400-139177-15	AX13166 EB-1	Total/NA	Water	PrecSep-21	
400-139177-16	AX13167 MW-9	Total/NA	Water	PrecSep-21	
400-139177-17	AX13168 MW-7	Total/NA	Water	PrecSep-21	
400-139177-18	AX13169 FB-2	Total/NA	Water	PrecSep-21	
400-139177-19	AX13170 MW-8	Total/NA	Water	PrecSep-21	
400-139177-20	AX13171 MW-5	Total/NA	Water	PrecSep-21	
MB 160-314192/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-314192/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-139177-9 DU	AX13160 MW-14	Total/NA	Water	PrecSep-21	
400-139177-13 DU	AX13164 MW-11	Total/NA	Water	PrecSep-21	

Prep Batch: 314196

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139177-1	AX13152 MW-4	Total/NA	Water	PrecSep_0	
400-139177-2	AX13153 MW-3	Total/NA	Water	PrecSep_0	
400-139177-3	AX13154 MW-1	Total/NA	Water	PrecSep_0	
400-139177-4	AX13155 FB-1	Total/NA	Water	PrecSep_0	
400-139177-5	AX13156 MW-2	Total/NA	Water	PrecSep_0	
400-139177-6	AX13157 MW-2 DUP	Total/NA	Water	PrecSep_0	
400-139177-7	AX13158 MW-16	Total/NA	Water	PrecSep_0	
400-139177-8	AX13159 MW-15	Total/NA	Water	PrecSep_0	
400-139177-9	AX13160 MW-14	Total/NA	Water	PrecSep_0	
400-139177-10	AX13161 MW-13	Total/NA	Water	PrecSep_0	
400-139177-11	AX13162 MW-12	Total/NA	Water	PrecSep_0	
400-139177-12	AX13163 MW-12 DUP	Total/NA	Water	PrecSep_0	
400-139177-13	AX13164 MW-11	Total/NA	Water	PrecSep_0	
400-139177-14	AX13165 MW-10	Total/NA	Water	PrecSep_0	
400-139177-15	AX13166 EB-1	Total/NA	Water	PrecSep_0	
400-139177-16	AX13167 MW-9	Total/NA	Water	PrecSep_0	
400-139177-17	AX13168 MW-7	Total/NA	Water	PrecSep_0	
400-139177-18	AX13169 FB-2	Total/NA	Water	PrecSep_0	
400-139177-19	AX13170 MW-8	Total/NA	Water	PrecSep_0	
400-139177-20	AX13171 MW-5	Total/NA	Water	PrecSep_0	
MB 160-314196/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-314196/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-139177-9 DU	AX13160 MW-14	Total/NA	Water	PrecSep_0	
400-139177-13 DU	AX13164 MW-11	Total/NA	Water	PrecSep_0	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-139177-1
SDG: Barry Ash Pond (8)

Prep Batch: 314266

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139177-21	AX13172 MW-6	Total/NA	Water	PrecSep-21	
MB 160-314266/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-314266/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-314266/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 314280

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139177-21	AX13172 MW-6	Total/NA	Water	PrecSep_0	
MB 160-314280/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-314280/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-314280/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13

QC Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-314192/1-A
Matrix: Water
Analysis Batch: 316993

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 314192

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.1236		0.0736	0.0744	1.00	0.0820	pCi/L	06/20/17 07:44	07/12/17 05:50	1
Carrier	MB MB		Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	%Yield	Qualifier	40 - 110							
	98.5				06/20/17 07:44	07/12/17 05:50	1			

Lab Sample ID: LCS 160-314192/2-A
Matrix: Water
Analysis Batch: 316993

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 314192

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-226	15.1	14.84		1.51	1.00	0.0914	pCi/L	98	68 - 137
Carrier	LCS LCS		Limits		Prepared	Analyzed	Dil Fac		
Ba Carrier	%Yield	Qualifier	40 - 110						
	97.3				06/20/17 07:44	07/12/17 05:50	1		

Lab Sample ID: 400-139177-9 DU
Matrix: Water
Analysis Batch: 316993

Client Sample ID: AX13160 MW-14
Prep Type: Total/NA
Prep Batch: 314192

Analyte	Sample Sample		DU	DU	Total	RL	MDC	Unit	RER	RER
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					Limit
Radium-226	0.178		0.1418		0.0856	1.00	0.104	pCi/L	0.20	1
Carrier	DU DU		Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	%Yield	Qualifier	40 - 110							
	94.4				06/20/17 07:44	07/12/17 05:50	1			

Lab Sample ID: 400-139177-13 DU
Matrix: Water
Analysis Batch: 316993

Client Sample ID: AX13164 MW-11
Prep Type: Total/NA
Prep Batch: 314192

Analyte	Sample Sample		DU	DU	Total	RL	MDC	Unit	RER	RER
	Result	Qual	Result	Qual	Uncert. (2σ+/-)					Limit
Radium-226	0.312		0.3795		0.131	1.00	0.110	pCi/L	0.27	1
Carrier	DU DU		Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	%Yield	Qualifier	40 - 110							
	94.4				06/20/17 07:44	07/12/17 05:50	1			

Lab Sample ID: MB 160-314266/1-A
Matrix: Water
Analysis Batch: 316993

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 314266

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-226	0.02156	U	0.0453	0.0453	1.00	0.0857	pCi/L	06/20/17 08:54	07/12/17 08:48	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

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

Lab Sample ID: MB 160-314266/1-A
Matrix: Water
Analysis Batch: 316993

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 314266

Carrier	<i>MB</i> %Yield	<i>MB</i> Qualifier	Limits
Ba Carrier	92.6		40 - 110

Prepared	Analyzed	Dil Fac
06/20/17 08:54	07/12/17 08:48	1

Lab Sample ID: LCS 160-314266/2-A
Matrix: Water
Analysis Batch: 316993

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 314266

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	15.1	13.63		1.41	1.00	0.0965	pCi/L	90	68 - 137

Carrier	<i>LCS</i> %Yield	<i>LCS</i> Qualifier	Limits
Ba Carrier	90.6		40 - 110

Lab Sample ID: LCSD 160-314266/3-A
Matrix: Water
Analysis Batch: 316993

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 314266

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	15.1	13.67		1.42	1.00	0.127	pCi/L	90	68 - 137	0.02	1

Carrier	<i>LCSD</i> %Yield	<i>LCSD</i> Qualifier	Limits
Ba Carrier	93.8		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-314196/1-A
Matrix: Water
Analysis Batch: 315637

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 314196

Analyte	<i>MB</i> Result	<i>MB</i> Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.1228	U	0.251	0.251	1.00	0.474	pCi/L	06/20/17 08:14	06/28/17 14:38	1

Carrier	<i>MB</i> %Yield	<i>MB</i> Qualifier	Limits
Ba Carrier	98.5		40 - 110
Y Carrier	87.1		40 - 110

Carrier	<i>MB</i> %Yield	<i>MB</i> Qualifier	Limits
Ba Carrier	98.5		40 - 110
Y Carrier	87.1		40 - 110

Prepared	Analyzed	Dil Fac
06/20/17 08:14	06/28/17 14:38	1
06/20/17 08:14	06/28/17 14:38	1

Lab Sample ID: LCS 160-314196/2-A
Matrix: Water
Analysis Batch: 315637

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 314196

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	17.7	19.28		2.05	1.00	0.485	pCi/L	109	56 - 140

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

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

Lab Sample ID: LCS 160-314196/2-A
Matrix: Water
Analysis Batch: 315637

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 314196

	LCS %Yield	LCS Qualifier	Limits
Carrier			
Ba Carrier	97.3		40 - 110
Y Carrier	89.3		40 - 110

Lab Sample ID: 400-139177-9 DU
Matrix: Water
Analysis Batch: 315637

Client Sample ID: AX13160 MW-14
Prep Type: Total/NA
Prep Batch: 314196

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.0196	U	0.1786	U	0.293	1.00	0.495	pCi/L	0.29	1

	DU %Yield	DU Qualifier	Limits
Carrier			
Ba Carrier	94.4		40 - 110
Y Carrier	88.6		40 - 110

Lab Sample ID: 400-139177-13 DU
Matrix: Water
Analysis Batch: 315636

Client Sample ID: AX13164 MW-11
Prep Type: Total/NA
Prep Batch: 314196

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.725		0.2502	U	0.267	1.00	0.434	pCi/L	0.78	1

	DU %Yield	DU Qualifier	Limits
Carrier			
Ba Carrier	94.4		40 - 110
Y Carrier	89.0		40 - 110

Lab Sample ID: MB 160-314280/1-A
Matrix: Water
Analysis Batch: 315636

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 314280

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.03836	U	0.233	0.233	1.00	0.432	pCi/L	06/20/17 09:58	06/28/17 11:08	1

	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Carrier						
Ba Carrier	92.6		40 - 110	06/20/17 09:58	06/28/17 11:08	1
Y Carrier	89.7		40 - 110	06/20/17 09:58	06/28/17 11:08	1

Lab Sample ID: LCS 160-314280/2-A
Matrix: Water
Analysis Batch: 315636

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 314280

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec Limits
Radium-228	17.7	23.83		2.53	1.00	0.544	pCi/L	135	56 - 140

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-139177-1
 SDG: Barry Ash Pond (8)

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

Lab Sample ID: LCS 160-314280/2-A
Matrix: Water
Analysis Batch: 315636

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 314280

	LCS	LCS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	90.6		40 - 110
Y Carrier	78.1		40 - 110

Lab Sample ID: LCSD 160-314280/3-A
Matrix: Water
Analysis Batch: 315636

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 314280

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER
											Limit
Radium-228	17.7	19.49		2.09	1.00	0.590	pCi/L	110	56 - 140	0.94	1

	LCSD	LCSD	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	93.8		40 - 110
Y Carrier	90.1		40 - 110

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

Lab Sample ID: 400-139177-9 DU
Matrix: Water
Analysis Batch: 317058

Client Sample ID: AX13160 MW-14
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	0.198	U	0.3204	U	0.306	5.00	0.495	pCi/L	0.21	

Lab Sample ID: 400-139177-13 DU
Matrix: Water
Analysis Batch: 317058

Client Sample ID: AX13164 MW-11
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	1.04		0.6297		0.297	5.00	0.434	pCi/L	0.62	

Chain of Custody Record

Client Information		Sampler: Nick Pitts		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: Page 1 of 2	
Company: Alabama Power General Test Laboratory		Address: 744 County Rd. 87 GSC #8		City: Calera		State, Zip: AL, 35040		Job #: 400-139177	
Phone: 205-664-6121 (Tel)		Email: sgcopela@southernco.com		Project #: 40007143		SSOW#: Barry Ash Pond (8)		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:	
Due Date Requested:		TAT Requested (days): Routine		Perform MS/MSD (Yes or No)		Field Filtered Sample (Yes or No)		Total Number of Containers	
Sample Identification		Sample Date		Sample Time		Sample Type (C=comp, G=grab)		Matrix (W=water, G=grab, O=water, A=Air)	
AX13152		6/6/17		0850		G		Water	
AX13153		6/6/17		0942		G		Water	
AX13154		6/6/17		1055		G		Water	
AX13155		6/6/17		1023		G		Water	
AX13156		6/6/17		1153		G		Water	
AX13157		6/6/17		1153		G		Water	
AX13158		6/6/17		1302		G		Water	
AX13159		6/6/17		1400		G		Water	
AX13160		6/6/17		1512		G		Water	
AX13161		6/7/17		0850		G		Water	
AX13162		6/7/17		0948		G		Water	
AX13163		6/7/17		0948		G		Water	
Possible Hazard Identification		Date: 06/12/2017, 0930		Date/Time: 6/12/17 1427		Company: APC		Company: Company	
<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		Relinquished by: Sarah Copeland		Relinquished by:		Relinquished by:		Relinquished by:	
Deliverable Requested: I, II, III, IV, Other (specify)		Date: 06/12/2017, 0930		Date/Time: 6/12/17 1427		Company: APC		Company: Company	
Empty Kit Relinquished by:		Date: 06/12/2017, 0930		Date/Time: 6/12/17 1427		Company: APC		Company: Company	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Special Instructions/OC Requirements:		Special Instructions/Note:	



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-139177-1
SDG Number: Barry Ash Pond (8)

Login Number: 139177

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 Barry

TestAmerica Job ID: 400-139177-1
 SDG: Barry 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

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 Barry

TestAmerica Job ID: 400-139177-1
SDG: Barry 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 06/08/2017 11:00

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Angie Jimmerson	Requested By	Greg Dyer
Collector	Nick Pitts	Location	Barry Ash Pond
Analysis Requested	Bottle 1 (1L): Radiological		
Comments	Rad Dups on MW-14 and MW-11 There is no temperature preservation requirement for Radium		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-4	06/06/2017	08:50	1	Groundwater		AX13152
MW-3	06/06/2017	09:42	1	Groundwater		AX13153
MW-1	06/06/2017	10:55	1	Groundwater		AX13154
FB-1	06/06/2017	10:23	1	Field Blank		AX13155
MW-2	06/06/2017	11:53	1	Groundwater		AX13156
MW-2 Dup	06/06/2017	11:53	1	Sample Duplicate		AX13157
MW-16	06/06/2017	13:02	1	Groundwater		AX13158
MW-15	06/06/2017	14:00	1	Groundwater		AX13159
MW-14	06/06/2017	15:12	3	Groundwater		AX13160
MW-13	06/07/2017	08:50	1	Groundwater		AX13161
MW-12	06/07/2017	09:48	1	Groundwater		AX13162
MW-12 Dup	06/07/2017	09:48	1	Sample Duplicate		AX13163
MW-11	06/07/2017	11:00	3	Groundwater		AX13164
MW-10	06/07/2017	12:08	1	Groundwater		AX13165
EB-1	06/07/2017	12:30	1	Equipment Blank		AX13166
MW-9	06/07/2017	13:15	1	Groundwater		AX13166
MW-7	06/07/2017	15:00	1	Groundwater		AX13168
FB-2	06/07/2017	14:08	1	Field Blank		AX13169

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: 2017.06.08 15:07:30 -0500</small>	06/08/2017 15:05

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
		NA
		Thermometer ID
		NA
		pH Strip ID
		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 : WMWBARAP_1116

Project/Site : Barry Ash Pond
Bucks, AL 36512

For : Southern Company Services
42 Inverness Center Parkway
Birmingham, AL 35242

Attention : Dustin Brooks & Greg Dyer

Released By : Anne Ryals
maryals@southernco.com
(205) 664-6032

The following data has been reviewed and approved by:

Quality Control:

Supervision:

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



Anions

Barry Ash Pond

WMWBARAP_1116

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
400-143536-1
General Chemistry

Method(s) SM 4500 SO4 E: The following sample was run at a dilution do to a matrix interference:
AX21683 MW-14 (400-143536-10).

Method(s) SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 369761 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

Barry Ash Pond

WMWBARAP_1116

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>
AX21355	20170921bF2K	WMWBARAP_1116
AX21356	20170921bF2K	WMWBARAP_1116
AX21357	20170921bF2K	WMWBARAP_1116
AX21358	20170921bF2K	WMWBARAP_1116
AX21632	20170921bF2K	WMWBARAP_1116
AX21633	20170921bF2K	WMWBARAP_1116
AX21634	20170921bF2K	WMWBARAP_1116
AX21681	20170921bIK	WMWBARAP_1116
AX21682	20170921bIK	WMWBARAP_1116
AX21683	20170921bIK	WMWBARAP_1116
AX21684	20170921bIK	WMWBARAP_1116
AX21685	20170921bIK	WMWBARAP_1116
AX21686	20170921bIK	WMWBARAP_1116
AX21687	20170921bIK	WMWBARAP_1116
AX21688	20170921bIK	WMWBARAP_1116
AX21689	20170921bIK	WMWBARAP_1116
AX21690	20170921bIK	WMWBARAP_1116
AX21691	20170921bJK	WMWBARAP_1116
AX21692	20170921bJK	WMWBARAP_1116
AX21693	20170921bJK	WMWBARAP_1116
AX21694	20170921bJK	WMWBARAP_1116

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 at a x2 dilution to compensate for potential matrix effects.
 8. The raw data results include results corrected for dilution.



TDS

Barry Ash Pond

WMWBARAP_1116

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>
AX21355	602953	WMWBARAP_1116
AX21356	602953	WMWBARAP_1116
AX21357	602953	WMWBARAP_1116
AX21358	602953	WMWBARAP_1116
AX21632	602956	WMWBARAP_1116
AX21633	602956	WMWBARAP_1116
AX21634	602956	WMWBARAP_1116
AX21681	603008	WMWBARAP_1116
AX21682	603008	WMWBARAP_1116
AX21683	603008	WMWBARAP_1116
AX21684	603008	WMWBARAP_1116
AX21685	603008	WMWBARAP_1116
AX21686	603008	WMWBARAP_1116
AX21687	603009	WMWBARAP_1116
AX21688	603009	WMWBARAP_1116
AX21689	603009	WMWBARAP_1116
AX21690	603009	WMWBARAP_1116
AX21691	603009	WMWBARAP_1116
AX21692	603009	WMWBARAP_1116
AX21693	603009	WMWBARAP_1116
AX21694	603009	WMWBARAP_1116

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 AX21358, AX21689, and AX21694 which did not meet the 2.5 mg 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 Alabama Power



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 12-Sep-17
 Customer ID:
 Delivery Date: 13-Sep-17

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AX21355

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/21/2017	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	0.884	mg/L
General Characteristics									
* Solids, Dissolved	CES	9/19/2017	SM 2540C		1		25	34.7	mg/L
* Chloride, Total, by Test America	RRC	9/24/2017	SM 4500 Cl_E		1	0.60	2.00	11	mg/L
* Fluoride, Total, by Test America	BAB	9/29/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	RRC	9/26/2017	SM 4500 SO4_E		1	1.40	5.00	J 1.9	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



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 12-Sep-17
 Customer ID:
 Delivery Date: 13-Sep-17

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AX21355

Sample	Analysis	Units	MB	MB				LFB		Rec			Prec
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX21634	Boron, Total	mg/L	0.00102	0.044	1.00	2.14	2.15	0.966	0.85 to 1.15	97.8	70 to 130	0.329	20
AX21634	Calcium, Total	mg/L	-0.00506	0.22	5.00	39.1	39.5	4.82	4.25 to 5.75	93.4	70 to 130	1.05	20

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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 12-Sep-17
 Customer ID:
 Delivery Date: 13-Sep-17

Description: Barry Ash Pond - MW-4

Laboratory ID Number: AX21355

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX21632	Solids, Dissolved	mg/L	4.00	25			281	55.0	40 to 60	0.898	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: WMWBARAP
 Sample Date: 12-Sep-17
 Customer ID:
 Delivery Date: 13-Sep-17

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AX21356

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/21/2017	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	0.988	mg/L
General Characteristics									
* Solids, Dissolved	CES	9/19/2017	SM 2540C		1		25	35.3	mg/L
* Chloride, Total, by Test America	RRC	9/24/2017	SM 4500 Cl_E		1	0.60	2.00	8.5	mg/L
* Fluoride, Total, by Test America	BAB	9/29/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	RRC	9/26/2017	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

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 12-Sep-17
 Customer ID:
 Delivery Date: 13-Sep-17

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AX21356

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX21634	Boron, Total	mg/L	0.00102	0.044	1.00	2.14	2.15	0.966	0.85 to 1.15	97.8	70 to 130	0.329	20
AX21634	Calcium, Total	mg/L	-0.00506	0.22	5.00	39.1	39.5	4.82	4.25 to 5.75	93.4	70 to 130	1.05	20

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 12-Sep-17
 Customer ID:
 Delivery Date: 13-Sep-17

Description: Barry Ash Pond - MW-3

Laboratory ID Number: AX21356

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Limit
AX21632	Solids, Dissolved	mg/L	4.00	25				281	55.0	40 to 60			0.898 5

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Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 12-Sep-17
 Customer ID:
 Delivery Date: 13-Sep-17

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AX21357

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/21/2017	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	2.88	mg/L
General Characteristics									
* Solids, Dissolved	CES	9/19/2017	SM 2540C		1		25	40.7	mg/L
* Chloride, Total, by Test America	RRC	9/24/2017	SM 4500 Cl_E		1	0.60	2.00	8.6	mg/L
* Fluoride, Total, by Test America	BAB	9/29/2017	SM 4500 F_C		1	0.032	0.10	J 0.037	mg/L
* Sulfate, Total, by Test America	RRC	9/26/2017	SM 4500 SO4_E		1	1.40	5.00	U <1.4	mg/L

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Expiration: June 30, 2018

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 (205) 664-6032 or 6171
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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 12-Sep-17
 Customer ID:
 Delivery Date: 13-Sep-17

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AX21357

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX21634	Boron, Total	mg/L	0.00102	0.044	1.00	2.14	2.15	0.966	0.85 to 1.15	97.8	70 to 130	0.329	20
AX21634	Calcium, Total	mg/L	-0.00506	0.22	5.00	39.1	39.5	4.82	4.25 to 5.75	93.4	70 to 130	1.05	20

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 12-Sep-17
 Customer ID:
 Delivery Date: 13-Sep-17

Description: Barry Ash Pond - MW-2

Laboratory ID Number: AX21357

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX21632	Solids, Dissolved	mg/L	4.00	25			281	55.0	40 to 60	0.898	5

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Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAPFB
 Sample Date: 12-Sep-17
 Customer ID:
 Delivery Date: 13-Sep-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX21358

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/21/2017	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	9/19/2017	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total, by Test America	RRC	9/24/2017	SM 4500 Cl_E		1	0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	BAB	9/29/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	RRC	9/26/2017	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

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAPFB
 Sample Date: 12-Sep-17
 Customer ID:
 Delivery Date: 13-Sep-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX21358

Sample	Analysis	Units	MB				MSD	LFB	LFB Limit	Rec		Prec Limit	
			MB	Limit	Spike	MS				Rec	Limit		
AX21634	Boron, Total	mg/L	0.00102	0.044	1.00	2.14	2.15	0.966	0.85 to 1.15	97.8	70 to 130	0.329	20
AX21634	Calcium, Total	mg/L	-0.00506	0.22	5.00	39.1	39.5	4.82	4.25 to 5.75	93.4	70 to 130	1.05	20

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Expiration: June 30, 2018

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAPFB
 Sample Date: 12-Sep-17
 Customer ID:
 Delivery Date: 13-Sep-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX21358

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX21632	Solids, Dissolved	mg/L	4.00	25			281	55.0	40 to 60	0.898	5

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Expiration: June 30, 2018

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CC:

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Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 14-Sep-17

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AX21632

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/21/2017	EPA 200.7		2	0.02	0.1	J 0.0825	mg/L
* Calcium, Total	HRG	9/21/2017	EPA 200.7		2	0.10	0.5	15.1	mg/L
General Characteristics									
* Solids, Dissolved	CES	9/19/2017	SM 2540C		1		25	276	mg/L
* Chloride, Total, by Test America	RRC	9/24/2017	SM 4500 Cl_E		1	0.60	2.00	21	mg/L
* Fluoride, Total, by Test America	BAB	9/29/2017	SM 4500 F_C		1	0.032	0.10	J 0.060	mg/L
* Sulfate, Total, by Test America	RRC	9/27/2017	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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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 14-Sep-17

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AX21632

Sample	Analysis	Units	MB	MB				LFB		Rec			Prec
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX21634	Boron, Total	mg/L	0.00102	0.044	1.00	2.14	2.15	0.966	0.85 to 1.15	97.8	70 to 130	0.329	20
AX21634	Calcium, Total	mg/L	-0.00506	0.22	5.00	39.1	39.5	4.82	4.25 to 5.75	93.4	70 to 130	1.05	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: WMWBARAP
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 14-Sep-17

Description: Barry Ash Pond - MW-5

Laboratory ID Number: AX21632

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX21632	Solids, Dissolved	mg/L	4.00	25			281	55.0	40 to 60	0.898	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



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 14-Sep-17

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AX21633

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/21/2017	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	2.14	mg/L
General Characteristics									
* Solids, Dissolved	CES	9/19/2017	SM 2540C		1		25	48.7	mg/L
* Chloride, Total, by Test America	RRC	9/24/2017	SM 4500 Cl_E		1	0.60	2.00	6.5	mg/L
* Fluoride, Total, by Test America	BAB	9/29/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	RRC	9/27/2017	SM 4500 SO4_E		1	1.40	5.00	J 1.8	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: WMWBARAP
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 14-Sep-17

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AX21633

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX21634	Boron, Total	mg/L	0.00102	0.044	1.00	2.14	2.15	0.966	0.85 to 1.15	97.8	70 to 130	0.329	20
AX21634	Calcium, Total	mg/L	-0.00506	0.22	5.00	39.1	39.5	4.82	4.25 to 5.75	93.4	70 to 130	1.05	20

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 14-Sep-17

Description: Barry Ash Pond - MW-6

Laboratory ID Number: AX21633

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX21634	Solids, Dissolved	mg/L	4.00	25			322	55.0	40 to 60	0.464	5

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Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 14-Sep-17

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AX21634

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/21/2017	EPA 200.7		2	0.02	0.1	1.16	mg/L
* Calcium, Total	HRG	9/21/2017	EPA 200.7		2	0.10	0.5	34.4	mg/L
General Characteristics									
* Solids, Dissolved	CES	9/19/2017	SM 2540C		1		25	325	mg/L
* Chloride, Total, by Test America	RRC	9/24/2017	SM 4500 Cl_E		1	0.60	2.00	24	mg/L
* Fluoride, Total, by Test America	BAB	9/29/2017	SM 4500 F_C		1	0.032	0.10	J 0.050	mg/L
* Sulfate, Total, by Test America	RRC	9/27/2017	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: WMWBARAP
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 14-Sep-17

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AX21634

Sample	Analysis	Units	MB	MB				LFB		Rec			Prec
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX21634	Boron, Total	mg/L	0.00102	0.044	1.00	2.14	2.15	0.966	0.85 to 1.15	97.8	70 to 130	0.329	20
AX21634	Calcium, Total	mg/L	-0.00506	0.22	5.00	39.1	39.5	4.82	4.25 to 5.75	93.4	70 to 130	1.05	20

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Batch QC Summary



To: Dustin Brooks
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Customer Account: WMWBARAP
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 14-Sep-17

Description: Barry Ash Pond - MW-8

Laboratory ID Number: AX21634

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Limit
AX21634	Solids, Dissolved	mg/L	4.00	25				322	55.0	40 to 60			0.464 5

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Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AX21681

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/21/2017	EPA 200.7		2	0.02	0.1	J 0.0937	mg/L
* Calcium, Total	HRG	9/21/2017	EPA 200.7		2	0.10	0.5	7.43	mg/L
General Characteristics									
* Solids, Dissolved	CES	9/19/2017	SM 2540C		1		25	202	mg/L
* Chloride, Total, by Test America	RRC	9/24/2017	SM 4500 Cl_E		1	0.60	2.00	36	mg/L
* Fluoride, Total, by Test America	BAB	9/29/2017	SM 4500 F_C		1	0.032	0.10	0.20	mg/L
* Sulfate, Total, by Test America	RRC	9/26/2017	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

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AX21681

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX21690	Boron, Total	mg/L	0.000794	0.044	1.00	2.97	2.98	0.963	0.85 to 1.15	101	70 to 130	0.491	20
AX21690	Calcium, Total	mg/L	-0.00702	0.22	5.00	59.8	60.5	4.76	4.25 to 5.75	97.4	70 to 130	1.23	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: WMWBARAP
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-15

Laboratory ID Number: AX21681

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX21686	Solids, Dissolved	mg/L	8.00	25			357	52.0	40 to 60		0.279 5

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CC:

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Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AX21682

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/21/2017	EPA 200.7		2	0.02	0.1	J 0.0440	mg/L
* Calcium, Total	HRG	9/21/2017	EPA 200.7		2	0.10	0.5	13.3	mg/L
General Characteristics									
* Solids, Dissolved	CES	9/19/2017	SM 2540C		1		25	332	mg/L
* Chloride, Total, by Test America	RRC	9/24/2017	SM 4500 Cl_E		1	0.60	2.00	42	mg/L
* Fluoride, Total, by Test America	BAB	9/29/2017	SM 4500 F_C		1	0.032	0.10	J 0.070	mg/L
* Sulfate, Total, by Test America	RRC	9/26/2017	SM 4500 SO4_E		1	1.40	5.00	J 2.2	mg/L

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Laboratory certification ID: E571114

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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AX21682

Sample	Analysis	Units	MB				MSD	LFB	LFB Limit	Rec		Prec Limit	
			MB	Limit	Spike	MS				Rec	Limit		
AX21690	Boron, Total	mg/L	0.000794	0.044	1.00	2.97	2.98	0.963	0.85 to 1.15	101	70 to 130	0.491	20
AX21690	Calcium, Total	mg/L	-0.00702	0.22	5.00	59.8	60.5	4.76	4.25 to 5.75	97.4	70 to 130	1.23	20

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-13

Laboratory ID Number: AX21682

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Limit
AX21686	Solids, Dissolved	mg/L	8.00	25				357	52.0	40 to 60			0.279 5

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Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AX21683

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/21/2017	EPA 200.7		2	0.02	0.1	J 0.0647	mg/L
* Calcium, Total	HRG	9/21/2017	EPA 200.7		2	0.10	0.5	13.9	mg/L
General Characteristics									
* Solids, Dissolved	CES	9/19/2017	SM 2540C		1		25	339	mg/L
* Chloride, Total, by Test America	RRC	9/24/2017	SM 4500 Cl_E		1	0.60	2.00	43	mg/L
* Fluoride, Total, by Test America	BAB	9/29/2017	SM 4500 F_C		1	0.032	0.10	J 0.070	mg/L
* Sulfate, Total, by Test America	RRC	9/26/2017	SM 4500 SO4_E		10	14.0	50	U <14	mg/L

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AX21683

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX21690	Boron, Total	mg/L	0.000794	0.044	1.00	2.97	2.98	0.963	0.85 to 1.15	101	70 to 130	0.491	20
AX21690	Calcium, Total	mg/L	-0.00702	0.22	5.00	59.8	60.5	4.76	4.25 to 5.75	97.4	70 to 130	1.23	20

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Expiration: June 30, 2018

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-14

Laboratory ID Number: AX21683

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX21686	Solids, Dissolved	mg/L	8.00	25			357	52.0	40 to 60		0.279 5

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Certificate Of Analysis  **Alabama Power**



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
Sample Date: 13-Sep-17
Customer ID:
Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AX21684

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/21/2017	EPA 200.7		2	0.02	0.1	1.87	mg/L
* Calcium, Total	HRG	9/21/2017	EPA 200.7		2	0.10	0.5	40.5	mg/L
General Characteristics									
* Solids, Dissolved	CES	9/19/2017	SM 2540C		1		25	456	mg/L
* Chloride, Total, by Test America	RRC	9/24/2017	SM 4500 Cl_E		1	0.60	2.00	24	mg/L
* Fluoride, Total, by Test America	BAB	9/29/2017	SM 4500 F_C		1	0.032	0.10	J 0.060	mg/L
* Sulfate, Total, by Test America	RRC	9/27/2017	SM 4500 SO4_E		1	1.40	5.00	J 4.7	mg/L

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AX21684

Sample	Analysis	Units	MB	MB				LFB		Rec			Prec
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX21690	Boron, Total	mg/L	0.000794	0.044	1.00	2.97	2.98	0.963	0.85 to 1.15	101	70 to 130	0.491	20
AX21690	Calcium, Total	mg/L	-0.00702	0.22	5.00	59.8	60.5	4.76	4.25 to 5.75	97.4	70 to 130	1.23	20

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-1

Laboratory ID Number: AX21684

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	
				Limit				Duplicate	LFB	Limit	Prec	
AX21686	Solids, Dissolved	mg/L	8.00	25				357	52.0	40 to 60	0.279	5

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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: WMWBARAP
Sample Date: 13-Sep-17
Customer ID:
Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AX21685

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/21/2017	EPA 200.7		2	0.02	0.1	2.18	mg/L
* Calcium, Total	HRG	9/21/2017	EPA 200.7		2	0.10	0.5	11.8	mg/L
General Characteristics									
* Solids, Dissolved	CES	9/19/2017	SM 2540C		1		25	333	mg/L
* Chloride, Total, by Test America	RRC	9/24/2017	SM 4500 Cl_E		1	0.60	2.00	21	mg/L
* Fluoride, Total, by Test America	BAB	9/29/2017	SM 4500 F_C		1	0.032	0.10	J 0.060	mg/L
* Sulfate, Total, by Test America	RRC	9/27/2017	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: WMWBARAP
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AX21685

Sample	Analysis	Units	MB	MB				LFB		Rec			Prec
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX21690	Boron, Total	mg/L	0.000794	0.044	1.00	2.97	2.98	0.963	0.85 to 1.15	101	70 to 130	0.491	20
AX21690	Calcium, Total	mg/L	-0.00702	0.22	5.00	59.8	60.5	4.76	4.25 to 5.75	97.4	70 to 130	1.23	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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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-16

Laboratory ID Number: AX21685

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX21686	Solids, Dissolved	mg/L	8.00	25			357	52.0	40 to 60		0.279 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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 FAX (205) 257-1654

Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AX21686

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/21/2017	EPA 200.7		2	0.02	0.1	J 0.0926	mg/L
* Calcium, Total	HRG	9/21/2017	EPA 200.7		2	0.10	0.5	22.1	mg/L
General Characteristics									
* Solids, Dissolved	CES	9/19/2017	SM 2540C		1		25	359	mg/L
* Chloride, Total, by Test America	RRC	9/24/2017	SM 4500 Cl_E		1	0.60	2.00	23	mg/L
* Fluoride, Total, by Test America	BAB	9/29/2017	SM 4500 F_C		1	0.032	0.10	J 0.070	mg/L
* Sulfate, Total, by Test America	RRC	9/27/2017	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

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AX21686

Sample	Analysis	Units	MB	MB				LFB		Rec			Prec
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX21690	Boron, Total	mg/L	0.000794	0.044	1.00	2.97	2.98	0.963	0.85 to 1.15	101	70 to 130	0.491	20
AX21690	Calcium, Total	mg/L	-0.00702	0.22	5.00	59.8	60.5	4.76	4.25 to 5.75	97.4	70 to 130	1.23	20

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 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-12

Laboratory ID Number: AX21686

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX21686	Solids, Dissolved	mg/L	8.00	25			357	52.0	40 to 60		0.279 5

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Expiration: June 30, 2018

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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: WMWBARAP
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-12 Dup

Laboratory ID Number: AX21687

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/21/2017	EPA 200.7		2	0.02	0.1	J 0.0866	mg/L
* Calcium, Total	HRG	9/21/2017	EPA 200.7		2	0.10	0.5	22.1	mg/L
General Characteristics									
* Solids, Dissolved	CES	9/19/2017	SM 2540C		1		25	360	mg/L
* Chloride, Total, by Test America	RRC	9/24/2017	SM 4500 Cl_E		1	0.60	2.00	24	mg/L
* Fluoride, Total, by Test America	BAB	9/29/2017	SM 4500 F_C		1	0.032	0.10	J 0.070	mg/L
* Sulfate, Total, by Test America	RRC	9/27/2017	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: WMWBARAP
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-12 Dup

Laboratory ID Number: AX21687

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX21690	Boron, Total	mg/L	0.000794	0.044	1.00	2.97	2.98	0.963	0.85 to 1.15	101	70 to 130	0.491	20
AX21690	Calcium, Total	mg/L	-0.00702	0.22	5.00	59.8	60.5	4.76	4.25 to 5.75	97.4	70 to 130	1.23	20

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-12 Dup

Laboratory ID Number: AX21687

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX21686	Solids, Dissolved	mg/L	8.00	25			357	52.0	40 to 60			0.279	5

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CC:

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Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AX21688

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/21/2017	EPA 200.7		2	0.02	0.1	J 0.0751	mg/L
* Calcium, Total	HRG	9/21/2017	EPA 200.7		2	0.10	0.5	25.5	mg/L
General Characteristics									
* Solids, Dissolved	CES	9/19/2017	SM 2540C		1		25	378	mg/L
* Chloride, Total, by Test America	RRC	9/24/2017	SM 4500 Cl_E		1	0.60	2.00	26	mg/L
* Fluoride, Total, by Test America	BAB	9/29/2017	SM 4500 F_C		1	0.032	0.10	J 0.070	mg/L
* Sulfate, Total, by Test America	RRC	9/27/2017	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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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AX21688

Sample	Analysis	Units	MB	MB				LFB		Rec			Prec
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX21690	Boron, Total	mg/L	0.000794	0.044	1.00	2.97	2.98	0.963	0.85 to 1.15	101	70 to 130	0.491	20
AX21690	Calcium, Total	mg/L	-0.00702	0.22	5.00	59.8	60.5	4.76	4.25 to 5.75	97.4	70 to 130	1.23	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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 (205) 664-6032 or 6171
 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-11

Laboratory ID Number: AX21688

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec
AX21692	Solids, Dissolved	mg/L	8.00	25				358	52.0	40 to 60			1.13
													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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 (205) 664-6032 or 6171
 FAX (205) 257-1654

Certificate Of Analysis Alabama Power



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAPEB
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AX21689

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/21/2017	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	9/19/2017	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total, by Test America	RRC	9/24/2017	SM 4500 Cl_E		1	0.60	2.00	J 0.99	mg/L
* Fluoride, Total, by Test America	BAB	9/29/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	RRC	9/27/2017	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
 (205) 664-6032 or 6171
 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAPEB
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AX21689

Sample	Analysis	Units	MB				MSD	LFB	LFB Limit	Rec		Prec Limit	
			MB	Limit	Spike	MS				Rec	Limit		
AX21690	Boron, Total	mg/L	0.000794	0.044	1.00	2.97	2.98	0.963	0.85 to 1.15	101	70 to 130	0.491	20
AX21690	Calcium, Total	mg/L	-0.00702	0.22	5.00	59.8	60.5	4.76	4.25 to 5.75	97.4	70 to 130	1.23	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



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAPEB
 Sample Date: 13-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond Equipment Blank

Laboratory ID Number: AX21689

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX21692	Solids, Dissolved	mg/L	8.00	25			358	52.0	40 to 60	1.13	5

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Expiration: June 30, 2018

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CC:

Alabama Power General Test Laboratory
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 FAX (205) 257-1654

Certificate Of Analysis



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AX21690

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/21/2017	EPA 200.7		2	0.02	0.1	1.96	mg/L
* Calcium, Total	HRG	9/21/2017	EPA 200.7		2	0.10	0.5	54.9	mg/L
General Characteristics									
* Solids, Dissolved	CES	9/19/2017	SM 2540C		1		25	391	mg/L
* Chloride, Total, by Test America	RRC	9/24/2017	SM 4500 Cl_E		1	0.60	2.00	22	mg/L
* Fluoride, Total, by Test America	BAB	9/29/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	RRC	9/27/2017	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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 (205) 664-6032 or 6171
 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AX21690

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX21690	Boron, Total	mg/L	0.000794	0.044	1.00	2.97	2.98	0.963	0.85 to 1.15	101	70 to 130	0.491	20
AX21690	Calcium, Total	mg/L	-0.00702	0.22	5.00	59.8	60.5	4.76	4.25 to 5.75	97.4	70 to 130	1.23	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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 (205) 664-6032 or 6171
 FAX (205) 257-1654

Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-10

Laboratory ID Number: AX21690

Sample	Analysis	Units	MB	MB	Spike	LFM	Sample	LFB	Rec	Prec	
			Limit	Limit			Duplicate	LFB	Limit	Limit	
AX21692	Solids, Dissolved	mg/L	8.00	25			358	52.0	40 to 60	1.13	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



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-10 Dup

Laboratory ID Number: AX21691

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/21/2017	EPA 200.7		2	0.02	0.1	1.95	mg/L
* Calcium, Total	HRG	9/21/2017	EPA 200.7		2	0.10	0.5	54.7	mg/L
General Characteristics									
* Solids, Dissolved	CES	9/19/2017	SM 2540C		1		25	386	mg/L
* Chloride, Total, by Test America	RRC	9/24/2017	SM 4500 Cl_E		1	0.60	2.00	22	mg/L
* Fluoride, Total, by Test America	BAB	9/29/2017	SM 4500 F_C		1	0.032	0.10	J 0.040	mg/L
* Sulfate, Total, by Test America	RRC	9/27/2017	SM 4500 SO4_E		1	1.40	5.00	U <1.4	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: WMWBARAP
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-10 Dup

Laboratory ID Number: AX21691

Sample	Analysis	Units	MB	MB				LFB		Rec		Prec	
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX21694	Calcium, Total	mg/L	-0.00684	0.22	5.00	5.04	4.99	4.98	4.25 to 5.75	101	70 to 130	1.01	20
AX21694	Boron, Total	mg/L	0.00162	0.044	1.00	0.973	0.947	0.960	0.85 to 1.15	97.3	70 to 130	2.66	20

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Batch QC Summary



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-10 Dup

Laboratory ID Number: AX21691

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Limit
AX21692	Solids, Dissolved	mg/L	8.00	25				358	52.0	40 to 60			1.13 5

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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



To: Dustin Brooks
 Greg Dyer

Customer Account: WMWBARAP
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AX21692

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/21/2017	EPA 200.7		2	0.02	0.1	2.41	mg/L
* Calcium, Total	HRG	9/21/2017	EPA 200.7		2	0.10	0.5	40.7	mg/L
General Characteristics									
* Solids, Dissolved	CES	9/19/2017	SM 2540C		1		25	350	mg/L
* Chloride, Total, by Test America	RRC	9/24/2017	SM 4500 Cl_E		1	0.60	2.00	24	mg/L
* Fluoride, Total, by Test America	BAB	9/29/2017	SM 4500 F_C		1	0.032	0.10	J 0.070	mg/L
* Sulfate, Total, by Test America	RRC	9/27/2017	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: WMWBARAP
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AX21692

Sample	Analysis	Units	MB	MB				LFB		Rec			Prec
				Limit	Spike	MS	MSD	LFB	Limit	Rec	Limit	Prec	Limit
AX21694	Boron, Total	mg/L	0.00162	0.044	1.00	0.973	0.947	0.960	0.85 to 1.15	97.3	70 to 130	2.66	20
AX21694	Calcium, Total	mg/L	-0.00684	0.22	5.00	5.04	4.99	4.98	4.25 to 5.75	101	70 to 130	1.01	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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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: WMWBARAP
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-9

Laboratory ID Number: AX21692

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Limit
AX21692	Solids, Dissolved	mg/L	8.00	25				358	52.0	40 to 60		1.13	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: WMWBARAP
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AX21693

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/21/2017	EPA 200.7		2	0.02	0.1	J 0.0471	mg/L
* Calcium, Total	HRG	9/21/2017	EPA 200.7		2	0.10	0.5	9.64	mg/L
General Characteristics									
* Solids, Dissolved	CES	9/19/2017	SM 2540C		1		25	141	mg/L
* Chloride, Total, by Test America	RRC	9/27/2017	SM 4500 Cl_E		1	0.60	2.00	13	mg/L
* Fluoride, Total, by Test America	BAB	9/29/2017	SM 4500 F_C		1	0.032	0.10	J 0.070	mg/L
* Sulfate, Total, by Test America	RRC	9/27/2017	SM 4500 SO4_E		1	1.40	5.00	U <1.4	mg/L

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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: WMWBARAP
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AX21693

Sample	Analysis	Units	MB		Spike	MS	MSD	LFB	LFB		Rec		Prec
			Limit	Limit					Limit	Rec	Limit	Prec	
AX21694	Boron, Total	mg/L	0.00162	0.044	1.00	0.973	0.947	0.960	0.85 to 1.15	97.3	70 to 130	2.66	20
AX21694	Calcium, Total	mg/L	-0.00684	0.22	5.00	5.04	4.99	4.98	4.25 to 5.75	101	70 to 130	1.01	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: WMWBARAP
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond - MW-7

Laboratory ID Number: AX21693

Sample	Analysis	Units	MB	MB	Limit	Spike	LFM	Sample	LFB	Rec	Prec	Prec	Limit	
				Limit				Duplicate	LFB	Limit	Rec	Limit	Prec	Limit
AX21692	Solids, Dissolved	mg/L	8.00	25				358	52.0	40 to 60			1.13	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: WMWBARAPFB
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX21694

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q Results	Units
Metals, Cyanide, Total Phenols									
* Boron, Total	HRG	9/21/2017	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	9/19/2017	SM 2540C		1		25	U Not Detected	mg/L
* Chloride, Total, by Test America	RRC	9/24/2017	SM 4500 Cl_E		1	0.60	2.00	U <0.60	mg/L
* Fluoride, Total, by Test America	BAB	9/29/2017	SM 4500 F_C		1	0.032	0.10	U <0.032	mg/L
* Sulfate, Total, by Test America	RRC	9/27/2017	SM 4500 SO4_E		1	1.40	5.00	U <1.4	mg/L

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Expiration: June 30, 2018

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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: WMWBARAPFB
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX21694

Sample	Analysis	Units	MB		MS	MSD	LFB	LFB		Rec		Prec	Limit
			Limit	Spike				Limit	Rec	Limit	Prec		
AX21694	Boron, Total	mg/L	0.00162	0.044	1.00	0.973	0.947	0.960	0.85 to 1.15	97.3	70 to 130	2.66	20
AX21694	Calcium, Total	mg/L	-0.00684	0.22	5.00	5.04	4.99	4.98	4.25 to 5.75	101	70 to 130	1.01	20

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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: WMWBARAPFB
 Sample Date: 14-Sep-17
 Customer ID:
 Delivery Date: 15-Sep-17

Description: Barry Ash Pond Field Blank

Laboratory ID Number: AX21694

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX21692	Solids, Dissolved	mg/L	8.00	25			358	52.0	40 to 60			1.13	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 09/14/2017 16:45

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Tamala Davis	Requested By	Greg Dyer
Collector	Nick Pitts	Location	Barry Ash Pond
Analysis Requested	Bottle 1 (500 ml): Metals, Bottle 2 (500 ml): TDS, Bottle 3 (250 ml): Anions		
Comments	All anions outsourced to Test America, Pensacola.		

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-15	09/13/2017	10:05	3	Groundwater		AX21681
MW-13	09/13/2017	11:07	3	Groundwater		AX21682
MW-14	09/13/2017	12:02	3	Groundwater		AX21683
MW-1	09/13/2017	13:00	3	Groundwater		AX21684
MW-16	09/13/2017	14:18	3	Groundwater		AX21685
MW-12	09/13/2017	15:08	3	Groundwater		AX21686
MW-12 Dup	09/13/2017	15:08	3	Sample Duplicate		AX21687
MW-11	09/13/2017	15:57	3	Groundwater		AX21688
EB-1	09/13/2017	09:30	3	Equipment Blank		AX21689
MW-10	09/14/2017	09:48	3	Groundwater		AX21690
MW-10 Dup	09/14/2017	09:48	3	Sample Duplicate		AX21691
MW-9	09/14/2017	10:42	3	Groundwater		AX21692
MW-7	09/14/2017	11:50	3	Groundwater		AX21693
FB-2	09/14/2017	11:18	3	Field Blank		AX21694

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=kkornega@southernco.com, c=US Date: 2017.09.15 09:00:00 -0500</small>	09/15/2017 09:00

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
		0.5 degrees C
		Thermometer ID
		6035-30997-2-2
		pH Strip ID
		6153-32036-10-3

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: 400-143536-1

TestAmerica Sample Delivery Group: Plant Barry Ash Pond

Client Project/Site: CCR Plant Barry

For:

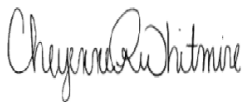
Alabama Power General Test Laboratory

744 County Rd 87

GSC #8

Calera, Alabama 35040

Attn: Sarah Copeland



Authorized for release by:

9/29/2017 7:27:22 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

LINKS

Review your project
results through

Total Access

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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 Barry

TestAmerica Job ID: 400-143536-1
SDG: Plant Barry Ash Pond

Job ID: 400-143536-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-143536-1

General Chemistry

Method(s) SM 4500 SO4 E: The following sample was run at a dilution do to a matrix interference: AX21683 MW-14 (400-143536-10).

Method(s) SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 369761 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.

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Detection Summary

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

TestAmerica Job ID: 400-143536-1
SDG: Plant Barry Ash Pond

Client Sample ID: AX21355 MW-4

Lab Sample ID: 400-143536-1

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
Sulfate	1.9	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX21356 MW-3

Lab Sample ID: 400-143536-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	8.5		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: AX21357 MW-2

Lab Sample ID: 400-143536-3

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	0.037	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX21358 FB-1

Lab Sample ID: 400-143536-4

No Detections.

Client Sample ID: AX21632 MW-5

Lab Sample ID: 400-143536-5

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	0.060	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX21633 MW-6

Lab Sample ID: 400-143536-6

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	1.8	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX21634 MW-8

Lab Sample ID: 400-143536-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	24		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: AX21681 MW-15

Lab Sample ID: 400-143536-8

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	0.20		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX21682 MW-13

Lab Sample ID: 400-143536-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	42		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	2.2	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX21683 MW-14

Lab Sample ID: 400-143536-10

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-143536-1
SDG: Plant Barry Ash Pond

Client Sample ID: AX21683 MW-14 (Continued)

Lab Sample ID: 400-143536-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	43		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

Client Sample ID: AX21684 MW-1

Lab Sample ID: 400-143536-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	24		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	4.7	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX21685 MW-16

Lab Sample ID: 400-143536-12

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	0.060	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: AX21686 MW-12

Lab Sample ID: 400-143536-13

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	0.070	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX21687 MW-12 DUP

Lab Sample ID: 400-143536-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	24		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

Client Sample ID: AX21688 MW-11

Lab Sample ID: 400-143536-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	26		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

Client Sample ID: AX21689 EB-1

Lab Sample ID: 400-143536-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	0.99	J	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: AX21690 MW-10

Lab Sample ID: 400-143536-17

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

Client Sample ID: AX21691 MW-10 DUP

Lab Sample ID: 400-143536-18

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

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

TestAmerica Job ID: 400-143536-1
SDG: Plant Barry Ash Pond

Client Sample ID: AX21691 MW-10 DUP (Continued)

Lab Sample ID: 400-143536-18

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

Client Sample ID: AX21692 MW-9

Lab Sample ID: 400-143536-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	24		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

Client Sample ID: AX21693 MW-7

Lab Sample ID: 400-143536-20

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	0.070	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX21694 FB-2

Lab Sample ID: 400-143536-21

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 Barry

TestAmerica Job ID: 400-143536-1
SDG: Plant Barry 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 Barry

TestAmerica Job ID: 400-143536-1
SDG: Plant Barry Ash Pond

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-143536-1	AX21355 MW-4	Water	09/12/17 15:15	09/20/17 13:50
400-143536-2	AX21356 MW-3	Water	09/12/17 16:00	09/20/17 13:50
400-143536-3	AX21357 MW-2	Water	09/12/17 16:50	09/20/17 13:50
400-143536-4	AX21358 FB-1	Water	09/12/17 17:00	09/20/17 13:50
400-143536-5	AX21632 MW-5	Water	09/14/17 09:32	09/20/17 13:50
400-143536-6	AX21633 MW-6	Water	09/14/17 10:50	09/20/17 13:50
400-143536-7	AX21634 MW-8	Water	09/14/17 11:35	09/20/17 13:50
400-143536-8	AX21681 MW-15	Water	09/13/17 10:05	09/20/17 13:50
400-143536-9	AX21682 MW-13	Water	09/13/17 11:07	09/20/17 13:50
400-143536-10	AX21683 MW-14	Water	09/13/17 12:02	09/20/17 13:50
400-143536-11	AX21684 MW-1	Water	09/13/17 13:00	09/20/17 13:50
400-143536-12	AX21685 MW-16	Water	09/13/17 14:18	09/20/17 13:50
400-143536-13	AX21686 MW-12	Water	09/13/17 15:08	09/20/17 13:50
400-143536-14	AX21687 MW-12 DUP	Water	09/13/17 15:08	09/20/17 13:50
400-143536-15	AX21688 MW-11	Water	09/13/17 15:57	09/20/17 13:50
400-143536-16	AX21689 EB-1	Water	09/13/17 09:30	09/20/17 13:50
400-143536-17	AX21690 MW-10	Water	09/14/17 09:48	09/20/17 13:50
400-143536-18	AX21691 MW-10 DUP	Water	09/14/17 09:48	09/20/17 13:50
400-143536-19	AX21692 MW-9	Water	09/14/17 10:42	09/20/17 13:50
400-143536-20	AX21693 MW-7	Water	09/14/17 11:50	09/20/17 13:50
400-143536-21	AX21694 FB-2	Water	09/14/17 11:18	09/20/17 13:50

Client Sample Results

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

TestAmerica Job ID: 400-143536-1
 SDG: Plant Barry Ash Pond

Client Sample ID: AX21355 MW-4

Lab Sample ID: 400-143536-1

Date Collected: 09/12/17 15:15

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11		2.0	0.60	mg/L			09/24/17 08:27	1
Fluoride	<0.032		0.10	0.032	mg/L			09/29/17 15:27	1
Sulfate	1.9	J	5.0	1.4	mg/L			09/26/17 09:09	1

Client Sample ID: AX21356 MW-3

Lab Sample ID: 400-143536-2

Date Collected: 09/12/17 16:00

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.5		2.0	0.60	mg/L			09/24/17 08:27	1
Fluoride	<0.032		0.10	0.032	mg/L			09/29/17 15:29	1
Sulfate	<1.4		5.0	1.4	mg/L			09/26/17 09:09	1

Client Sample ID: AX21357 MW-2

Lab Sample ID: 400-143536-3

Date Collected: 09/12/17 16:50

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.6		2.0	0.60	mg/L			09/24/17 08:27	1
Fluoride	0.037	J	0.10	0.032	mg/L			09/29/17 15:35	1
Sulfate	<1.4		5.0	1.4	mg/L			09/26/17 09:09	1

Client Sample ID: AX21358 FB-1

Lab Sample ID: 400-143536-4

Date Collected: 09/12/17 17:00

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			09/24/17 08:27	1
Fluoride	<0.032		0.10	0.032	mg/L			09/29/17 15:39	1
Sulfate	<1.4		5.0	1.4	mg/L			09/26/17 09:09	1

Client Sample ID: AX21632 MW-5

Lab Sample ID: 400-143536-5

Date Collected: 09/14/17 09:32

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21		2.0	0.60	mg/L			09/24/17 09:33	1
Fluoride	0.060	J	0.10	0.032	mg/L			09/29/17 16:45	1
Sulfate	<1.4		5.0	1.4	mg/L			09/27/17 10:52	1

Client Sample Results

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

TestAmerica Job ID: 400-143536-1
 SDG: Plant Barry Ash Pond

Client Sample ID: AX21633 MW-6

Lab Sample ID: 400-143536-6

Date Collected: 09/14/17 10:50

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	6.5		2.0	0.60	mg/L			09/24/17 09:34	1
Fluoride	<0.032		0.10	0.032	mg/L			09/29/17 16:59	1
Sulfate	1.8	J	5.0	1.4	mg/L			09/27/17 10:52	1

Client Sample ID: AX21634 MW-8

Lab Sample ID: 400-143536-7

Date Collected: 09/14/17 11:35

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24		2.0	0.60	mg/L			09/24/17 09:33	1
Fluoride	0.050	J	0.10	0.032	mg/L			09/29/17 16:52	1
Sulfate	<1.4		5.0	1.4	mg/L			09/27/17 10:52	1

Client Sample ID: AX21681 MW-15

Lab Sample ID: 400-143536-8

Date Collected: 09/13/17 10:05

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	36		2.0	0.60	mg/L			09/24/17 08:44	1
Fluoride	0.20		0.10	0.032	mg/L			09/29/17 17:01	1
Sulfate	<1.4		5.0	1.4	mg/L			09/26/17 09:24	1

Client Sample ID: AX21682 MW-13

Lab Sample ID: 400-143536-9

Date Collected: 09/13/17 11:07

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	42		2.0	0.60	mg/L			09/24/17 08:45	1
Fluoride	0.070	J	0.10	0.032	mg/L			09/29/17 17:03	1
Sulfate	2.2	J	5.0	1.4	mg/L			09/26/17 09:26	1

Client Sample ID: AX21683 MW-14

Lab Sample ID: 400-143536-10

Date Collected: 09/13/17 12:02

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	43		2.0	0.60	mg/L			09/24/17 08:45	1
Fluoride	0.070	J	0.10	0.032	mg/L			09/29/17 17:06	1
Sulfate	<14		50	14	mg/L			09/26/17 09:33	10

Client Sample ID: AX21684 MW-1

Lab Sample ID: 400-143536-11

Date Collected: 09/13/17 13:00

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24		2.0	0.60	mg/L			09/24/17 09:33	1

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-143536-1
 SDG: Plant Barry Ash Pond

Client Sample ID: AX21684 MW-1

Lab Sample ID: 400-143536-11

Date Collected: 09/13/17 13:00

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.060	J	0.10	0.032	mg/L			09/29/17 17:10	1
Sulfate	4.7	J	5.0	1.4	mg/L			09/27/17 10:52	1

Client Sample ID: AX21685 MW-16

Lab Sample ID: 400-143536-12

Date Collected: 09/13/17 14:18

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	21		2.0	0.60	mg/L			09/24/17 09:33	1
Fluoride	0.060	J	0.10	0.032	mg/L			09/29/17 17:12	1
Sulfate	2.6	J	5.0	1.4	mg/L			09/27/17 10:52	1

Client Sample ID: AX21686 MW-12

Lab Sample ID: 400-143536-13

Date Collected: 09/13/17 15:08

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23		2.0	0.60	mg/L			09/24/17 09:33	1
Fluoride	0.070	J	0.10	0.032	mg/L			09/29/17 17:45	1
Sulfate	<1.4		5.0	1.4	mg/L			09/27/17 10:52	1

Client Sample ID: AX21687 MW-12 DUP

Lab Sample ID: 400-143536-14

Date Collected: 09/13/17 15:08

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24		2.0	0.60	mg/L			09/24/17 09:33	1
Fluoride	0.070	J	0.10	0.032	mg/L			09/29/17 17:47	1
Sulfate	<1.4		5.0	1.4	mg/L			09/27/17 10:52	1

Client Sample ID: AX21688 MW-11

Lab Sample ID: 400-143536-15

Date Collected: 09/13/17 15:57

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26		2.0	0.60	mg/L			09/24/17 09:49	1
Fluoride	0.070	J	0.10	0.032	mg/L			09/29/17 17:56	1
Sulfate	<1.4	F1 F2	5.0	1.4	mg/L			09/27/17 10:52	1

Client Sample ID: AX21689 EB-1

Lab Sample ID: 400-143536-16

Date Collected: 09/13/17 09:30

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.99	J	2.0	0.60	mg/L			09/24/17 09:33	1
Fluoride	0.040	J	0.10	0.032	mg/L			09/29/17 18:08	1

TestAmerica Pensacola

Client Sample Results

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

TestAmerica Job ID: 400-143536-1
 SDG: Plant Barry Ash Pond

Client Sample ID: AX21689 EB-1

Lab Sample ID: 400-143536-16

Date Collected: 09/13/17 09:30

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.4		5.0	1.4	mg/L			09/27/17 10:52	1

Client Sample ID: AX21690 MW-10

Lab Sample ID: 400-143536-17

Date Collected: 09/14/17 09:48

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22		2.0	0.60	mg/L			09/24/17 09:33	1
Fluoride	0.040	J	0.10	0.032	mg/L			09/29/17 17:49	1
Sulfate	<1.4		5.0	1.4	mg/L			09/27/17 10:54	1

Client Sample ID: AX21691 MW-10 DUP

Lab Sample ID: 400-143536-18

Date Collected: 09/14/17 09:48

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22		2.0	0.60	mg/L			09/24/17 09:34	1
Fluoride	0.040	J	0.10	0.032	mg/L			09/29/17 18:05	1
Sulfate	<1.4		5.0	1.4	mg/L			09/27/17 10:54	1

Client Sample ID: AX21692 MW-9

Lab Sample ID: 400-143536-19

Date Collected: 09/14/17 10:42

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24		2.0	0.60	mg/L			09/24/17 09:49	1
Fluoride	0.070	J	0.10	0.032	mg/L			09/29/17 17:43	1
Sulfate	<1.4		5.0	1.4	mg/L			09/27/17 10:54	1

Client Sample ID: AX21693 MW-7

Lab Sample ID: 400-143536-20

Date Collected: 09/14/17 11:50

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	13		2.0	0.60	mg/L			09/27/17 15:26	1
Fluoride	0.070	J	0.10	0.032	mg/L			09/29/17 17:37	1
Sulfate	<1.4		5.0	1.4	mg/L			09/27/17 11:57	1

Client Sample ID: AX21694 FB-2

Lab Sample ID: 400-143536-21

Date Collected: 09/14/17 11:18

Matrix: Water

Date Received: 09/20/17 13:50

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			09/24/17 09:49	1
Fluoride	<0.032		0.10	0.032	mg/L			09/29/17 18:03	1
Sulfate	<1.4		5.0	1.4	mg/L			09/27/17 11:57	1

TestAmerica Pensacola

Definitions/Glossary

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

TestAmerica Job ID: 400-143536-1
SDG: Plant Barry 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.
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 Barry

TestAmerica Job ID: 400-143536-1
 SDG: Plant Barry Ash Pond

Client Sample ID: AX21355 MW-4
Date Collected: 09/12/17 15:15
Date Received: 09/20/17 13:50

Lab Sample ID: 400-143536-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	369311	09/24/17 08:27	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	370140	09/29/17 15:27	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	369519	09/26/17 09:09	RRC	TAL PEN

Client Sample ID: AX21356 MW-3
Date Collected: 09/12/17 16:00
Date Received: 09/20/17 13:50

Lab Sample ID: 400-143536-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	369311	09/24/17 08:27	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	370140	09/29/17 15:29	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	369519	09/26/17 09:09	RRC	TAL PEN

Client Sample ID: AX21357 MW-2
Date Collected: 09/12/17 16:50
Date Received: 09/20/17 13:50

Lab Sample ID: 400-143536-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	369311	09/24/17 08:27	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	370140	09/29/17 15:35	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	369519	09/26/17 09:09	RRC	TAL PEN

Client Sample ID: AX21358 FB-1
Date Collected: 09/12/17 17:00
Date Received: 09/20/17 13:50

Lab Sample ID: 400-143536-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	369311	09/24/17 08:27	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	370140	09/29/17 15:39	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	369519	09/26/17 09:09	RRC	TAL PEN

Client Sample ID: AX21632 MW-5
Date Collected: 09/14/17 09:32
Date Received: 09/20/17 13:50

Lab Sample ID: 400-143536-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	369312	09/24/17 09:33	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	370157	09/29/17 16:45	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	369761	09/27/17 10:52	RRC	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-143536-1
SDG: Plant Barry Ash Pond

Client Sample ID: AX21633 MW-6

Lab Sample ID: 400-143536-6

Date Collected: 09/14/17 10:50

Matrix: Water

Date Received: 09/20/17 13:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	369312	09/24/17 09:34	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	370157	09/29/17 16:59	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	369761	09/27/17 10:52	RRC	TAL PEN

Client Sample ID: AX21634 MW-8

Lab Sample ID: 400-143536-7

Date Collected: 09/14/17 11:35

Matrix: Water

Date Received: 09/20/17 13:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	369312	09/24/17 09:33	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	370157	09/29/17 16:52	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	369761	09/27/17 10:52	RRC	TAL PEN

Client Sample ID: AX21681 MW-15

Lab Sample ID: 400-143536-8

Date Collected: 09/13/17 10:05

Matrix: Water

Date Received: 09/20/17 13:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	369311	09/24/17 08:44	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	370157	09/29/17 17:01	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	369519	09/26/17 09:24	RRC	TAL PEN

Client Sample ID: AX21682 MW-13

Lab Sample ID: 400-143536-9

Date Collected: 09/13/17 11:07

Matrix: Water

Date Received: 09/20/17 13:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	369311	09/24/17 08:45	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	370157	09/29/17 17:03	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	369519	09/26/17 09:26	RRC	TAL PEN

Client Sample ID: AX21683 MW-14

Lab Sample ID: 400-143536-10

Date Collected: 09/13/17 12:02

Matrix: Water

Date Received: 09/20/17 13:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	369311	09/24/17 08:45	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	370157	09/29/17 17:06	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	369519	09/26/17 09:33	RRC	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-143536-1
 SDG: Plant Barry Ash Pond

Client Sample ID: AX21684 MW-1

Lab Sample ID: 400-143536-11

Date Collected: 09/13/17 13:00

Matrix: Water

Date Received: 09/20/17 13:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	369312	09/24/17 09:33	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	370157	09/29/17 17:10	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	369761	09/27/17 10:52	RRC	TAL PEN

Client Sample ID: AX21685 MW-16

Lab Sample ID: 400-143536-12

Date Collected: 09/13/17 14:18

Matrix: Water

Date Received: 09/20/17 13:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	369312	09/24/17 09:33	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	370157	09/29/17 17:12	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	369761	09/27/17 10:52	RRC	TAL PEN

Client Sample ID: AX21686 MW-12

Lab Sample ID: 400-143536-13

Date Collected: 09/13/17 15:08

Matrix: Water

Date Received: 09/20/17 13:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	369312	09/24/17 09:33	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	370163	09/29/17 17:45	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	369761	09/27/17 10:52	RRC	TAL PEN

Client Sample ID: AX21687 MW-12 DUP

Lab Sample ID: 400-143536-14

Date Collected: 09/13/17 15:08

Matrix: Water

Date Received: 09/20/17 13:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	369312	09/24/17 09:33	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	370163	09/29/17 17:47	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	369761	09/27/17 10:52	RRC	TAL PEN

Client Sample ID: AX21688 MW-11

Lab Sample ID: 400-143536-15

Date Collected: 09/13/17 15:57

Matrix: Water

Date Received: 09/20/17 13:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	369312	09/24/17 09:49	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	370163	09/29/17 17:56	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	369761	09/27/17 10:52	RRC	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-143536-1
 SDG: Plant Barry Ash Pond

Client Sample ID: AX21689 EB-1

Lab Sample ID: 400-143536-16

Date Collected: 09/13/17 09:30

Matrix: Water

Date Received: 09/20/17 13:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	369312	09/24/17 09:33	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	370163	09/29/17 18:08	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	369761	09/27/17 10:52	RRC	TAL PEN

Client Sample ID: AX21690 MW-10

Lab Sample ID: 400-143536-17

Date Collected: 09/14/17 09:48

Matrix: Water

Date Received: 09/20/17 13:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	369312	09/24/17 09:33	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	370163	09/29/17 17:49	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	369761	09/27/17 10:54	RRC	TAL PEN

Client Sample ID: AX21691 MW-10 DUP

Lab Sample ID: 400-143536-18

Date Collected: 09/14/17 09:48

Matrix: Water

Date Received: 09/20/17 13:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	369312	09/24/17 09:34	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	370163	09/29/17 18:05	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	369761	09/27/17 10:54	RRC	TAL PEN

Client Sample ID: AX21692 MW-9

Lab Sample ID: 400-143536-19

Date Collected: 09/14/17 10:42

Matrix: Water

Date Received: 09/20/17 13:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	369312	09/24/17 09:49	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	370163	09/29/17 17:43	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	369761	09/27/17 10:54	RRC	TAL PEN

Client Sample ID: AX21693 MW-7

Lab Sample ID: 400-143536-20

Date Collected: 09/14/17 11:50

Matrix: Water

Date Received: 09/20/17 13:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	369805	09/27/17 15:26	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	370163	09/29/17 17:37	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	369761	09/27/17 11:57	RRC	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-143536-1
SDG: Plant Barry Ash Pond

Client Sample ID: AX21694 FB-2

Lab Sample ID: 400-143536-21

Date Collected: 09/14/17 11:18

Matrix: Water

Date Received: 09/20/17 13:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	369312	09/24/17 09:49	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	370163	09/29/17 18:03	BAB	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	369761	09/27/17 11:57	RRC	TAL PEN

Laboratory References:

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

QC Association Summary

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

TestAmerica Job ID: 400-143536-1
 SDG: Plant Barry Ash Pond

General Chemistry

Analysis Batch: 369311

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-143536-1	AX21355 MW-4	Total/NA	Water	SM 4500 Cl- E	
400-143536-2	AX21356 MW-3	Total/NA	Water	SM 4500 Cl- E	
400-143536-3	AX21357 MW-2	Total/NA	Water	SM 4500 Cl- E	
400-143536-4	AX21358 FB-1	Total/NA	Water	SM 4500 Cl- E	
400-143536-8	AX21681 MW-15	Total/NA	Water	SM 4500 Cl- E	
400-143536-9	AX21682 MW-13	Total/NA	Water	SM 4500 Cl- E	
400-143536-10	AX21683 MW-14	Total/NA	Water	SM 4500 Cl- E	
MB 400-369311/15	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-369311/16	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-369311/12	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-143535-A-1 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-143535-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	
400-143535-A-9 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-143535-A-9 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 369312

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-143536-5	AX21632 MW-5	Total/NA	Water	SM 4500 Cl- E	
400-143536-6	AX21633 MW-6	Total/NA	Water	SM 4500 Cl- E	
400-143536-7	AX21634 MW-8	Total/NA	Water	SM 4500 Cl- E	
400-143536-11	AX21684 MW-1	Total/NA	Water	SM 4500 Cl- E	
400-143536-12	AX21685 MW-16	Total/NA	Water	SM 4500 Cl- E	
400-143536-13	AX21686 MW-12	Total/NA	Water	SM 4500 Cl- E	
400-143536-14	AX21687 MW-12 DUP	Total/NA	Water	SM 4500 Cl- E	
400-143536-15	AX21688 MW-11	Total/NA	Water	SM 4500 Cl- E	
400-143536-16	AX21689 EB-1	Total/NA	Water	SM 4500 Cl- E	
400-143536-17	AX21690 MW-10	Total/NA	Water	SM 4500 Cl- E	
400-143536-18	AX21691 MW-10 DUP	Total/NA	Water	SM 4500 Cl- E	
400-143536-19	AX21692 MW-9	Total/NA	Water	SM 4500 Cl- E	
400-143536-21	AX21694 FB-2	Total/NA	Water	SM 4500 Cl- E	
MB 400-369312/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-369312/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-369312/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-143536-7 MS	AX21634 MW-8	Total/NA	Water	SM 4500 Cl- E	
400-143536-7 MSD	AX21634 MW-8	Total/NA	Water	SM 4500 Cl- E	
400-143536-15 MS	AX21688 MW-11	Total/NA	Water	SM 4500 Cl- E	
400-143536-15 MSD	AX21688 MW-11	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 369519

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-143536-1	AX21355 MW-4	Total/NA	Water	SM 4500 SO4 E	
400-143536-2	AX21356 MW-3	Total/NA	Water	SM 4500 SO4 E	
400-143536-3	AX21357 MW-2	Total/NA	Water	SM 4500 SO4 E	
400-143536-4	AX21358 FB-1	Total/NA	Water	SM 4500 SO4 E	
400-143536-8	AX21681 MW-15	Total/NA	Water	SM 4500 SO4 E	
400-143536-9	AX21682 MW-13	Total/NA	Water	SM 4500 SO4 E	
400-143536-10	AX21683 MW-14	Total/NA	Water	SM 4500 SO4 E	
MB 400-369519/17	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-369519/18	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-369519/14	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-143535-A-1 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-143536-1
 SDG: Plant Barry Ash Pond

General Chemistry (Continued)

Analysis Batch: 369519 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-143535-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	
400-143535-A-9 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-143535-A-9 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 369761

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-143536-5	AX21632 MW-5	Total/NA	Water	SM 4500 SO4 E	
400-143536-6	AX21633 MW-6	Total/NA	Water	SM 4500 SO4 E	
400-143536-7	AX21634 MW-8	Total/NA	Water	SM 4500 SO4 E	
400-143536-11	AX21684 MW-1	Total/NA	Water	SM 4500 SO4 E	
400-143536-12	AX21685 MW-16	Total/NA	Water	SM 4500 SO4 E	
400-143536-13	AX21686 MW-12	Total/NA	Water	SM 4500 SO4 E	
400-143536-14	AX21687 MW-12 DUP	Total/NA	Water	SM 4500 SO4 E	
400-143536-15	AX21688 MW-11	Total/NA	Water	SM 4500 SO4 E	
400-143536-16	AX21689 EB-1	Total/NA	Water	SM 4500 SO4 E	
400-143536-17	AX21690 MW-10	Total/NA	Water	SM 4500 SO4 E	
400-143536-18	AX21691 MW-10 DUP	Total/NA	Water	SM 4500 SO4 E	
400-143536-19	AX21692 MW-9	Total/NA	Water	SM 4500 SO4 E	
400-143536-20	AX21693 MW-7	Total/NA	Water	SM 4500 SO4 E	
400-143536-21	AX21694 FB-2	Total/NA	Water	SM 4500 SO4 E	
MB 400-369761/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-369761/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-369761/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-143536-7 MS	AX21634 MW-8	Total/NA	Water	SM 4500 SO4 E	
400-143536-7 MSD	AX21634 MW-8	Total/NA	Water	SM 4500 SO4 E	
400-143536-15 MS	AX21688 MW-11	Total/NA	Water	SM 4500 SO4 E	
400-143536-15 MSD	AX21688 MW-11	Total/NA	Water	SM 4500 SO4 E	
400-143536-20 MS	AX21693 MW-7	Total/NA	Water	SM 4500 SO4 E	
400-143536-20 MSD	AX21693 MW-7	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 369805

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-143536-20	AX21693 MW-7	Total/NA	Water	SM 4500 CI- E	
MB 400-369805/6	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 400-369805/7	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
MRL 400-369805/3	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
400-143536-20 MS	AX21693 MW-7	Total/NA	Water	SM 4500 CI- E	
400-143536-20 MSD	AX21693 MW-7	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 370140

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-143536-1	AX21355 MW-4	Total/NA	Water	SM 4500 F C	
400-143536-2	AX21356 MW-3	Total/NA	Water	SM 4500 F C	
400-143536-3	AX21357 MW-2	Total/NA	Water	SM 4500 F C	
400-143536-4	AX21358 FB-1	Total/NA	Water	SM 4500 F C	
MB 400-370140/1	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-370140/2	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-143535-A-1 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-143535-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-143536-3 DU	AX21357 MW-2	Total/NA	Water	SM 4500 F C	

TestAmerica Pensacola

QC Association Summary

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

TestAmerica Job ID: 400-143536-1
SDG: Plant Barry Ash Pond

General Chemistry (Continued)

Analysis Batch: 370157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-143536-5	AX21632 MW-5	Total/NA	Water	SM 4500 F C	
400-143536-6	AX21633 MW-6	Total/NA	Water	SM 4500 F C	
400-143536-7	AX21634 MW-8	Total/NA	Water	SM 4500 F C	
400-143536-8	AX21681 MW-15	Total/NA	Water	SM 4500 F C	
400-143536-9	AX21682 MW-13	Total/NA	Water	SM 4500 F C	
400-143536-10	AX21683 MW-14	Total/NA	Water	SM 4500 F C	
400-143536-11	AX21684 MW-1	Total/NA	Water	SM 4500 F C	
400-143536-12	AX21685 MW-16	Total/NA	Water	SM 4500 F C	
MB 400-370157/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-370157/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-143536-7 MS	AX21634 MW-8	Total/NA	Water	SM 4500 F C	
400-143536-7 MSD	AX21634 MW-8	Total/NA	Water	SM 4500 F C	

Analysis Batch: 370163

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-143536-13	AX21686 MW-12	Total/NA	Water	SM 4500 F C	
400-143536-14	AX21687 MW-12 DUP	Total/NA	Water	SM 4500 F C	
400-143536-15	AX21688 MW-11	Total/NA	Water	SM 4500 F C	
400-143536-16	AX21689 EB-1	Total/NA	Water	SM 4500 F C	
400-143536-17	AX21690 MW-10	Total/NA	Water	SM 4500 F C	
400-143536-18	AX21691 MW-10 DUP	Total/NA	Water	SM 4500 F C	
400-143536-19	AX21692 MW-9	Total/NA	Water	SM 4500 F C	
400-143536-20	AX21693 MW-7	Total/NA	Water	SM 4500 F C	
400-143536-21	AX21694 FB-2	Total/NA	Water	SM 4500 F C	
MB 400-370163/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-370163/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-143536-15 MS	AX21688 MW-11	Total/NA	Water	SM 4500 F C	
400-143536-15 MSD	AX21688 MW-11	Total/NA	Water	SM 4500 F C	
400-143536-20 MS	AX21693 MW-7	Total/NA	Water	SM 4500 F C	
400-143536-20 MSD	AX21693 MW-7	Total/NA	Water	SM 4500 F C	

QC Sample Results

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

TestAmerica Job ID: 400-143536-1
 SDG: Plant Barry Ash Pond

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-369311/15
Matrix: Water
Analysis Batch: 369311

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			09/24/17 08:13	1

Lab Sample ID: LCS 400-369311/16
Matrix: Water
Analysis Batch: 369311

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	29.2		mg/L		97	90 - 110

Lab Sample ID: MRL 400-369311/12
Matrix: Water
Analysis Batch: 369311

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	2.41		mg/L		120	50 - 150

Lab Sample ID: 400-143535-A-1 MS
Matrix: Water
Analysis Batch: 369311

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	8.5		10.0	18.9		mg/L		104	73 - 120

Lab Sample ID: 400-143535-A-1 MSD
Matrix: Water
Analysis Batch: 369311

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	8.5		10.0	18.9		mg/L		104	73 - 120	0	8

Lab Sample ID: 400-143535-A-9 MS
Matrix: Water
Analysis Batch: 369311

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	3.9		10.0	14.7		mg/L		108	73 - 120

Lab Sample ID: 400-143535-A-9 MSD
Matrix: Water
Analysis Batch: 369311

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	3.9		10.0	14.7		mg/L		107	73 - 120	1	8

Lab Sample ID: MB 400-369312/6
Matrix: Water
Analysis Batch: 369312

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			09/24/17 09:05	1

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-143536-1
 SDG: Plant Barry Ash Pond

Lab Sample ID: LCS 400-369312/7
Matrix: Water
Analysis Batch: 369312

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	29.6		mg/L		99	90 - 110

Lab Sample ID: MRL 400-369312/3
Matrix: Water
Analysis Batch: 369312

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	2.48		mg/L		124	50 - 150

Lab Sample ID: 400-143536-7 MS
Matrix: Water
Analysis Batch: 369312

Client Sample ID: AX21634 MW-8
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	24		10.0	32.7		mg/L		91	73 - 120

Lab Sample ID: 400-143536-7 MSD
Matrix: Water
Analysis Batch: 369312

Client Sample ID: AX21634 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	24		10.0	33.1		mg/L		95	73 - 120	1	8

Lab Sample ID: 400-143536-15 MS
Matrix: Water
Analysis Batch: 369312

Client Sample ID: AX21688 MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	26		10.0	36.3		mg/L		101	73 - 120

Lab Sample ID: 400-143536-15 MSD
Matrix: Water
Analysis Batch: 369312

Client Sample ID: AX21688 MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	26		10.0	35.7		mg/L		96	73 - 120	2	8

Lab Sample ID: MB 400-369805/6
Matrix: Water
Analysis Batch: 369805

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			09/27/17 15:13	1

Lab Sample ID: LCS 400-369805/7
Matrix: Water
Analysis Batch: 369805

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	30.0		mg/L		100	90 - 110

QC Sample Results

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

TestAmerica Job ID: 400-143536-1
 SDG: Plant Barry Ash Pond

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: MRL 400-369805/3
Matrix: Water
Analysis Batch: 369805

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	2.36		mg/L		118	50 - 150

Lab Sample ID: 400-143536-20 MS
Matrix: Water
Analysis Batch: 369805

Client Sample ID: AX21693 MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	13		10.0	23.3		mg/L		102	73 - 120

Lab Sample ID: 400-143536-20 MSD
Matrix: Water
Analysis Batch: 369805

Client Sample ID: AX21693 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	13		10.0	23.2		mg/L		102	73 - 120	0	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-370140/1
Matrix: Water
Analysis Batch: 370140

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			09/29/17 15:03	1

Lab Sample ID: LCS 400-370140/2
Matrix: Water
Analysis Batch: 370140

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	3.67		mg/L		92	90 - 110

Lab Sample ID: 400-143535-A-1 MS
Matrix: Water
Analysis Batch: 370140

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	<0.032		1.00	0.964		mg/L		96	75 - 125

Lab Sample ID: 400-143535-A-1 MSD
Matrix: Water
Analysis Batch: 370140

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	<0.032		1.00	1.00		mg/L		100	75 - 125	4	4

QC Sample Results

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

TestAmerica Job ID: 400-143536-1
 SDG: Plant Barry Ash Pond

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: 400-143536-3 DU
Matrix: Water
Analysis Batch: 370140

Client Sample ID: AX21357 MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride	0.037	J	0.0370	J	mg/L		0	4

Lab Sample ID: MB 400-370157/3
Matrix: Water
Analysis Batch: 370157

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			09/29/17 16:14	1

Lab Sample ID: LCS 400-370157/4
Matrix: Water
Analysis Batch: 370157

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	3.67		mg/L		92	90 - 110

Lab Sample ID: 400-143536-7 MS
Matrix: Water
Analysis Batch: 370157

Client Sample ID: AX21634 MW-8
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	1.02		mg/L		97	75 - 125

Lab Sample ID: 400-143536-7 MSD
Matrix: Water
Analysis Batch: 370157

Client Sample ID: AX21634 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	0.050	J	1.00	1.00		mg/L		95	75 - 125	2	4

Lab Sample ID: MB 400-370163/3
Matrix: Water
Analysis Batch: 370163

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			09/29/17 17:27	1

Lab Sample ID: LCS 400-370163/4
Matrix: Water
Analysis Batch: 370163

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	3.75		mg/L		94	90 - 110

Lab Sample ID: 400-143536-15 MS
Matrix: Water
Analysis Batch: 370163

Client Sample ID: AX21688 MW-11
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	1.06		mg/L		99	75 - 125

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-143536-1
 SDG: Plant Barry Ash Pond

Lab Sample ID: 400-143536-15 MSD
Matrix: Water
Analysis Batch: 370163

Client Sample ID: AX21688 MW-11
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	1.06		mg/L		99	75 - 125	0	4

Lab Sample ID: 400-143536-20 MS
Matrix: Water
Analysis Batch: 370163

Client Sample ID: AX21693 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
Fluoride	0.070	J	1.00	1.08		mg/L		101	75 - 125		

Lab Sample ID: 400-143536-20 MSD
Matrix: Water
Analysis Batch: 370163

Client Sample ID: AX21693 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	0.070	J	1.00	1.08		mg/L		101	75 - 125	0	4

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-369519/17
Matrix: Water
Analysis Batch: 369519

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			09/26/17 08:56	1

Lab Sample ID: LCS 400-369519/18
Matrix: Water
Analysis Batch: 369519

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	14.0		mg/L		93	90 - 110		

Lab Sample ID: MRL 400-369519/14
Matrix: Water
Analysis Batch: 369519

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	4.58	J	mg/L		92	50 - 150		

Lab Sample ID: 400-143535-A-1 MS
Matrix: Water
Analysis Batch: 369519

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	3.0	J	10.0	14.1		mg/L		111	77 - 128		

QC Sample Results

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

TestAmerica Job ID: 400-143536-1
 SDG: Plant Barry Ash Pond

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: 400-143535-A-1 MSD
Matrix: Water
Analysis Batch: 369519

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	3.0	J	10.0	13.8		mg/L		108	77 - 128	3	5

Lab Sample ID: 400-143535-A-9 MS
Matrix: Water
Analysis Batch: 369519

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	7.6		10.0	19.8		mg/L		122	77 - 128		

Lab Sample ID: 400-143535-A-9 MSD
Matrix: Water
Analysis Batch: 369519

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	7.6		10.0	19.0		mg/L		114	77 - 128	4	5

Lab Sample ID: MB 400-369761/6
Matrix: Water
Analysis Batch: 369761

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			09/27/17 09:37	1

Lab Sample ID: LCS 400-369761/7
Matrix: Water
Analysis Batch: 369761

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	15.0		mg/L		100	90 - 110		

Lab Sample ID: MRL 400-369761/3
Matrix: Water
Analysis Batch: 369761

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	4.96	J	mg/L		99	50 - 150		

Lab Sample ID: 400-143536-7 MS
Matrix: Water
Analysis Batch: 369761

Client Sample ID: AX21634 MW-8
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	9.86		mg/L		99	77 - 128		

Lab Sample ID: 400-143536-7 MSD
Matrix: Water
Analysis Batch: 369761

Client Sample ID: AX21634 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	<1.4		10.0	9.65		mg/L		96	77 - 128	2	5

TestAmerica Pensacola

QC Sample Results

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

TestAmerica Job ID: 400-143536-1
 SDG: Plant Barry Ash Pond

Lab Sample ID: 400-143536-15 MS
Matrix: Water
Analysis Batch: 369761

Client Sample ID: AX21688 MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	<1.4	F1 F2	10.0	5.13	F1	mg/L		51	77 - 128

Lab Sample ID: 400-143536-15 MSD
Matrix: Water
Analysis Batch: 369761

Client Sample ID: AX21688 MW-11
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	F1 F2	10.0	4.27	J F1 F2	mg/L		43	77 - 128	18	5

Lab Sample ID: 400-143536-20 MS
Matrix: Water
Analysis Batch: 369761

Client Sample ID: AX21693 MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	<1.4		10.0	9.43		mg/L		94	77 - 128

Lab Sample ID: 400-143536-20 MSD
Matrix: Water
Analysis Batch: 369761

Client Sample ID: AX21693 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	<1.4		10.0	9.24		mg/L		92	77 - 128	2	5

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: tk.korneg@southernco.com Project Name: CCR Site: Barry Ash Pond		Sampler: Anthony Goggins/Nick Pitts Lab PM: Whitmire, Cheyenne R Phone: E-Mail: cheyenne.whitmire@testamericainc.com		Carrier Tracking No(s): COC No: 400-56525-24537.1 Page: Page 1 of 1 Job #:		
Due Date Requested: TAT Requested (days): Routine		Analysis Requested				
PO #: WO #: Project #: SSOW#:		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 L - EDA Z - other (specify) Other:				
Address: City: State, Zip: Phone: Email: Project Name: CCR Site: Barry Ash Pond		Total Number of Containers				
Sample Identification		Special Instructions/Note: 0.0 IL-7 PC				
AX21687	9/13/17	1508	G	Water	1	MW-12 Dup (Sample Duplicate)
AX21688	9/13/17	1557	G	Water	1	MW-11
AX21689	9/13/17	0930	G	Water	1	EB-1 (Equipment Blank)
AX21690	9/14/17	0948	G	Water	1	MW-10
AX21691	9/14/17	0948	G	Water	1	MW-10 Dup (Sample Duplicate)
AX21692	9/14/17	1042	G	Water	1	MW-9
AX21693	9/14/17	1150	G	Water	1	MW-7
AX21694	9/14/17	1118	G	Water	1	FB-2 (Field 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		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: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:				
Empty Kit Relinquished by: Keith Kornegay Relinquished by:		Date: 09/19/2017 12:00 Date/Time:		Method of Shipment:		
Relinquished by:		Date/Time:		Company:		
Relinquished by:		Date/Time:		Company:		
Relinquished by:		Date/Time:		Company:		
Custody Seals Intact:		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		



Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-143536-1
SDG Number: Plant Barry Ash Pond

Login Number: 143536

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 Barry

TestAmerica Job ID: 400-143536-1
 SDG: Plant Barry 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	09-01-18
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-18
Georgia	State Program	4	N/A	06-30-18
Illinois	NELAP	5	200041	10-09-17
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	06-30-18
Tennessee	State Program	4	TN02907	06-30-18
Texas	NELAP	6	T104704286-17-12	09-30-18
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-18
Washington	State Program	10	C915	05-15-18
West Virginia DEP	State Program	3	136	06-30-18

Plant Barry Ash Pond
Field pH Data

Well	Date	Result	Units
BY-AP-MW-1	3/2/2016	5.78	SU
BY-AP-MW-1	4/19/2016	5.8	SU
BY-AP-MW-1	6/8/2016	5.83	SU
BY-AP-MW-1	8/31/2016	5.85	SU
BY-AP-MW-1	10/19/2016	5.87	SU
BY-AP-MW-1	1/31/2017	5.83	SU
BY-AP-MW-1	3/21/2017	5.83	SU
BY-AP-MW-1	5/2/2017	5.73	SU
BY-AP-MW-1	6/6/2017	5.83	SU
BY-AP-MW-1	9/13/2017	5.91	SU
BY-AP-MW-10	3/1/2016	6.33	SU
BY-AP-MW-10	4/20/2016	6.31	SU
BY-AP-MW-10	6/8/2016	6.34	SU
BY-AP-MW-10	8/31/2016	6.35	SU
BY-AP-MW-10	10/19/2016	6.35	SU
BY-AP-MW-10	2/1/2017	6.27	SU
BY-AP-MW-10	3/22/2017	6.29	SU
BY-AP-MW-10	5/3/2017	6.23	SU
BY-AP-MW-10	6/7/2017	6.27	SU
BY-AP-MW-10	9/14/2017	6.27	SU
BY-AP-MW-11	3/1/2016	6.34	SU
BY-AP-MW-11	4/20/2016	6.31	SU
BY-AP-MW-11	6/8/2016	6.33	SU
BY-AP-MW-11	8/31/2016	6.29	SU
BY-AP-MW-11	10/19/2016	6.26	SU
BY-AP-MW-11	2/1/2017	6.22	SU
BY-AP-MW-11	3/22/2017	6.22	SU
BY-AP-MW-11	5/3/2017	6.15	SU
BY-AP-MW-11	6/7/2017	6.21	SU
BY-AP-MW-11	9/13/2017	6.26	SU
BY-AP-MW-12	3/2/2016	6.16	SU
BY-AP-MW-12	4/20/2016	6.17	SU
BY-AP-MW-12	6/8/2016	6.25	SU
BY-AP-MW-12	8/31/2016	6.23	SU
BY-AP-MW-12	10/19/2016	6.2	SU
BY-AP-MW-12	2/1/2017	6.08	SU
BY-AP-MW-12	3/22/2017	6.12	SU
BY-AP-MW-12	5/3/2017	6.12	SU
BY-AP-MW-12	6/7/2017	6.13	SU
BY-AP-MW-12	9/13/2017	6.19	SU
BY-AP-MW-13	3/2/2016	6.1	SU
BY-AP-MW-13	4/20/2016	6.14	SU
BY-AP-MW-13	6/8/2016	6.11	SU
BY-AP-MW-13	8/31/2016	6.1	SU
BY-AP-MW-13	10/19/2016	6.1	SU
BY-AP-MW-13	1/31/2017	6.07	SU

Plant Barry Ash Pond
Field pH Data

Well	Date	Result	Units
BY-AP-MW-13	3/22/2017	6.07	SU
BY-AP-MW-13	5/3/2017	6.1	SU
BY-AP-MW-13	6/7/2017	6.07	SU
BY-AP-MW-13	9/13/2017	6.12	SU
BY-AP-MW-14	3/2/2016	6.08	SU
BY-AP-MW-14	4/20/2016	6.04	SU
BY-AP-MW-14	6/8/2016	6.13	SU
BY-AP-MW-14	8/30/2016	6.08	SU
BY-AP-MW-14	10/18/2016	6.13	SU
BY-AP-MW-14	1/31/2017	6.06	SU
BY-AP-MW-14	3/22/2017	6.09	SU
BY-AP-MW-14	5/2/2017	5.94	SU
BY-AP-MW-14	6/6/2017	6.1	SU
BY-AP-MW-14	9/13/2017	6.11	SU
BY-AP-MW-15	3/2/2016	6.61	SU
BY-AP-MW-15	4/19/2016	6.75	SU
BY-AP-MW-15	6/8/2016	6.63	SU
BY-AP-MW-15	8/31/2016	6.71	SU
BY-AP-MW-15	10/19/2016	6.66	SU
BY-AP-MW-15	1/31/2017	6.73	SU
BY-AP-MW-15	3/21/2017	6.62	SU
BY-AP-MW-15	5/2/2017	6.49	SU
BY-AP-MW-15	6/6/2017	6.7	SU
BY-AP-MW-15	9/13/2017	6.66	SU
BY-AP-MW-16	3/2/2016	5.79	SU
BY-AP-MW-16	4/19/2016	5.78	SU
BY-AP-MW-16	6/8/2016	5.8	SU
BY-AP-MW-16	8/31/2016	5.83	SU
BY-AP-MW-16	10/19/2016	5.81	SU
BY-AP-MW-16	1/31/2017	5.84	SU
BY-AP-MW-16	3/21/2017	5.79	SU
BY-AP-MW-16	5/2/2017	5.68	SU
BY-AP-MW-16	6/6/2017	5.8	SU
BY-AP-MW-16	9/13/2017	5.86	SU
BY-AP-MW-2	3/2/2016	6.08	SU
BY-AP-MW-2	4/19/2016	5.92	SU
BY-AP-MW-2	6/8/2016	5.9	SU
BY-AP-MW-2	8/31/2016	5.87	SU
BY-AP-MW-2	10/19/2016	5.82	SU
BY-AP-MW-2	1/31/2017	5.87	SU
BY-AP-MW-2	3/21/2017	5.85	SU
BY-AP-MW-2	5/2/2017	5.61	SU
BY-AP-MW-2	6/6/2017	5.82	SU
BY-AP-MW-2	9/12/2017	5.61	SU
BY-AP-MW-3	3/2/2016	5.14	SU
BY-AP-MW-3	4/19/2016	5.06	SU

Plant Barry Ash Pond
Field pH Data

Well	Date	Result	Units
BY-AP-MW-3	6/7/2016	5.13	SU
BY-AP-MW-3	8/31/2016	5.11	SU
BY-AP-MW-3	10/19/2016	5.05	SU
BY-AP-MW-3	1/31/2017	5.14	SU
BY-AP-MW-3	3/21/2017	5.13	SU
BY-AP-MW-3	5/2/2017	4.85	SU
BY-AP-MW-3	6/6/2017	5.15	SU
BY-AP-MW-3	9/12/2017	4.96	SU
BY-AP-MW-4	3/1/2016	5.19	SU
BY-AP-MW-4	4/19/2016	5.06	SU
BY-AP-MW-4	6/7/2016	4.7	SU
BY-AP-MW-4	8/30/2016	4.77	SU
BY-AP-MW-4	10/19/2016	4.67	SU
BY-AP-MW-4	1/31/2017	4.42	SU
BY-AP-MW-4	3/21/2017	4.45	SU
BY-AP-MW-4	5/2/2017	4.46	SU
BY-AP-MW-4	6/6/2017	4.89	SU
BY-AP-MW-4	9/12/2017	4.71	SU
BY-AP-MW-5	3/1/2016	5.99	SU
BY-AP-MW-5	4/20/2016	5.96	SU
BY-AP-MW-5	6/7/2016	6.03	SU
BY-AP-MW-5	8/30/2016	6	SU
BY-AP-MW-5	10/18/2016	5.99	SU
BY-AP-MW-5	1/31/2017	5.96	SU
BY-AP-MW-5	3/22/2017	6.01	SU
BY-AP-MW-5	5/3/2017	5.99	SU
BY-AP-MW-5	6/7/2017	6.01	SU
BY-AP-MW-5	9/14/2017	6	SU
BY-AP-MW-6	3/1/2016	5.59	SU
BY-AP-MW-6	4/19/2016	5.55	SU
BY-AP-MW-6	6/7/2016	5.43	SU
BY-AP-MW-6	8/30/2016	5.39	SU
BY-AP-MW-6	10/19/2016	5.31	SU
BY-AP-MW-6	1/31/2017	5.26	SU
BY-AP-MW-6	3/22/2017	5.32	SU
BY-AP-MW-6	5/3/2017	5.35	SU
BY-AP-MW-6	6/7/2017	5.32	SU
BY-AP-MW-6	9/14/2017	5.29	SU
BY-AP-MW-7	3/1/2016	6.36	SU
BY-AP-MW-7	4/20/2016	6.31	SU
BY-AP-MW-7	6/7/2016	6.3	SU
BY-AP-MW-7	8/31/2016	6.31	SU
BY-AP-MW-7	10/19/2016	6.23	SU
BY-AP-MW-7	1/31/2017	6.26	SU
BY-AP-MW-7	3/22/2017	6.32	SU
BY-AP-MW-7	5/3/2017	6.29	SU

Plant Barry Ash Pond
Field pH Data

Well	Date	Result	Units
BY-AP-MW-7	6/7/2017	6.27	SU
BY-AP-MW-7	9/14/2017	6.25	SU
BY-AP-MW-8	3/1/2016	6.21	SU
BY-AP-MW-8	4/20/2016	6.22	SU
BY-AP-MW-8	6/7/2016	6.26	SU
BY-AP-MW-8	8/30/2016	6.21	SU
BY-AP-MW-8	10/18/2016	6.21	SU
BY-AP-MW-8	1/31/2017	6.17	SU
BY-AP-MW-8	3/22/2017	6.22	SU
BY-AP-MW-8	5/3/2017	6.22	SU
BY-AP-MW-8	6/7/2017	6.21	SU
BY-AP-MW-8	9/14/2017	6.18	SU
BY-AP-MW-9	3/1/2016	6.26	SU
BY-AP-MW-9	4/20/2016	6.26	SU
BY-AP-MW-9	6/8/2016	6.25	SU
BY-AP-MW-9	8/31/2016	6.29	SU
BY-AP-MW-9	10/19/2016	6.22	SU
BY-AP-MW-9	2/1/2017	6.24	SU
BY-AP-MW-9	3/22/2017	6.28	SU
BY-AP-MW-9	5/3/2017	6.17	SU
BY-AP-MW-9	6/7/2017	6.24	SU
BY-AP-MW-9	9/14/2017	6.24	SU

Appendix B

Statistical Data Evaluation

Interwell Prediction Limits - Significant Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 12/13/2017, 1:03 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDsND Adj.	Transform	Alpha	Method
Boron (mg/L)	BY-AP-MW-1	0.1	n/a	9/13/2017	1.87	Yes	27	n/a	n/a	100	n/a	n/a	NP Inter (NDs) 1 of 2
Boron (mg/L)	BY-AP-MW-8	0.1	n/a	9/14/2017	1.16	Yes	27	n/a	n/a	100	n/a	n/a	NP Inter (NDs) 1 of 2
Boron (mg/L)	BY-AP-MW-9	0.1	n/a	9/14/2017	2.41	Yes	27	n/a	n/a	100	n/a	n/a	NP Inter (NDs) 1 of 2
Boron (mg/L)	BY-AP-MW-10	0.1	n/a	9/14/2017	1.96	Yes	27	n/a	n/a	100	n/a	n/a	NP Inter (NDs) 1 of 2
Boron (mg/L)	BY-AP-MW-16	0.1	n/a	9/13/2017	2.18	Yes	27	n/a	n/a	100	n/a	n/a	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BY-AP-MW-1	3.86	n/a	9/13/2017	40.5	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-5	3.86	n/a	9/14/2017	15.1	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-7	3.86	n/a	9/14/2017	9.64	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-8	3.86	n/a	9/14/2017	34.4	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-9	3.86	n/a	9/14/2017	40.7	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-10	3.86	n/a	9/14/2017	54.9	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-11	3.86	n/a	9/13/2017	25.5	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-12	3.86	n/a	9/13/2017	22.1	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-13	3.86	n/a	9/13/2017	13.3	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-14	3.86	n/a	9/13/2017	13.9	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-15	3.86	n/a	9/13/2017	7.43	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-16	3.86	n/a	9/13/2017	11.8	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Chloride (mg/L)	BY-AP-MW-1	12.91	n/a	9/13/2017	24	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-5	12.91	n/a	9/14/2017	21	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-7	12.91	n/a	9/14/2017	13	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-8	12.91	n/a	9/14/2017	24	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-9	12.91	n/a	9/14/2017	24	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-10	12.91	n/a	9/14/2017	22	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-11	12.91	n/a	9/13/2017	26	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-12	12.91	n/a	9/13/2017	23	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-13	12.91	n/a	9/13/2017	42	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-14	12.91	n/a	9/13/2017	43	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-15	12.91	n/a	9/13/2017	36	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-16	12.91	n/a	9/13/2017	21	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-1	53.61	n/a	9/13/2017	456	Yes	27	37.78	7.081	0	None	No	0.0005787 Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-5	53.61	n/a	9/14/2017	276	Yes	27	37.78	7.081	0	None	No	0.0005787 Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-7	53.61	n/a	9/14/2017	141	Yes	27	37.78	7.081	0	None	No	0.0005787 Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-8	53.61	n/a	9/14/2017	325	Yes	27	37.78	7.081	0	None	No	0.0005787 Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-9	53.61	n/a	9/14/2017	350	Yes	27	37.78	7.081	0	None	No	0.0005787 Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-10	53.61	n/a	9/14/2017	391	Yes	27	37.78	7.081	0	None	No	0.0005787 Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-11	53.61	n/a	9/13/2017	378	Yes	27	37.78	7.081	0	None	No	0.0005787 Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-12	53.61	n/a	9/13/2017	359	Yes	27	37.78	7.081	0	None	No	0.0005787 Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-13	53.61	n/a	9/13/2017	332	Yes	27	37.78	7.081	0	None	No	0.0005787 Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-14	53.61	n/a	9/13/2017	339	Yes	27	37.78	7.081	0	None	No	0.0005787 Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-15	53.61	n/a	9/13/2017	202	Yes	27	37.78	7.081	0	None	No	0.0005787 Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-16	53.61	n/a	9/13/2017	333	Yes	27	37.78	7.081	0	None	No	0.0005787 Param Inter 1 of 2

Intrawell Prediction Limits - Significant Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 12/18/2017, 11:37 AM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bq N</u>	<u>Bq Mean</u>	<u>Std. Dev.</u>	<u>%NDs</u>	<u>ND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
pH (pH)	BY-AP-MW-1	5.908	5.725	9/13/2017	5.91	Yes	9	5.817	0.04153	0	None	No	0.0002894	Param 1 of 3

Interwell Prediction Limits - All Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 12/13/2017, 1:03 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bq N	Bq Mean	Std. Dev.	%NDsND Adj.	Transform	Alpha	Method
Boron (mg/L)	BY-AP-MW-1	0.1	n/a	9/13/2017	1.87	Yes	27	n/a	n/a	100	n/a	n/a	NP Inter (NDs) 1 of 2
Boron (mg/L)	BY-AP-MW-5	0.1	n/a	9/14/2017	0.0825	No	27	n/a	n/a	100	n/a	n/a	NP Inter (NDs) 1 of 2
Boron (mg/L)	BY-AP-MW-6	0.1	n/a	9/14/2017	0.05ND	No	27	n/a	n/a	100	n/a	n/a	NP Inter (NDs) 1 of 2
Boron (mg/L)	BY-AP-MW-7	0.1	n/a	9/14/2017	0.0471	No	27	n/a	n/a	100	n/a	n/a	NP Inter (NDs) 1 of 2
Boron (mg/L)	BY-AP-MW-8	0.1	n/a	9/14/2017	1.16	Yes	27	n/a	n/a	100	n/a	n/a	NP Inter (NDs) 1 of 2
Boron (mg/L)	BY-AP-MW-9	0.1	n/a	9/14/2017	2.41	Yes	27	n/a	n/a	100	n/a	n/a	NP Inter (NDs) 1 of 2
Boron (mg/L)	BY-AP-MW-10	0.1	n/a	9/14/2017	1.96	Yes	27	n/a	n/a	100	n/a	n/a	NP Inter (NDs) 1 of 2
Boron (mg/L)	BY-AP-MW-11	0.1	n/a	9/13/2017	0.0751	No	27	n/a	n/a	100	n/a	n/a	NP Inter (NDs) 1 of 2
Boron (mg/L)	BY-AP-MW-12	0.1	n/a	9/13/2017	0.0926	No	27	n/a	n/a	100	n/a	n/a	NP Inter (NDs) 1 of 2
Boron (mg/L)	BY-AP-MW-13	0.1	n/a	9/13/2017	0.044	No	27	n/a	n/a	100	n/a	n/a	NP Inter (NDs) 1 of 2
Boron (mg/L)	BY-AP-MW-14	0.1	n/a	9/13/2017	0.0647	No	27	n/a	n/a	100	n/a	n/a	NP Inter (NDs) 1 of 2
Boron (mg/L)	BY-AP-MW-15	0.1	n/a	9/13/2017	0.0937	No	27	n/a	n/a	100	n/a	n/a	NP Inter (NDs) 1 of 2
Boron (mg/L)	BY-AP-MW-16	0.1	n/a	9/13/2017	2.18	Yes	27	n/a	n/a	100	n/a	n/a	NP Inter (NDs) 1 of 2
Calcium (mg/L)	BY-AP-MW-1	3.86	n/a	9/13/2017	40.5	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-5	3.86	n/a	9/14/2017	15.1	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-6	3.86	n/a	9/14/2017	2.14	No	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-7	3.86	n/a	9/14/2017	9.64	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-8	3.86	n/a	9/14/2017	34.4	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-9	3.86	n/a	9/14/2017	40.7	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-10	3.86	n/a	9/14/2017	54.9	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-11	3.86	n/a	9/13/2017	25.5	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-12	3.86	n/a	9/13/2017	22.1	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-13	3.86	n/a	9/13/2017	13.3	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-14	3.86	n/a	9/13/2017	13.9	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-15	3.86	n/a	9/13/2017	7.43	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Calcium (mg/L)	BY-AP-MW-16	3.86	n/a	9/13/2017	11.8	Yes	27	n/a	n/a	0	n/a	n/a	NP Inter (normality) 1 of 2
Chloride (mg/L)	BY-AP-MW-1	12.91	n/a	9/13/2017	24	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-5	12.91	n/a	9/14/2017	21	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-6	12.91	n/a	9/14/2017	6.5	No	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-7	12.91	n/a	9/14/2017	13	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-8	12.91	n/a	9/14/2017	24	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-9	12.91	n/a	9/14/2017	24	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-10	12.91	n/a	9/14/2017	22	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-11	12.91	n/a	9/13/2017	26	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-12	12.91	n/a	9/13/2017	23	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-13	12.91	n/a	9/13/2017	42	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-14	12.91	n/a	9/13/2017	43	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-15	12.91	n/a	9/13/2017	36	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Chloride (mg/L)	BY-AP-MW-16	12.91	n/a	9/13/2017	21	Yes	27	2.906	0.3074	0	None	sqrt(x)	0.0005787 Param Inter 1 of 2
Fluoride (mg/L)	BY-AP-MW-1	0.067	n/a	9/13/2017	0.05ND	No	27	n/a	n/a	37.04	n/a	n/a	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BY-AP-MW-5	0.067	n/a	9/14/2017	0.06	No	27	n/a	n/a	37.04	n/a	n/a	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BY-AP-MW-6	0.067	n/a	9/14/2017	0.05ND	No	27	n/a	n/a	37.04	n/a	n/a	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BY-AP-MW-7	0.067	n/a	9/14/2017	0.07	No	27	n/a	n/a	37.04	n/a	n/a	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BY-AP-MW-8	0.067	n/a	9/14/2017	0.05	No	27	n/a	n/a	37.04	n/a	n/a	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BY-AP-MW-9	0.067	n/a	9/14/2017	0.07	No	27	n/a	n/a	37.04	n/a	n/a	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BY-AP-MW-10	0.067	n/a	9/14/2017	0.04	No	27	n/a	n/a	37.04	n/a	n/a	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BY-AP-MW-11	0.067	n/a	9/13/2017	0.05ND	No	27	n/a	n/a	37.04	n/a	n/a	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BY-AP-MW-12	0.067	n/a	9/13/2017	0.05ND	No	27	n/a	n/a	37.04	n/a	n/a	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BY-AP-MW-13	0.067	n/a	9/13/2017	0.05ND	No	27	n/a	n/a	37.04	n/a	n/a	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BY-AP-MW-14	0.067	n/a	9/13/2017	0.05ND	No	27	n/a	n/a	37.04	n/a	n/a	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BY-AP-MW-15	0.067	n/a	9/13/2017	0.05ND	No	27	n/a	n/a	37.04	n/a	n/a	NP Inter (normality) 1 of 2
Fluoride (mg/L)	BY-AP-MW-16	0.067	n/a	9/13/2017	0.05ND	No	27	n/a	n/a	37.04	n/a	n/a	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BY-AP-MW-1	5.06	n/a	9/13/2017	4.7	No	27	n/a	n/a	37.04	n/a	n/a	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BY-AP-MW-5	5.06	n/a	9/14/2017	2.5ND	No	27	n/a	n/a	37.04	n/a	n/a	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BY-AP-MW-6	5.06	n/a	9/14/2017	1.8	No	27	n/a	n/a	37.04	n/a	n/a	NP Inter (normality) 1 of 2

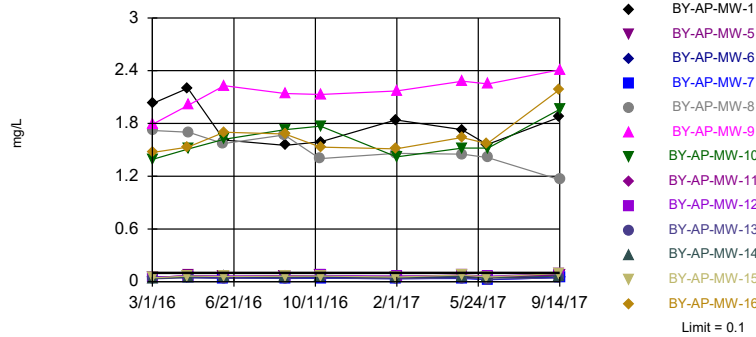
Interwell Prediction Limits - All Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 12/13/2017, 1:03 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bq N	Bq Mean	Std. Dev.	%NDsND Adj.	Transform	Alpha	Method
Sulfate (mg/L)	BY-AP-MW-7	5.06	n/a	9/14/2017	2.5ND	No	27	n/a	n/a	37.04 n/a	n/a	0.002232	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BY-AP-MW-8	5.06	n/a	9/14/2017	2.5ND	No	27	n/a	n/a	37.04 n/a	n/a	0.002232	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BY-AP-MW-9	5.06	n/a	9/14/2017	2.5ND	No	27	n/a	n/a	37.04 n/a	n/a	0.002232	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BY-AP-MW-10	5.06	n/a	9/14/2017	2.5ND	No	27	n/a	n/a	37.04 n/a	n/a	0.002232	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BY-AP-MW-11	5.06	n/a	9/13/2017	2.5ND	No	27	n/a	n/a	37.04 n/a	n/a	0.002232	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BY-AP-MW-12	5.06	n/a	9/13/2017	2.5ND	No	27	n/a	n/a	37.04 n/a	n/a	0.002232	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BY-AP-MW-13	5.06	n/a	9/13/2017	2.2	No	27	n/a	n/a	37.04 n/a	n/a	0.002232	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BY-AP-MW-14	5.06	n/a	9/13/2017	2.5ND	No	27	n/a	n/a	37.04 n/a	n/a	0.002232	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BY-AP-MW-15	5.06	n/a	9/13/2017	2.5ND	No	27	n/a	n/a	37.04 n/a	n/a	0.002232	NP Inter (normality) 1 of 2
Sulfate (mg/L)	BY-AP-MW-16	5.06	n/a	9/13/2017	2.6	No	27	n/a	n/a	37.04 n/a	n/a	0.002232	NP Inter (normality) 1 of 2
TDS (mg/L)	BY-AP-MW-1	53.61	n/a	9/13/2017	456	Yes	27	37.78	7.081	0 None	No	0.0005787	Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-5	53.61	n/a	9/14/2017	276	Yes	27	37.78	7.081	0 None	No	0.0005787	Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-6	53.61	n/a	9/14/2017	48.7	No	27	37.78	7.081	0 None	No	0.0005787	Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-7	53.61	n/a	9/14/2017	141	Yes	27	37.78	7.081	0 None	No	0.0005787	Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-8	53.61	n/a	9/14/2017	325	Yes	27	37.78	7.081	0 None	No	0.0005787	Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-9	53.61	n/a	9/14/2017	350	Yes	27	37.78	7.081	0 None	No	0.0005787	Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-10	53.61	n/a	9/14/2017	391	Yes	27	37.78	7.081	0 None	No	0.0005787	Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-11	53.61	n/a	9/13/2017	378	Yes	27	37.78	7.081	0 None	No	0.0005787	Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-12	53.61	n/a	9/13/2017	359	Yes	27	37.78	7.081	0 None	No	0.0005787	Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-13	53.61	n/a	9/13/2017	332	Yes	27	37.78	7.081	0 None	No	0.0005787	Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-14	53.61	n/a	9/13/2017	339	Yes	27	37.78	7.081	0 None	No	0.0005787	Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-15	53.61	n/a	9/13/2017	202	Yes	27	37.78	7.081	0 None	No	0.0005787	Param Inter 1 of 2
TDS (mg/L)	BY-AP-MW-16	53.61	n/a	9/13/2017	333	Yes	27	37.78	7.081	0 None	No	0.0005787	Param Inter 1 of 2

Exceeds Limit: BY-AP-MW-1, BY-AP-MW-8,
BY-AP-MW-9, BY-AP-MW-10, BY-AP-MW-1

Prediction Limit
Interwell Non-parametric

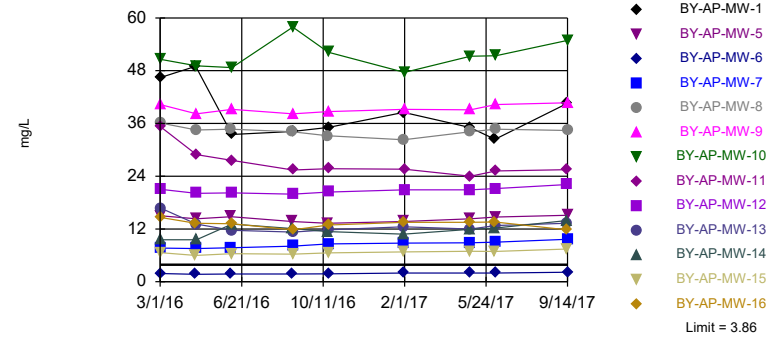


Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. All background values (n = 27) were censored; limit is most recent reporting limit. Annual per-constituent alpha = 0.05643. Individual comparison alpha = 0.002232 (1 of 2). Comparing 13 points to limit.

Constituent: Boron Analysis Run 12/13/2017 12:55 PM View: Interwell PLs
Plant Barry Client: Southern Company Data: Barry Ash Pond

Exceeds Limit: BY-AP-MW-1, BY-AP-MW-5,
BY-AP-MW-7, BY-AP-MW-8, BY-AP-MW-9..

Prediction Limit
Interwell Non-parametric

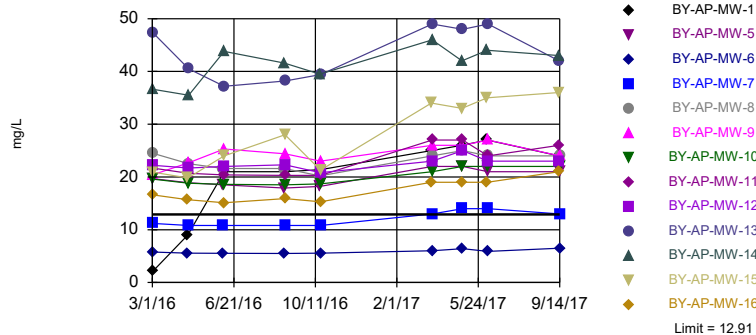


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 27 background values. Annual per-constituent alpha = 0.05643. Individual comparison alpha = 0.002232 (1 of 2). Comparing 13 points to limit.

Constituent: Calcium Analysis Run 12/13/2017 12:55 PM View: Interwell PLs
Plant Barry Client: Southern Company Data: Barry Ash Pond

Exceeds Limit: BY-AP-MW-1, BY-AP-MW-5,
BY-AP-MW-7, BY-AP-MW-8, BY-AP-MW-9..

Prediction Limit
Interwell Parametric

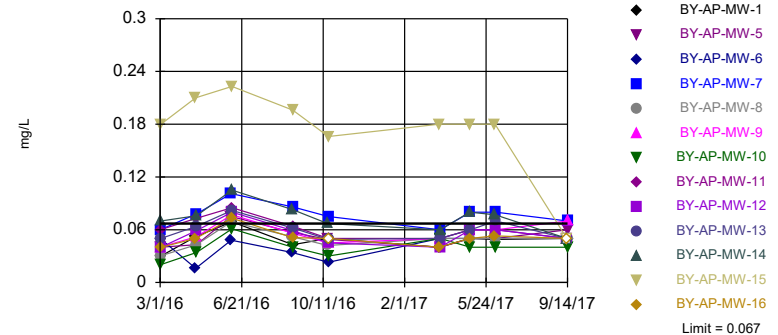


Background Data Summary (based on square root transformation): Mean=2.906, Std. Dev.=0.3074, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8996, critical = 0.894. Kappa = 2.236 (c=7, w=13, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0005787. Comparing 13 points to limit.

Constituent: Chloride Analysis Run 12/13/2017 12:55 PM View: Interwell PLs
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limit

Prediction Limit
Interwell Non-parametric

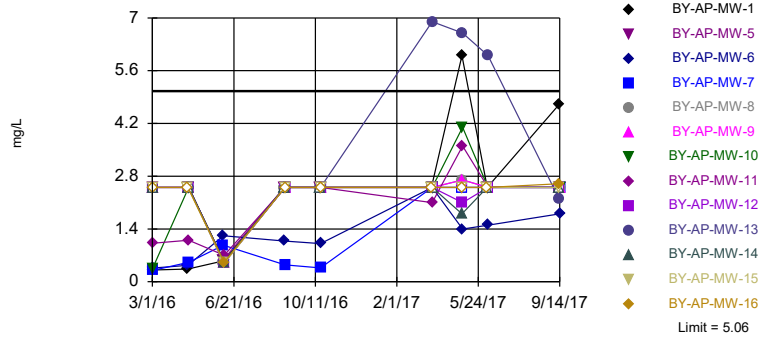


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 27 background values. 37.04% NDs. Annual per-constituent alpha = 0.05643. Individual comparison alpha = 0.002232 (1 of 2). Comparing 13 points to limit.

Constituent: Fluoride Analysis Run 12/13/2017 12:55 PM View: Interwell PLs
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limit

Prediction Limit
 Interwell Non-parametric

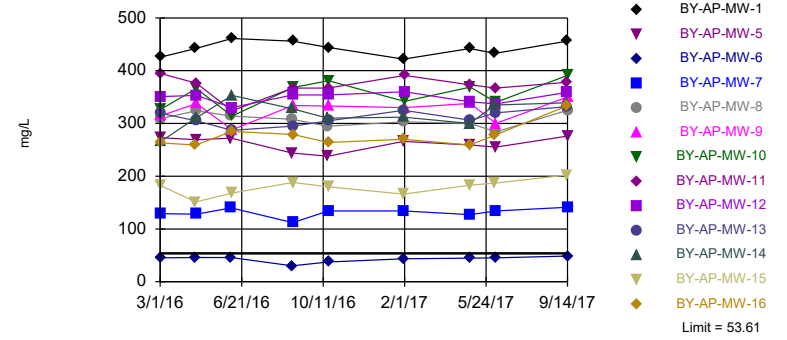


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 27 background values. 37.04% NDs. Annual per-constituent alpha = 0.05643. Individual comparison alpha = 0.002232 (1 of 2). Comparing 13 points to limit.

Constituent: Sulfate Analysis Run 12/13/2017 12:55 PM View: Interwell PLs
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Exceeds Limit: BY-AP-MW-1, BY-AP-MW-5,
 BY-AP-MW-7, BY-AP-MW-8, BY-AP-MW-9..

Prediction Limit
 Interwell Parametric



Background Data Summary: Mean=37.78, Std. Dev.=7.081, n=27. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9556, critical = 0.894. Kappa = 2.236 (c=7, w=13, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0005787. Comparing 13 points to limit.

Constituent: TDS Analysis Run 12/13/2017 12:55 PM View: Interwell PLs
 Plant Barry Client: Southern Company Data: Barry Ash Pond

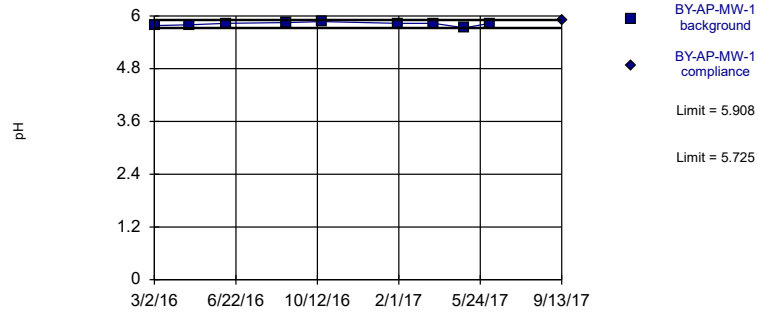
Intrawell Prediction Limits - All Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 11/1/2017, 1:02 PM

Constituent	Well	Upper Lim	Lower Lim	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (pH)	BY-AP-MW-1	5.908	5.725	9/13/2017	5.91	Yes	9	5.817	0.04153	0	None	No	0.0002894	Param Intra 1 of 3
pH (pH)	BY-AP-MW-2	6.13	5.59	9/12/2017	5.61	No	9	5.86	0.1223	0	None	No	0.0002894	Param Intra 1 of 3
pH (pH)	BY-AP-MW-3	5.15	4.85	9/12/2017	4.96	No	9	n/a	n/a	0	n/a	n/a	0.009351	NP Intra (normality) 1 of 3
pH (pH)	BY-AP-MW-4	5.338	4.131	9/12/2017	4.71	No	9	4.734	0.2737	0	None	No	0.0002894	Param Intra 1 of 3
pH (pH)	BY-AP-MW-5	6.044	5.943	9/14/2017	6	No	9	5.993	0.02291	0	None	No	0.0002894	Param Intra 1 of 3
pH (pH)	BY-AP-MW-6	5.64	5.142	9/14/2017	5.29	No	9	5.391	0.1129	0	None	No	0.0002894	Param Intra 1 of 3
pH (pH)	BY-AP-MW-7	6.378	6.211	9/14/2017	6.25	No	9	6.294	0.03779	0	None	No	0.0002894	Param Intra 1 of 3
pH (pH)	BY-AP-MW-8	6.265	6.164	9/14/2017	6.18	No	9	6.214	0.02297	0	None	No	0.0002894	Param Intra 1 of 3
pH (pH)	BY-AP-MW-9	6.324	6.168	9/14/2017	6.24	No	9	6.246	0.03539	0	None	No	0.0002894	Param Intra 1 of 3
pH (pH)	BY-AP-MW-10	6.397	6.211	9/14/2017	6.27	No	9	6.304	0.04216	0	None	No	0.0002894	Param Intra 1 of 3
pH (pH)	BY-AP-MW-11	6.399	6.118	9/13/2017	6.26	No	9	6.259	0.06373	0	None	No	0.0002894	Param Intra 1 of 3
pH (pH)	BY-AP-MW-12	6.286	6.039	9/13/2017	6.19	No	9	6.162	0.05608	0	None	No	0.0002894	Param Intra 1 of 3
pH (pH)	BY-AP-MW-13	6.146	6.045	9/13/2017	6.12	No	9	6.096	0.02297	0	None	No	0.0002894	Param Intra 1 of 3
pH (pH)	BY-AP-MW-14	6.199	5.945	9/13/2017	6.11	No	9	6.072	0.05761	0	None	No	0.0002894	Param Intra 1 of 3
pH (pH)	BY-AP-MW-15	6.831	6.48	9/13/2017	6.66	No	9	6.656	0.0797	0	None	No	0.0002894	Param Intra 1 of 3
pH (pH)	BY-AP-MW-16	5.892	5.69	9/13/2017	5.86	No	9	5.791	0.04595	0	None	No	0.0002894	Param Intra 1 of 3

Exceeds Limits

Prediction Limit
Intrawell Parametric

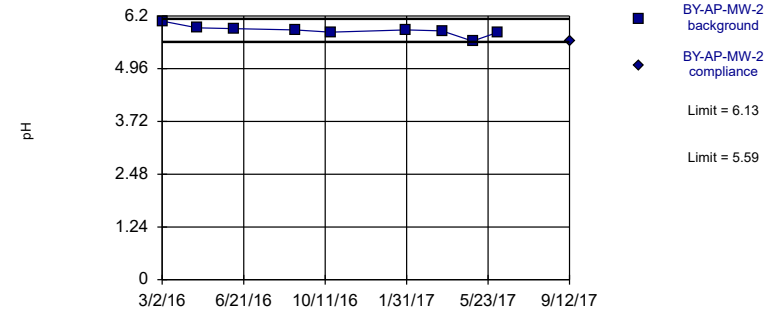


Background Data Summary: Mean=5.817, Std. Dev.=0.04153, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8939, critical = 0.764. Kappa = 2.205 (c=7, w=13, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005787.

Constituent: pH Analysis Run 11/1/2017 1:01 PM View: PLs - Intrawell
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit
Intrawell Parametric

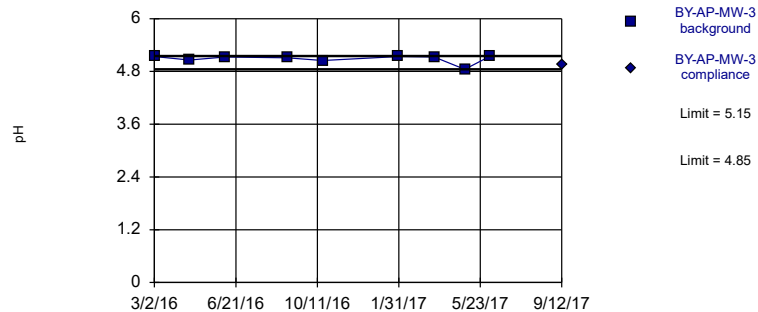


Background Data Summary: Mean=5.86, Std. Dev.=0.1223, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8934, critical = 0.764. Kappa = 2.205 (c=7, w=13, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005787.

Constituent: pH Analysis Run 11/1/2017 1:01 PM View: PLs - Intrawell
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit
Intrawell Non-parametric

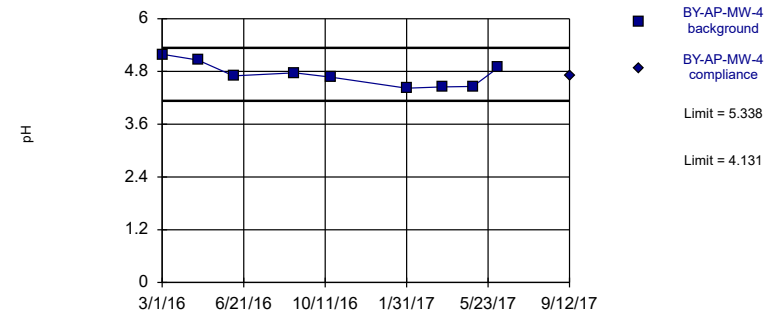


Non-parametric test used in lieu of parametric prediction limit because the Shapiro Wilk normality test showed the data to be non-normal at the 0.01 alpha level. Limits are highest and lowest of 9 background values. Well-constituent pair annual alpha = 0.01866. Individual comparison alpha = 0.009351 (1 of 3).

Constituent: pH Analysis Run 11/1/2017 1:01 PM View: PLs - Intrawell
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit
Intrawell Parametric

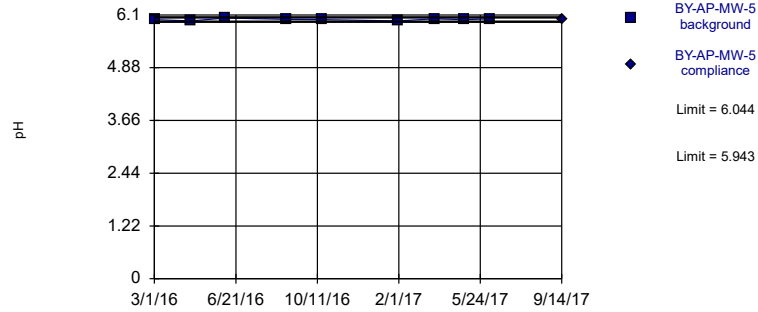


Background Data Summary: Mean=4.734, Std. Dev.=0.2737, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9277, critical = 0.764. Kappa = 2.205 (c=7, w=13, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005787.

Constituent: pH Analysis Run 11/1/2017 1:01 PM View: PLs - Intrawell
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit Intrawell Parametric

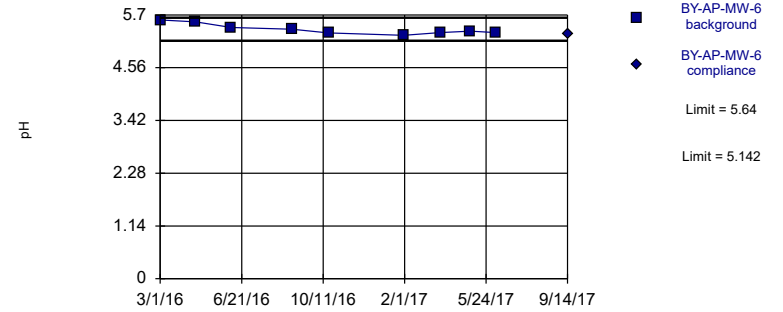


Background Data Summary: Mean=5.993, Std. Dev.=0.02291, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9252, critical = 0.764. Kappa = 2.205 (c=7, w=13, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005787.

Constituent: pH Analysis Run 11/1/2017 1:01 PM View: PLs - Intrawell
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit Intrawell Parametric

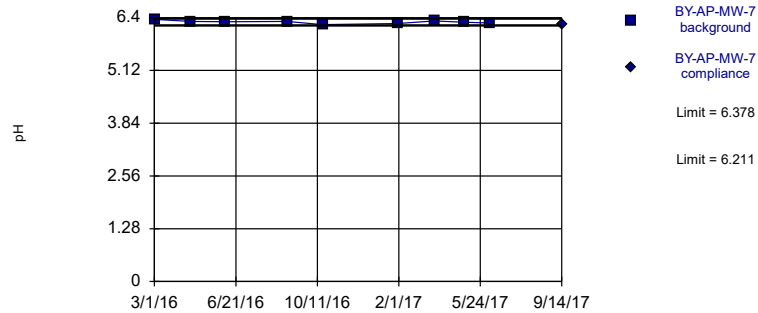


Background Data Summary: Mean=5.391, Std. Dev.=0.1129, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8864, critical = 0.764. Kappa = 2.205 (c=7, w=13, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005787.

Constituent: pH Analysis Run 11/1/2017 1:01 PM View: PLs - Intrawell
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit Intrawell Parametric

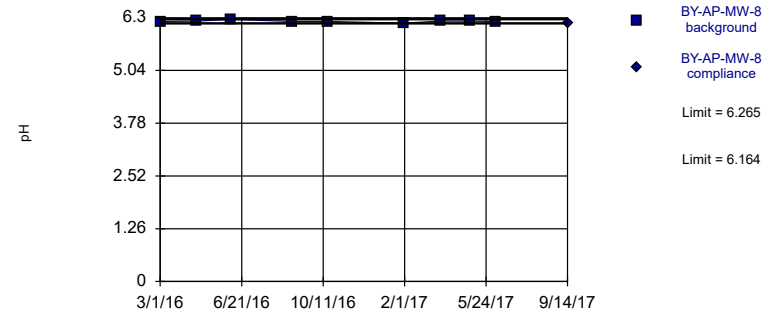


Background Data Summary: Mean=6.294, Std. Dev.=0.03779, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9801, critical = 0.764. Kappa = 2.205 (c=7, w=13, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005787.

Constituent: pH Analysis Run 11/1/2017 1:01 PM View: PLs - Intrawell
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit Intrawell Parametric

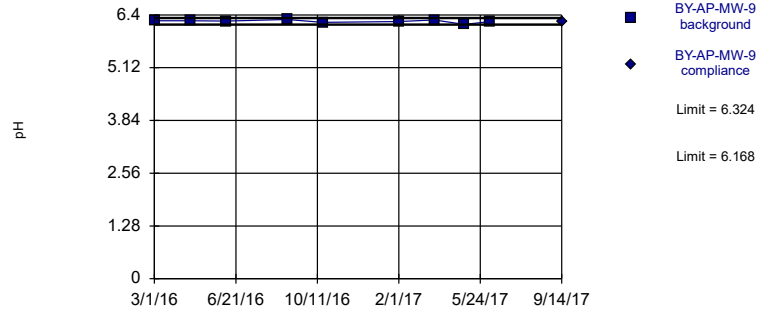


Background Data Summary: Mean=6.214, Std. Dev.=0.02297, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8289, critical = 0.764. Kappa = 2.205 (c=7, w=13, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005787.

Constituent: pH Analysis Run 11/1/2017 1:01 PM View: PLs - Intrawell
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit Intrawell Parametric

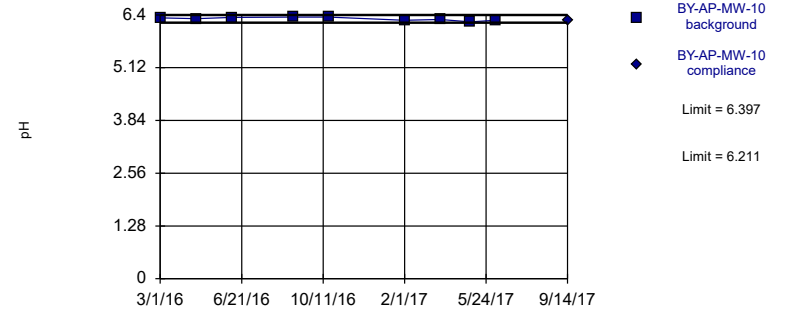


Background Data Summary: Mean=6.246, Std. Dev.=0.03539, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9189, critical = 0.764. Kappa = 2.205 (c=7, w=13, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005787.

Constituent: pH Analysis Run 11/1/2017 1:01 PM View: PLs - Intrawell
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit Intrawell Parametric

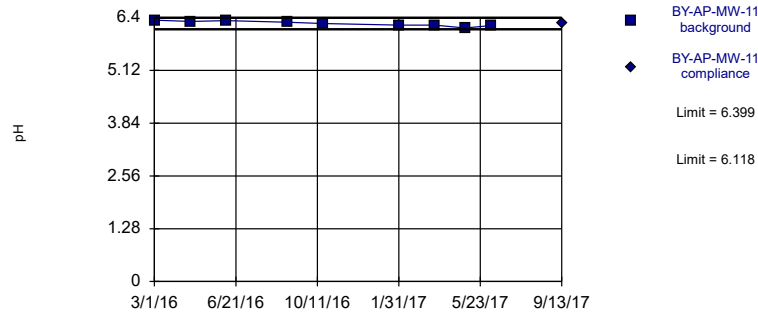


Background Data Summary: Mean=6.304, Std. Dev.=0.04216, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9174, critical = 0.764. Kappa = 2.205 (c=7, w=13, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005787.

Constituent: pH Analysis Run 11/1/2017 1:01 PM View: PLs - Intrawell
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit Intrawell Parametric

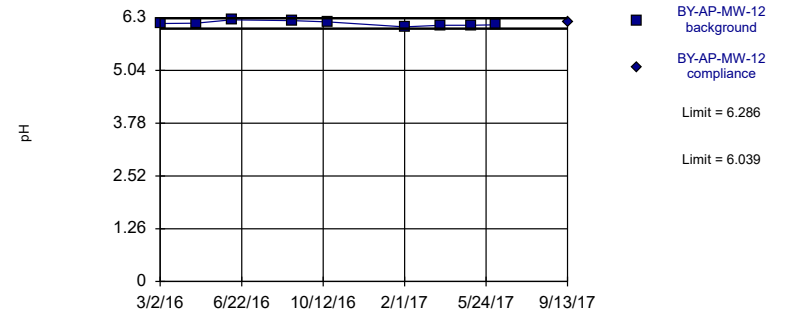


Background Data Summary: Mean=6.259, Std. Dev.=0.06373, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9449, critical = 0.764. Kappa = 2.205 (c=7, w=13, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005787.

Constituent: pH Analysis Run 11/1/2017 1:01 PM View: PLs - Intrawell
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit Intrawell Parametric

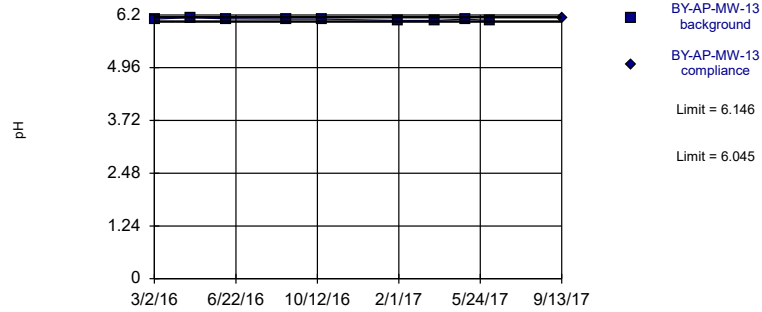


Background Data Summary: Mean=6.162, Std. Dev.=0.05608, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9597, critical = 0.764. Kappa = 2.205 (c=7, w=13, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005787.

Constituent: pH Analysis Run 11/1/2017 1:01 PM View: PLs - Intrawell
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit
Intrawell Parametric

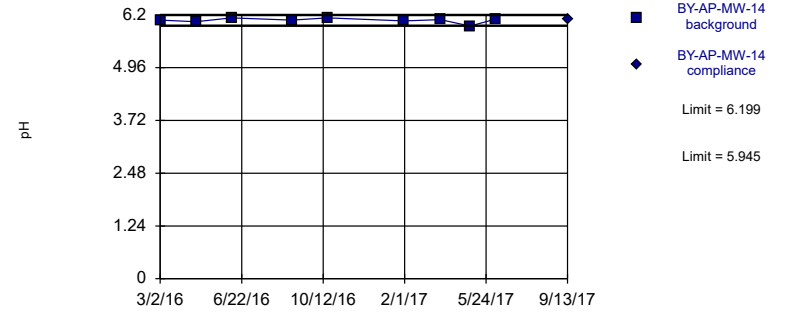


Background Data Summary: Mean=6.096, Std. Dev.=0.02297, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.856, critical = 0.764. Kappa = 2.205 (c=7, w=13, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005787.

Constituent: pH Analysis Run 11/1/2017 1:01 PM View: PLs - Intrawell
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit
Intrawell Parametric

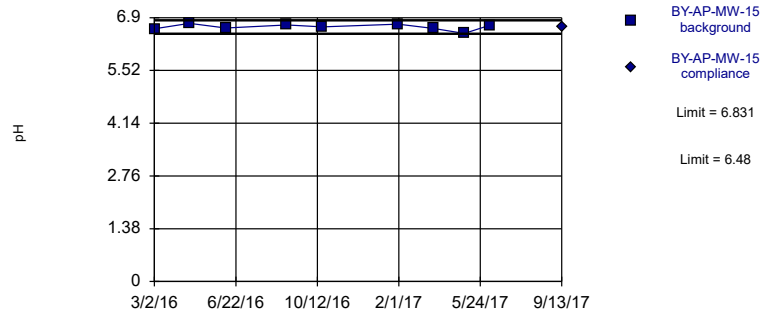


Background Data Summary: Mean=6.072, Std. Dev.=0.05761, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8464, critical = 0.764. Kappa = 2.205 (c=7, w=13, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005787.

Constituent: pH Analysis Run 11/1/2017 1:01 PM View: PLs - Intrawell
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit
Intrawell Parametric

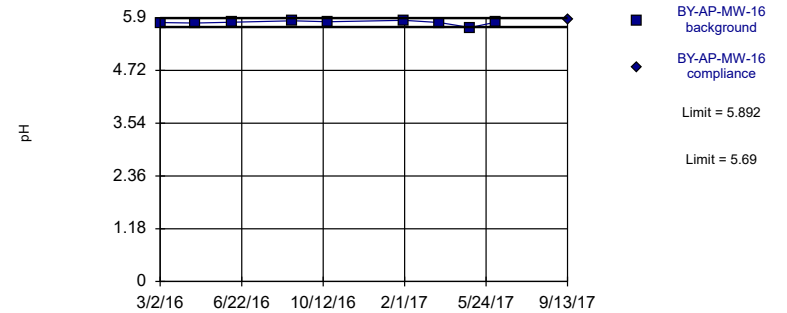


Background Data Summary: Mean=6.656, Std. Dev.=0.0797, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9217, critical = 0.764. Kappa = 2.205 (c=7, w=13, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005787.

Constituent: pH Analysis Run 11/1/2017 1:01 PM View: PLs - Intrawell
Plant Barry Client: Southern Company Data: Barry Ash Pond

Within Limits

Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=5.791, Std. Dev.=0.04595, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7875, critical = 0.764. Kappa = 2.205 (c=7, w=13, 1 of 3, event alpha = 0.05132). Report alpha = 0.0005787.

Constituent: pH Analysis Run 11/1/2017 1:01 PM View: PLs - Intrawell
Plant Barry Client: Southern Company Data: Barry Ash Pond

Trend Test Summary - Significant Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 11/3/2017, 12:33 PM

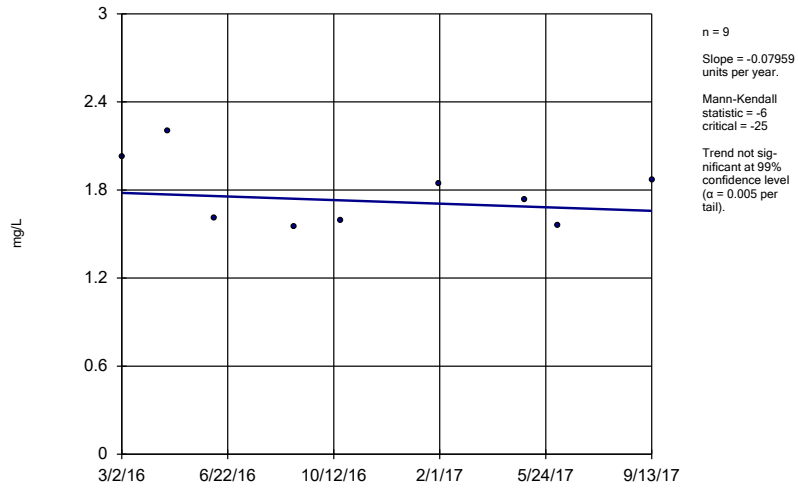
<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Boron (mg/L)	BY-AP-MW-8	-0.2944	-28	-25	Yes	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	BY-AP-MW-9	0.2604	26	25	Yes	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BY-AP-MW-7	1.287	34	25	Yes	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BY-AP-MW-1	8.789	29	25	Yes	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BY-AP-MW-15	10.95	28	25	Yes	9	0	n/a	n/a	0.01	NP

Trend Test Summary - All Results

Plant Barry Client: Southern Company Data: Barry Ash Pond Printed 11/3/2017, 12:33 PM

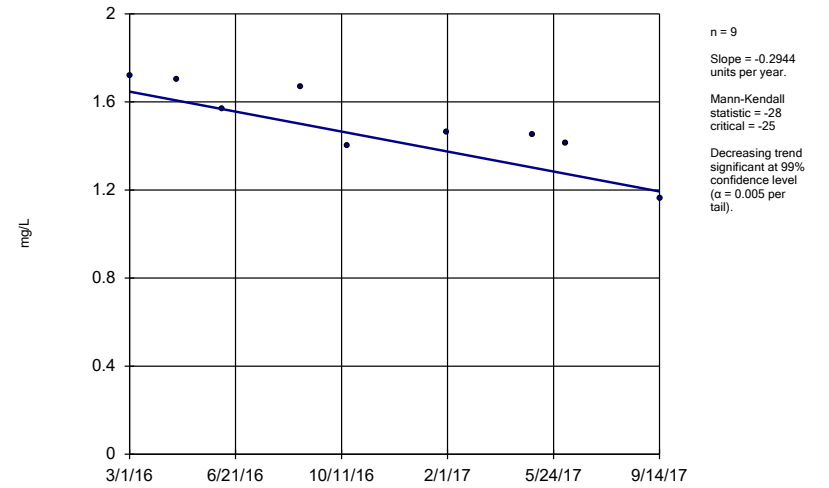
Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	BY-AP-MW-1	-0.07959	-6	-25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	BY-AP-MW-8	-0.2944	-28	-25	Yes	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	BY-AP-MW-9	0.2604	26	25	Yes	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	BY-AP-MW-10	0.2448	15	25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	BY-AP-MW-16	0.1005	11	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BY-AP-MW-1	-3.133	-5	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BY-AP-MW-5	0.03247	2	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BY-AP-MW-7	1.287	34	25	Yes	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BY-AP-MW-8	-0.8837	-10	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BY-AP-MW-9	1.143	13	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BY-AP-MW-10	2.079	8	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BY-AP-MW-11	-3.218	-24	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BY-AP-MW-12	0.9516	19	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BY-AP-MW-13	0.3036	4	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BY-AP-MW-14	2.072	18	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BY-AP-MW-15	0.6972	24	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	BY-AP-MW-16	-0.7609	-4	-25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BY-AP-MW-1	8.789	29	25	Yes	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BY-AP-MW-5	1.677	8	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BY-AP-MW-7	1.925	16	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BY-AP-MW-8	0.2132	4	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BY-AP-MW-9	3.032	19	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BY-AP-MW-10	2.178	17	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BY-AP-MW-11	3.263	8	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BY-AP-MW-12	0.9205	17	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BY-AP-MW-13	3.277	11	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BY-AP-MW-14	4.387	16	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BY-AP-MW-15	10.95	28	25	Yes	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	BY-AP-MW-16	3.331	19	25	No	9	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	BY-AP-MW-15	0	-4	-25	No	9	0	n/a	n/a	0.01	NP
pH (pH)	BY-AP-MW-1	0.03959	13	30	No	10	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-1	-6.156	-5	-21	No	8	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-5	-13.28	-14	-21	No	8	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-7	0	1	21	No	8	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-8	-20.91	-20	-21	No	8	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-9	-3.724	-1	-21	No	8	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-10	8.263	6	21	No	8	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-11	-3.615	-5	-21	No	8	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-12	1.003	1	21	No	8	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-13	9.897	9	21	No	8	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-14	8.039	4	21	No	8	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-15	11.57	8	21	No	8	0	n/a	n/a	0.01	NP
TDS (mg/L)	BY-AP-MW-16	0.79	1	21	No	8	0	n/a	n/a	0.01	NP

Sen's Slope Estimator BY-AP-MW-1



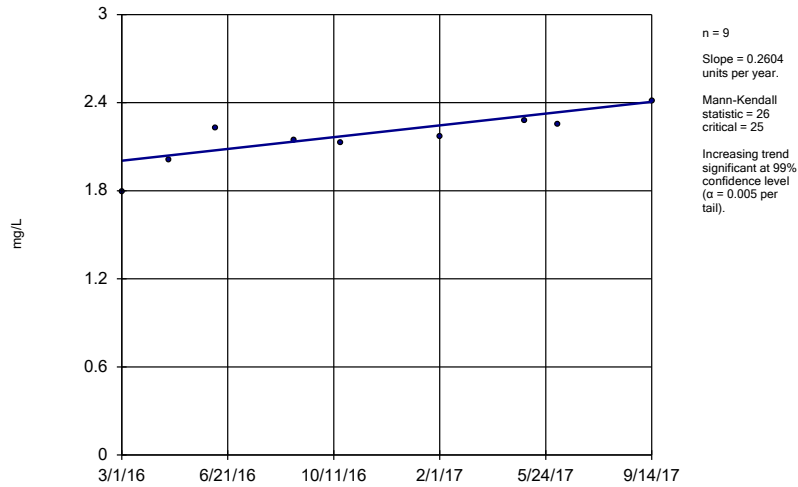
Constituent: Boron Analysis Run 11/3/2017 12:26 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-8



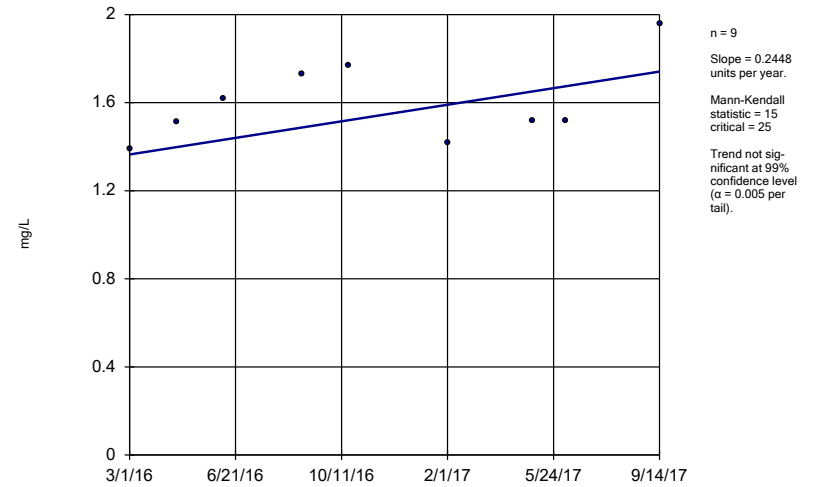
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-9



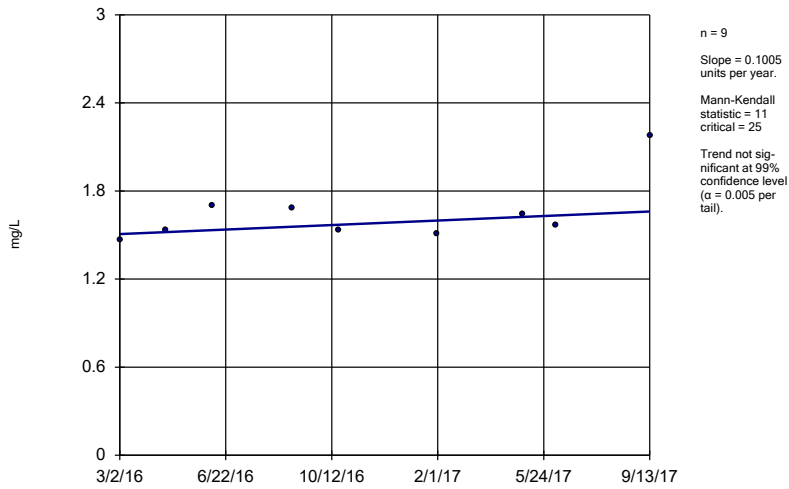
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-10



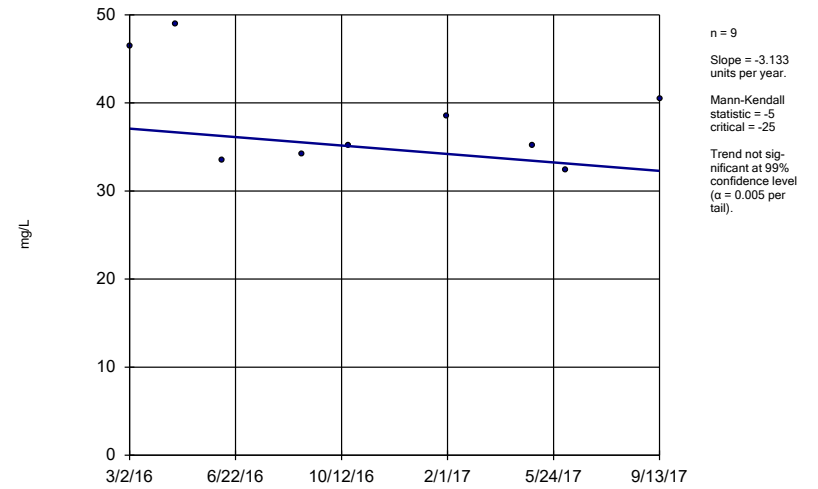
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-16



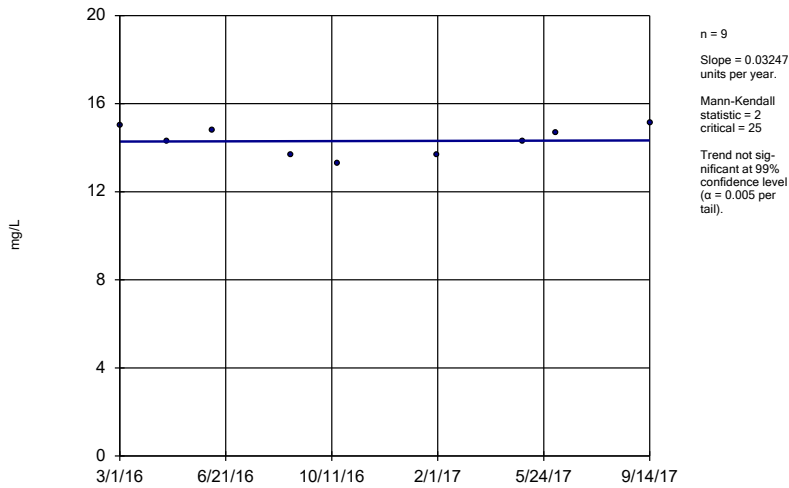
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Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-1



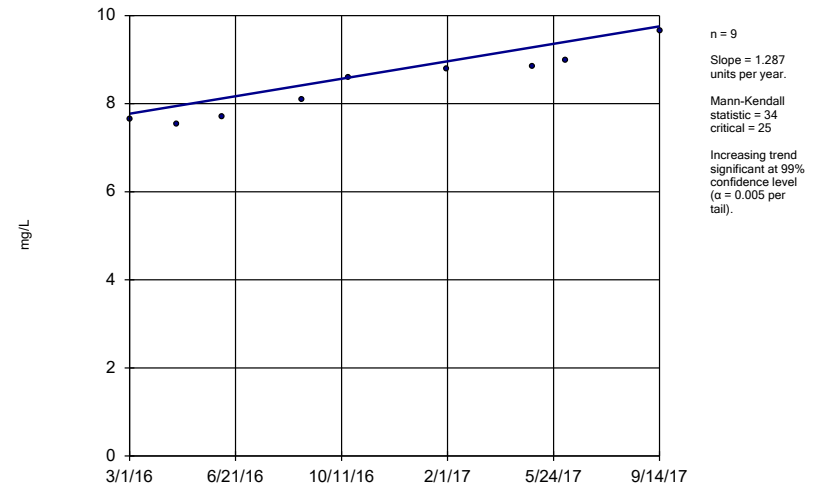
Constituent: Calcium Analysis Run 11/3/2017 12:26 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-5



Constituent: Calcium Analysis Run 11/3/2017 12:26 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

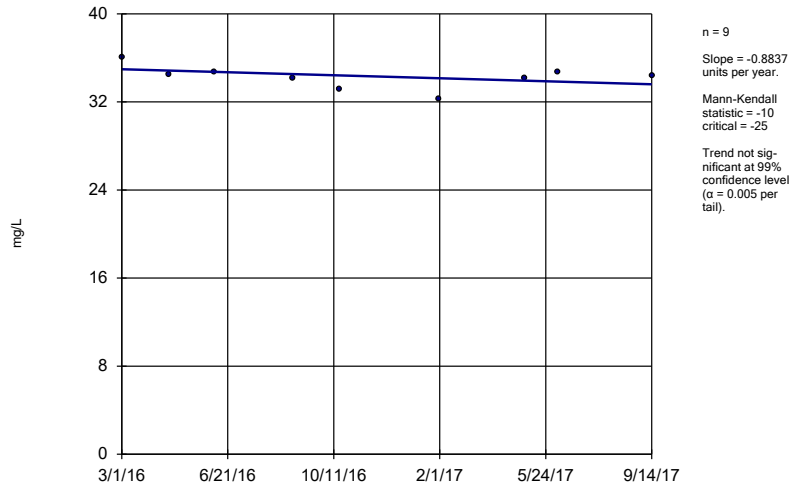
Sen's Slope Estimator BY-AP-MW-7



Constituent: Calcium Analysis Run 11/3/2017 12:26 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

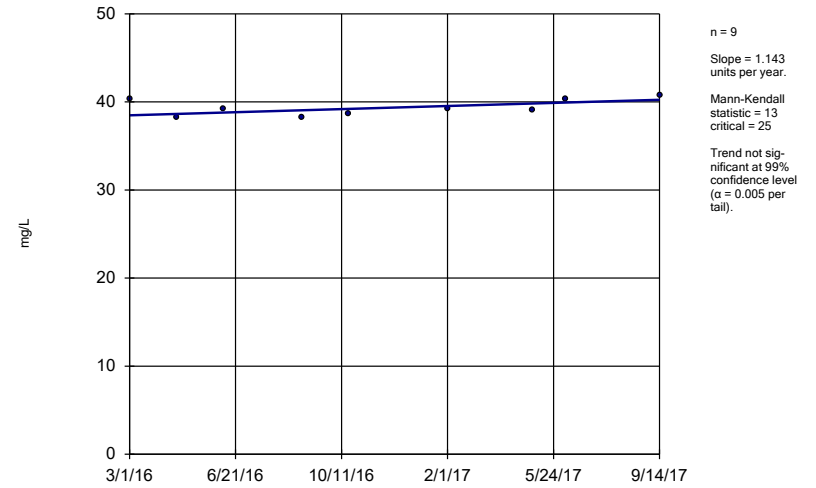
BY-AP-MW-8



Constituent: Calcium Analysis Run 11/3/2017 12:26 PM View: Trend Tests - PL Exceedances
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

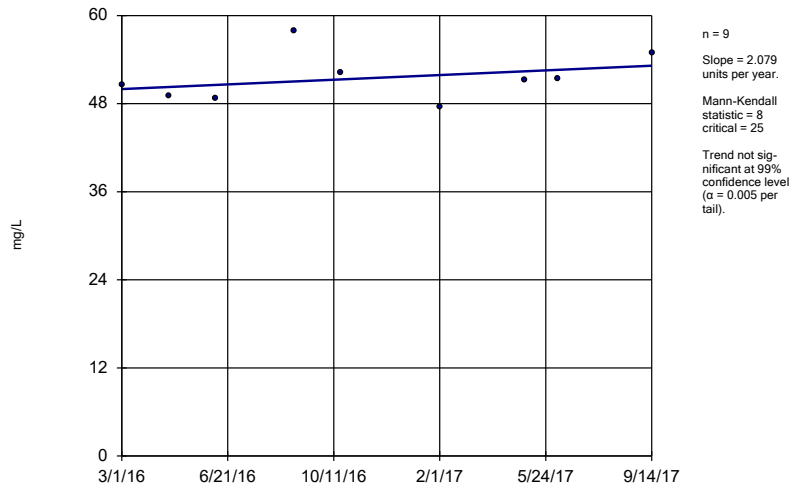
BY-AP-MW-9



Constituent: Calcium Analysis Run 11/3/2017 12:26 PM View: Trend Tests - PL Exceedances
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

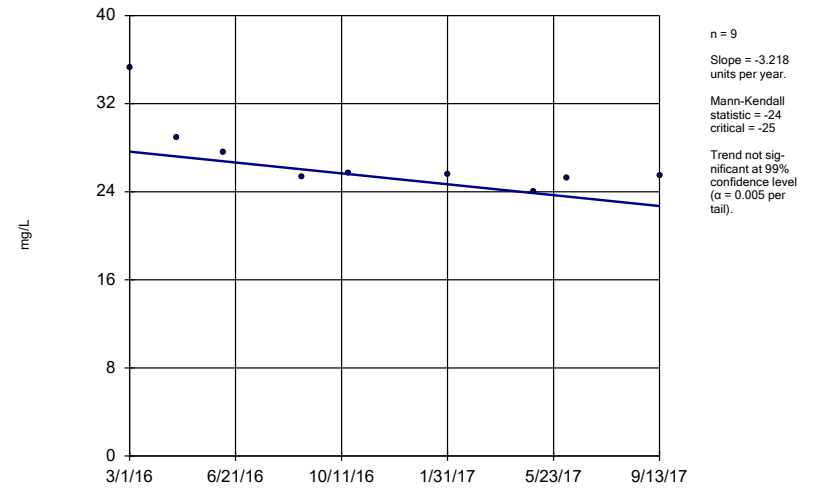
BY-AP-MW-10



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 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

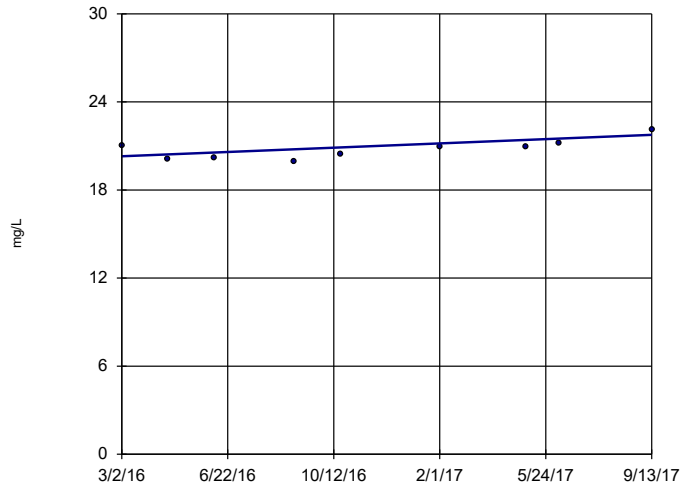
BY-AP-MW-11



Constituent: Calcium Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-12

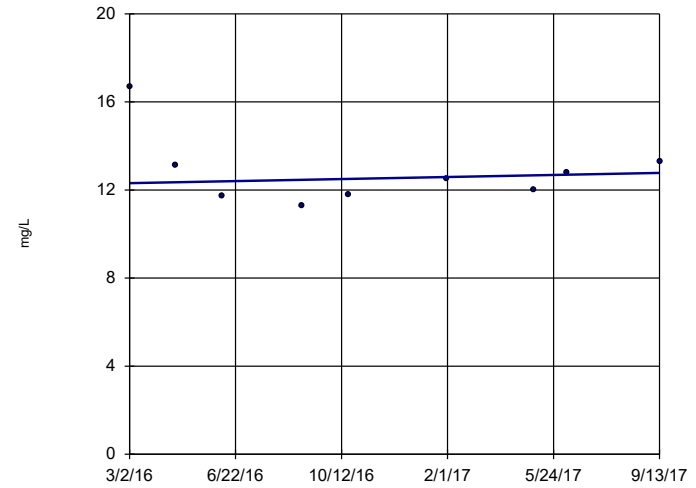


n = 9
 Slope = 0.9516 units per year.
 Mann-Kendall statistic = 19
 critical = 25
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-13

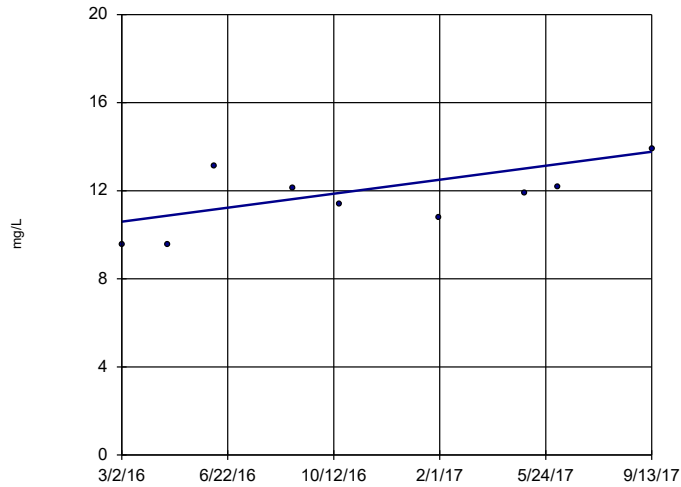


n = 9
 Slope = 0.3036 units per year.
 Mann-Kendall statistic = 4
 critical = 25
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-14

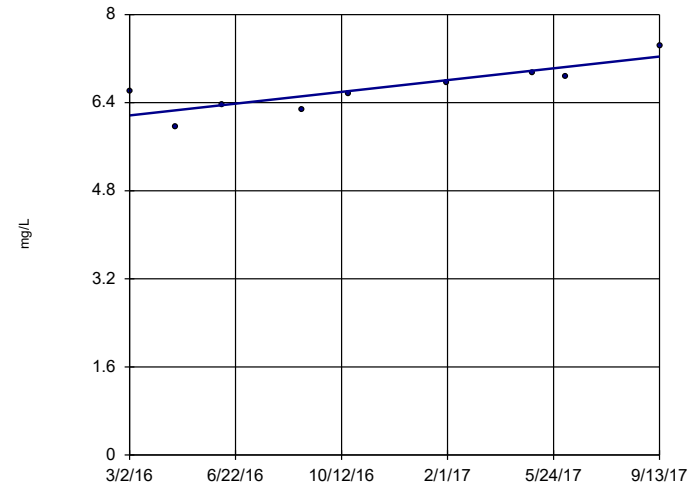


n = 9
 Slope = 2.072 units per year.
 Mann-Kendall statistic = 18
 critical = 25
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-15

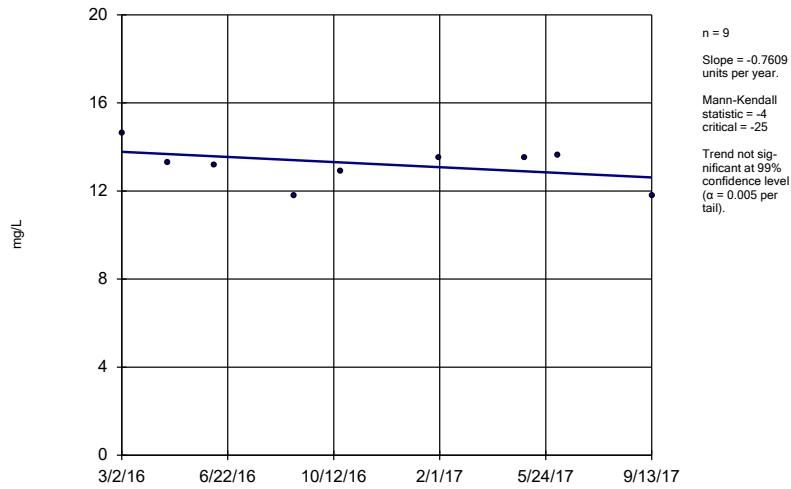


n = 9
 Slope = 0.6972 units per year.
 Mann-Kendall statistic = 24
 critical = 25
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

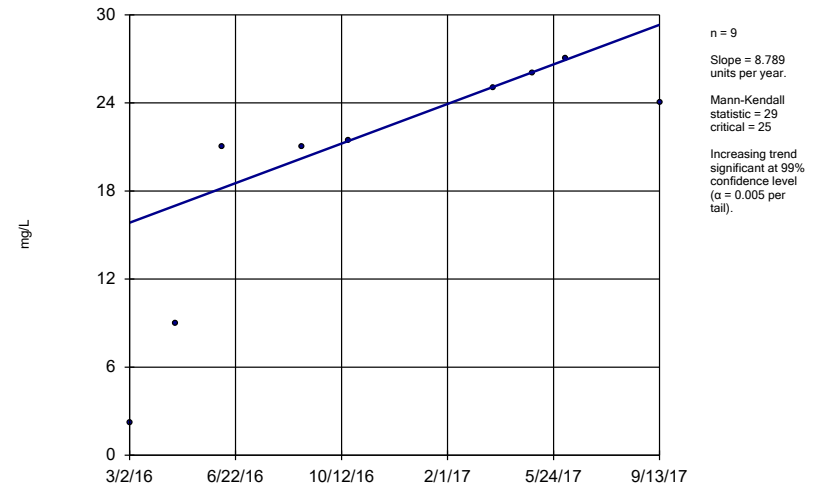
BY-AP-MW-16



Constituent: Calcium Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

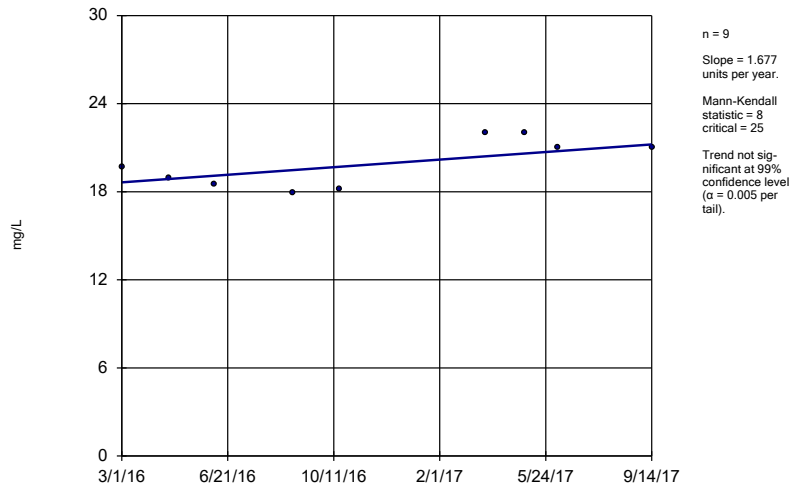
BY-AP-MW-1



Constituent: Chloride Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

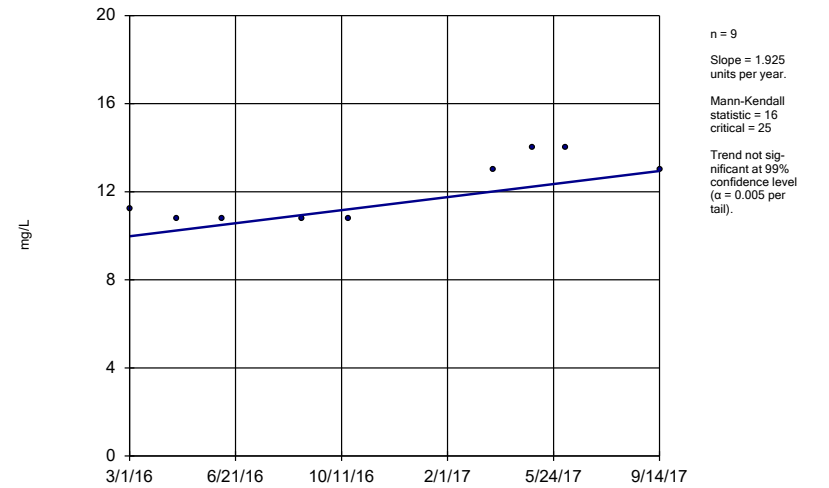
BY-AP-MW-5



Constituent: Chloride Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
 Plant Barry Client: Southern Company Data: Barry Ash Pond

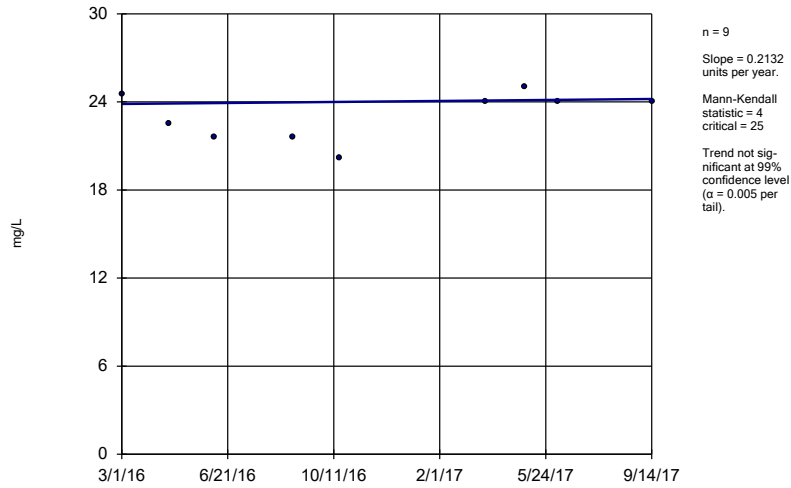
Sen's Slope Estimator

BY-AP-MW-7



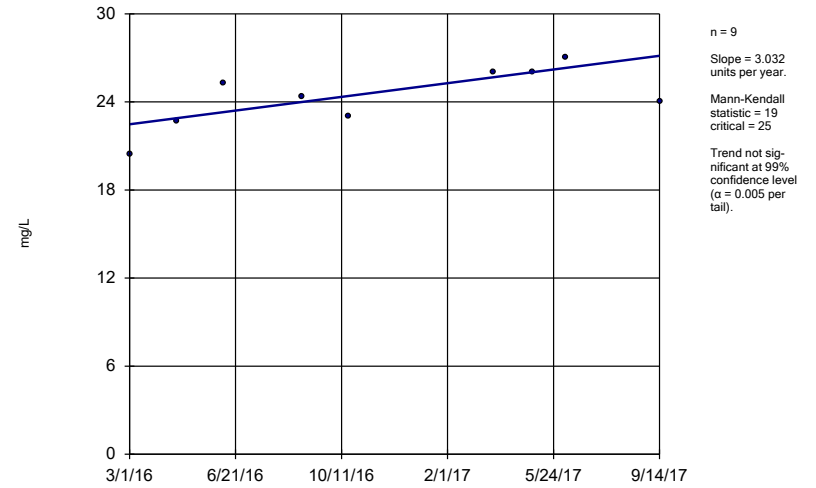
Constituent: Chloride Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-8



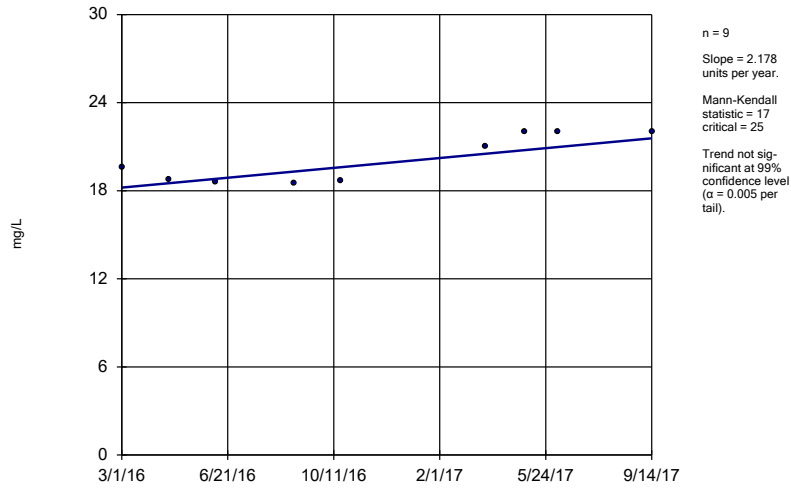
Constituent: Chloride Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-9



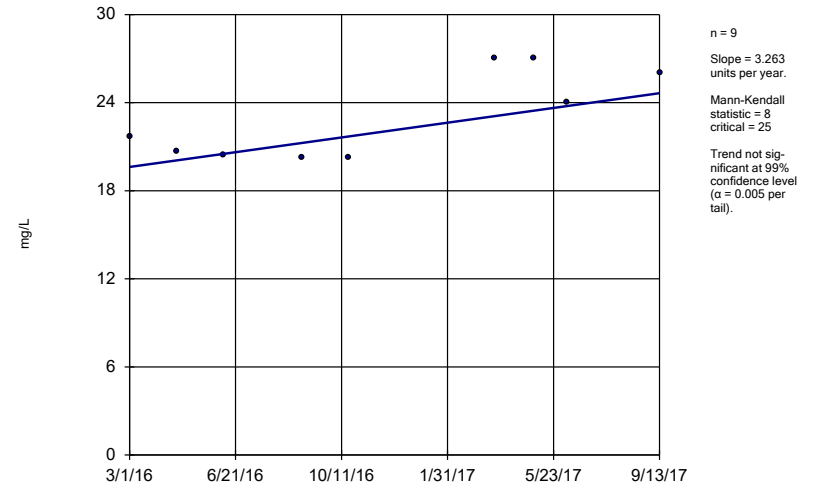
Constituent: Chloride Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-10



Constituent: Chloride Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

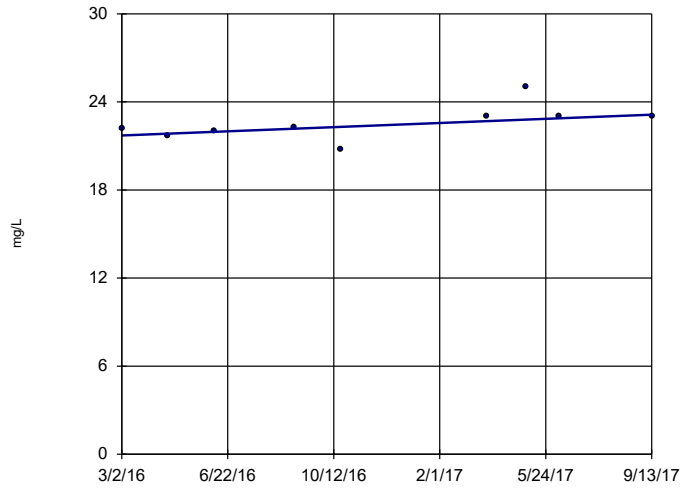
Sen's Slope Estimator BY-AP-MW-11



Constituent: Chloride Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-12

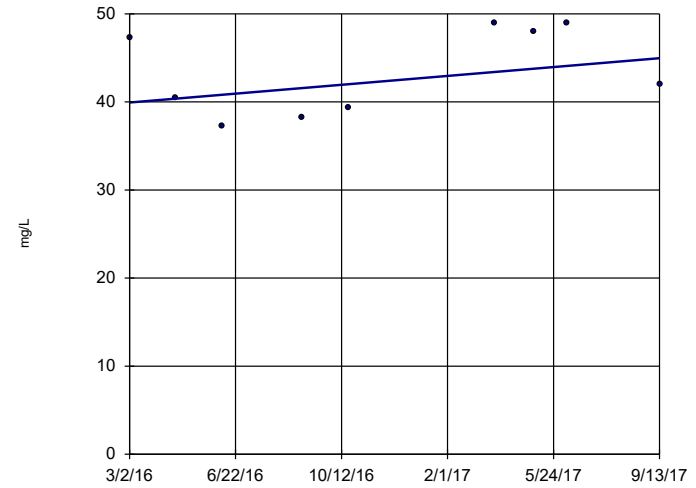


n = 9
 Slope = 0.9205 units per year.
 Mann-Kendall statistic = 17
 critical = 25
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-13

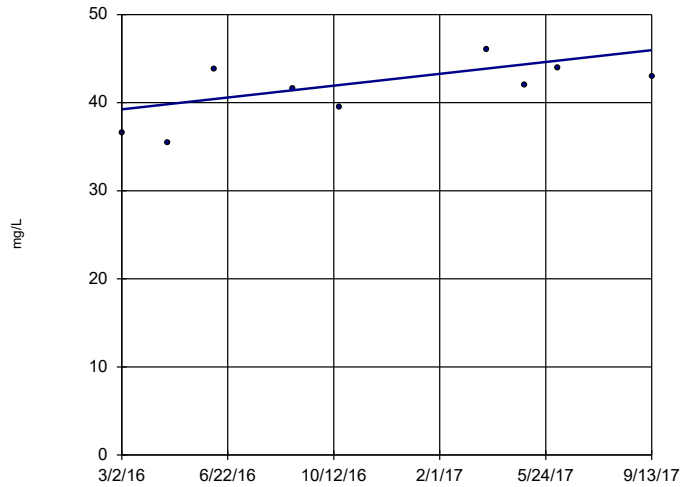


n = 9
 Slope = 3.277 units per year.
 Mann-Kendall statistic = 11
 critical = 25
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

BY-AP-MW-14

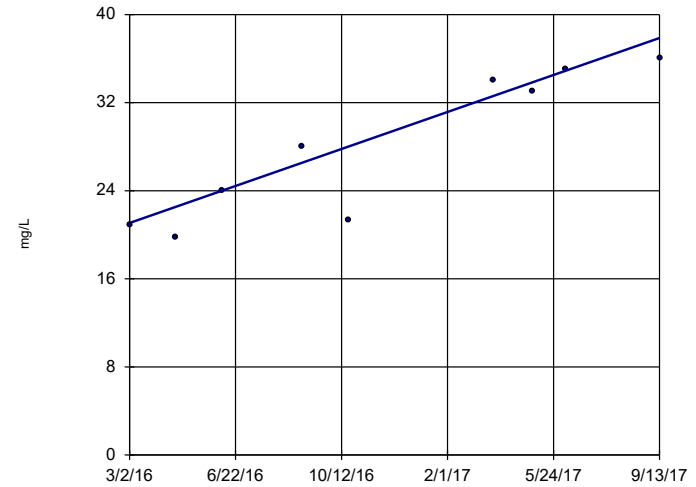


n = 9
 Slope = 4.387 units per year.
 Mann-Kendall statistic = 16
 critical = 25
 Trend not significant at 99% confidence level (α = 0.005 per tail).

Constituent: Chloride Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

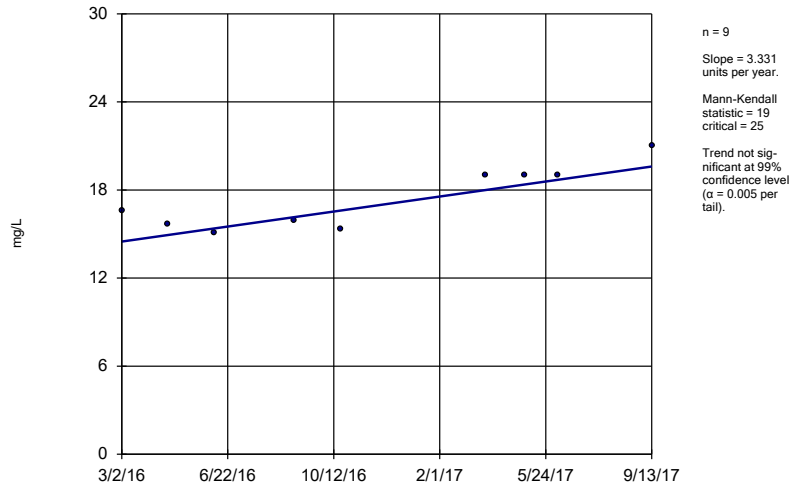
BY-AP-MW-15



n = 9
 Slope = 10.95 units per year.
 Mann-Kendall statistic = 28
 critical = 25
 Increasing trend significant at 99% confidence level (α = 0.005 per tail).

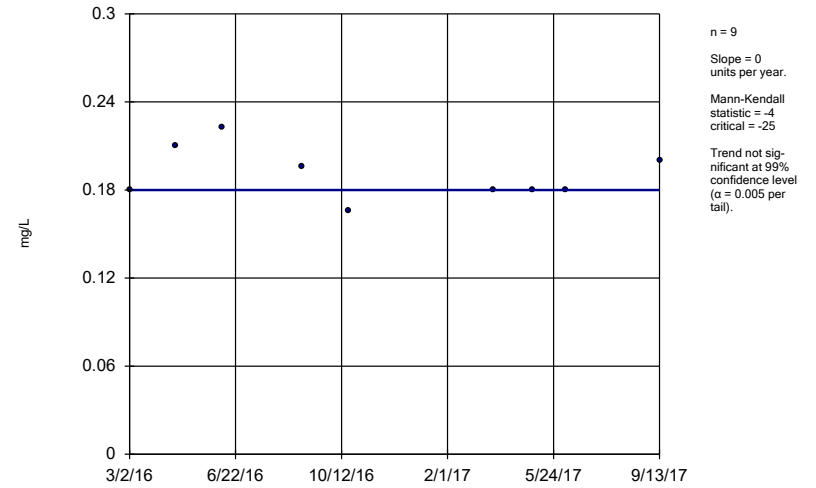
Constituent: Chloride Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator
BY-AP-MW-16



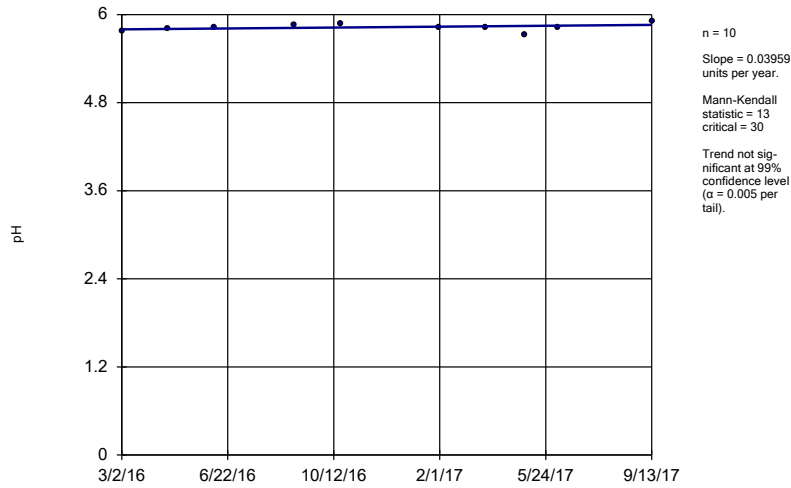
Constituent: Chloride Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator
BY-AP-MW-15



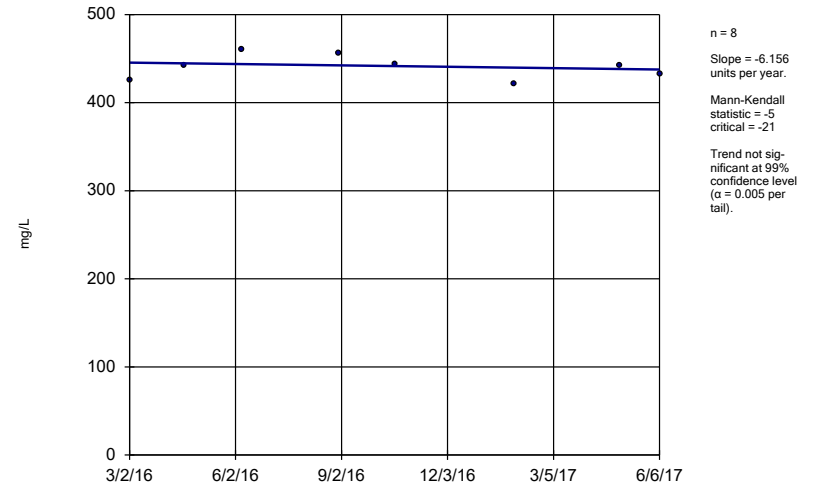
Constituent: Fluoride Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator
BY-AP-MW-1



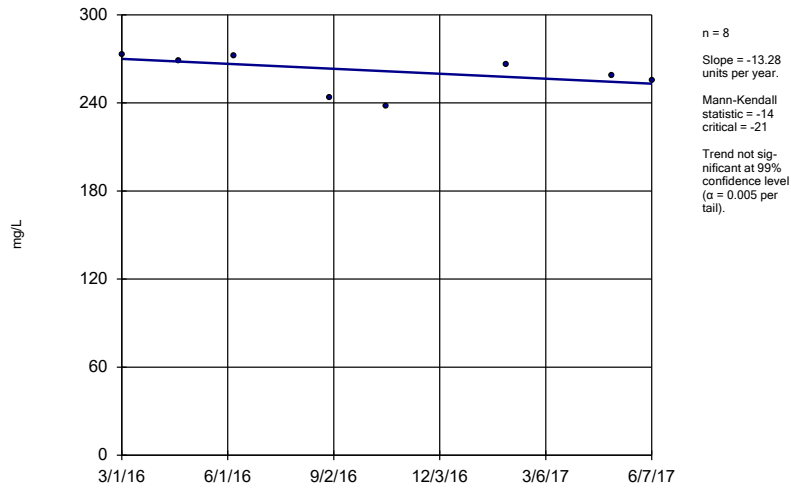
Constituent: pH Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator
BY-AP-MW-1



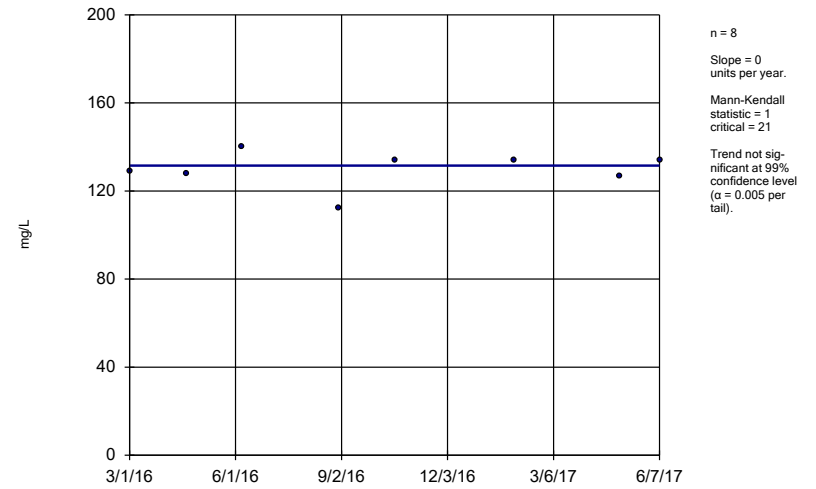
Constituent: TDS Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-5



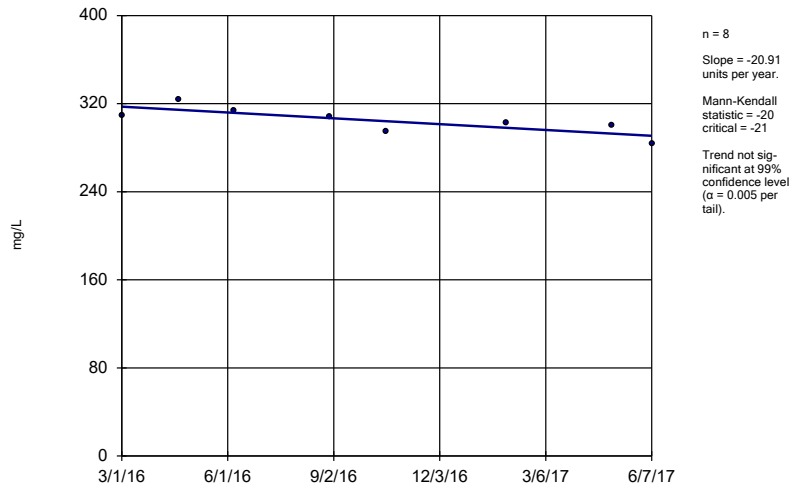
Constituent: TDS Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-7



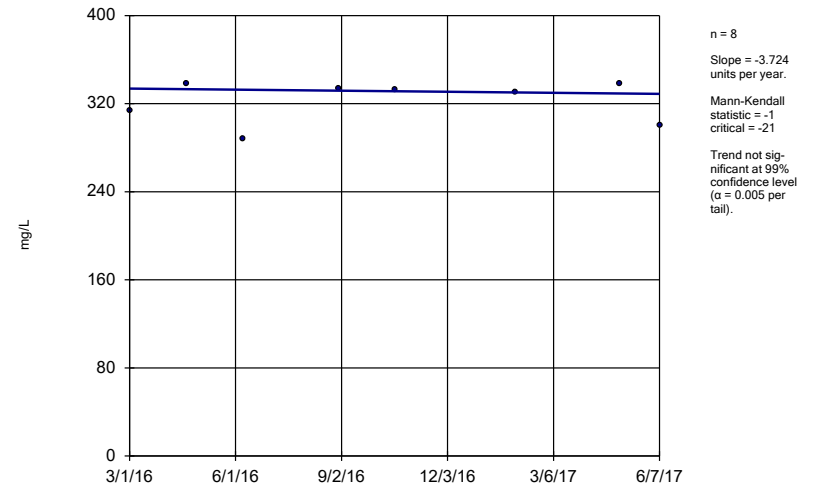
Constituent: TDS Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator BY-AP-MW-8



Constituent: TDS Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

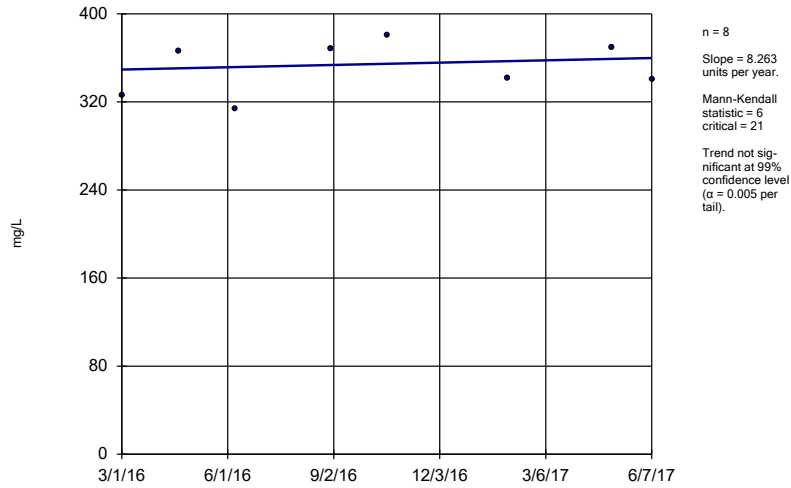
Sen's Slope Estimator BY-AP-MW-9



Constituent: TDS Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

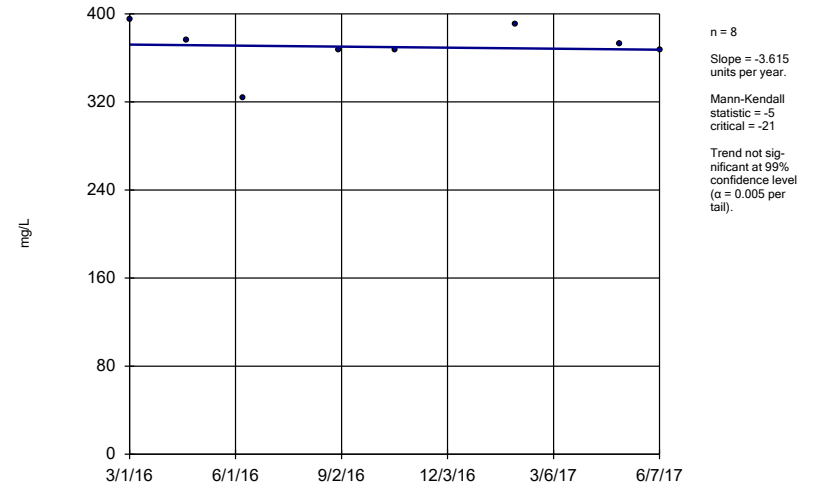
BY-AP-MW-10



Constituent: TDS Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

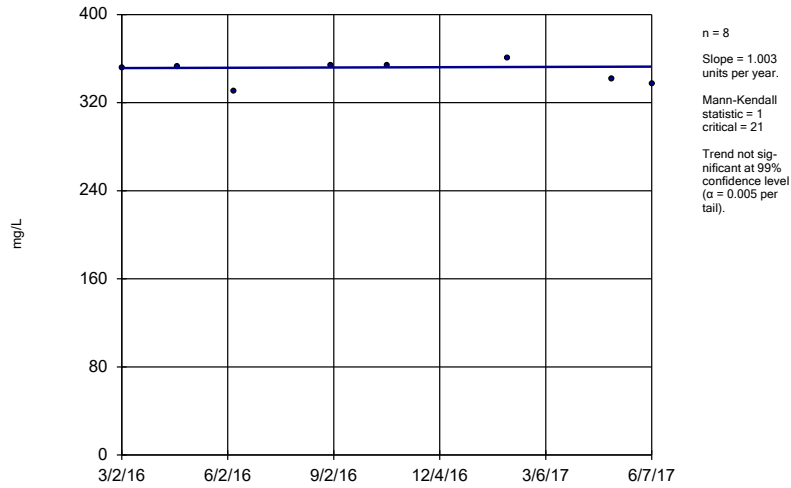
BY-AP-MW-11



Constituent: TDS Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

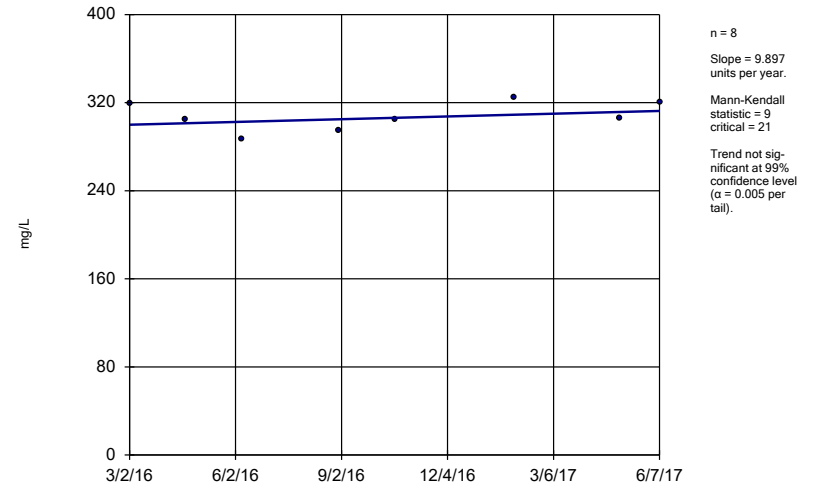
BY-AP-MW-12



Constituent: TDS Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

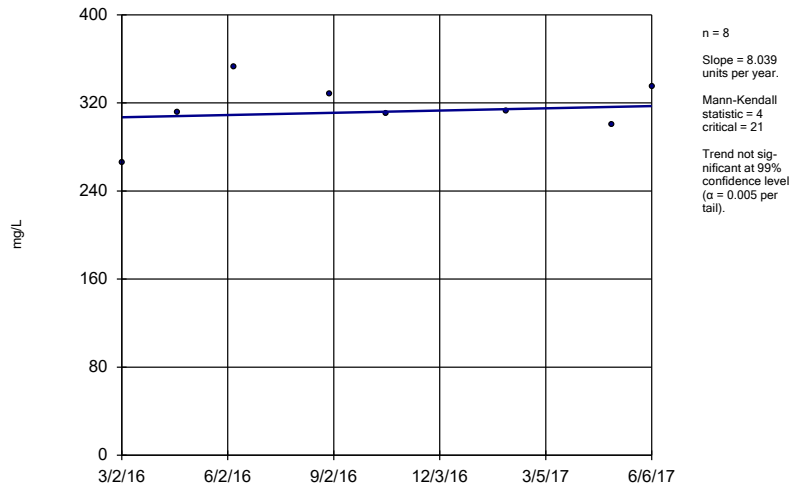
BY-AP-MW-13



Constituent: TDS Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

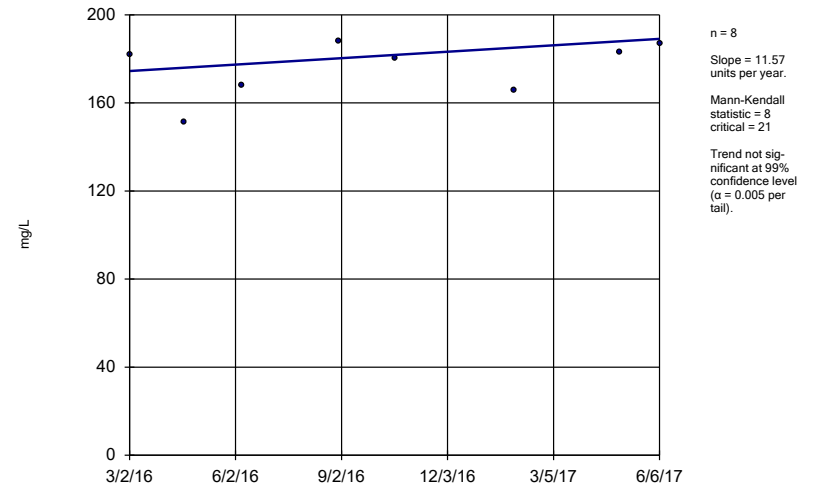
BY-AP-MW-14



Constituent: TDS Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

Sen's Slope Estimator

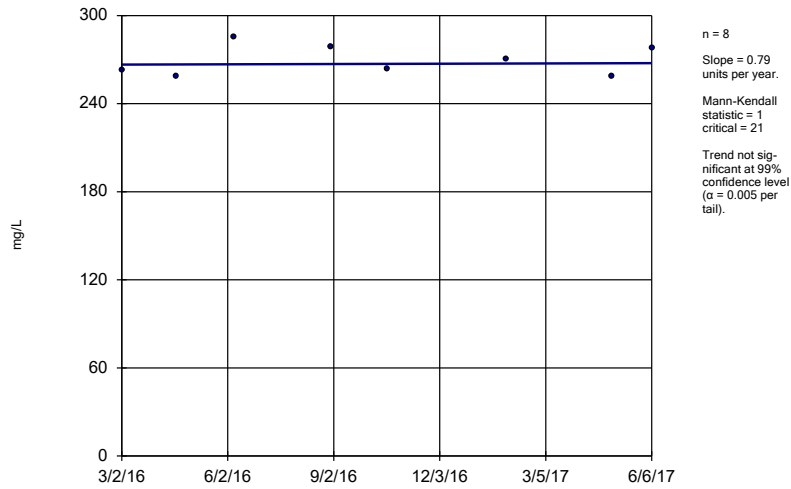
BY-AP-MW-15



Constituent: TDS Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

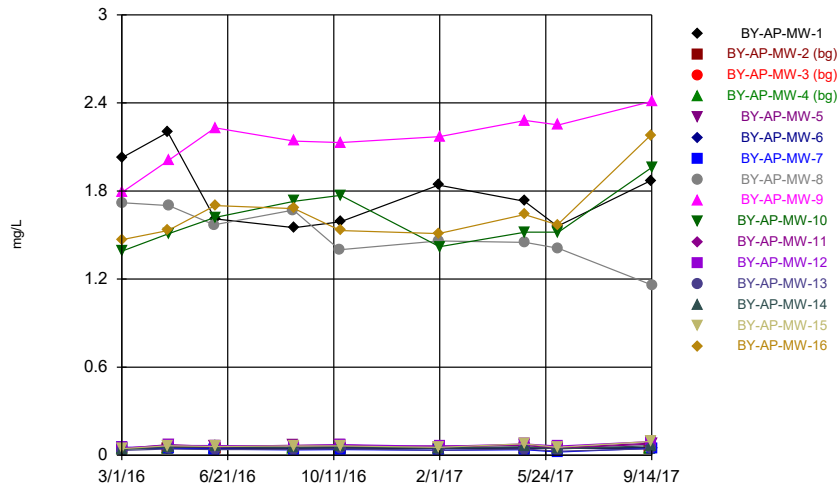
Sen's Slope Estimator

BY-AP-MW-16



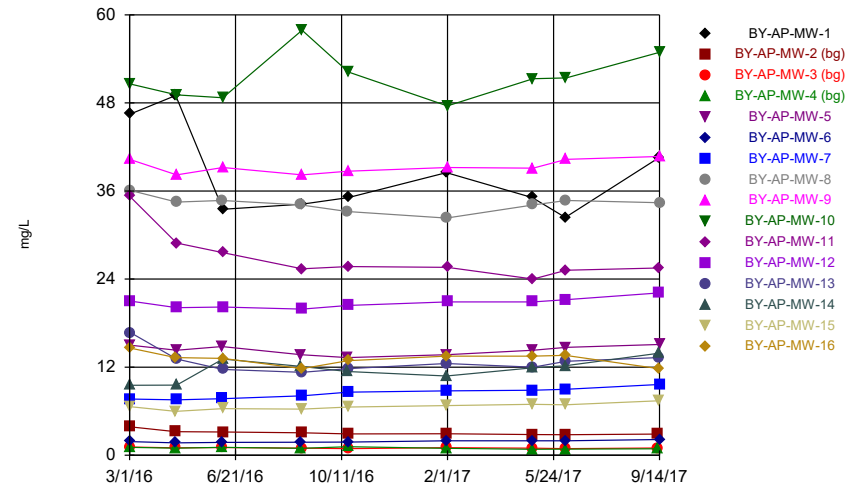
Constituent: TDS Analysis Run 11/3/2017 12:27 PM View: Trend Tests - PL Exceedances
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



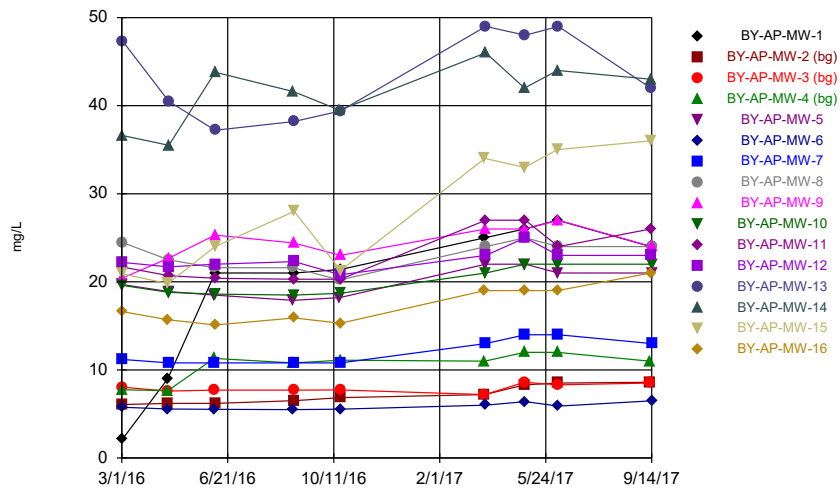
Constituent: Boron Analysis Run 12/13/2017 1:10 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



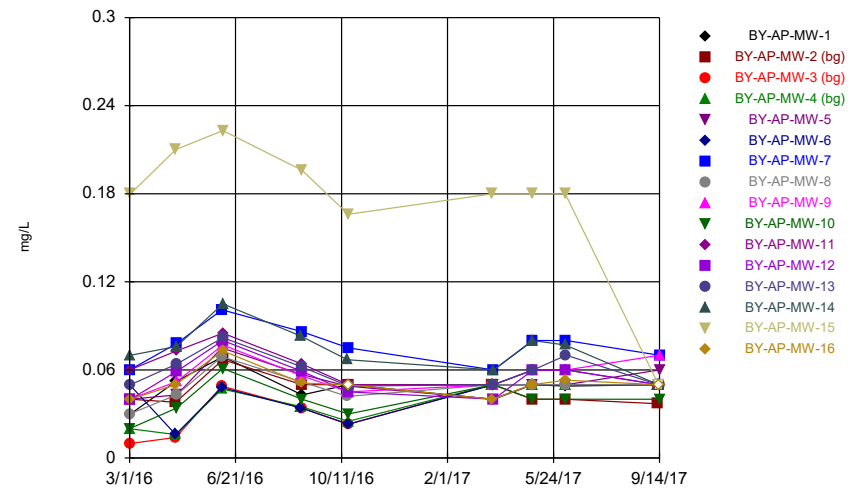
Constituent: Calcium Analysis Run 12/13/2017 1:10 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



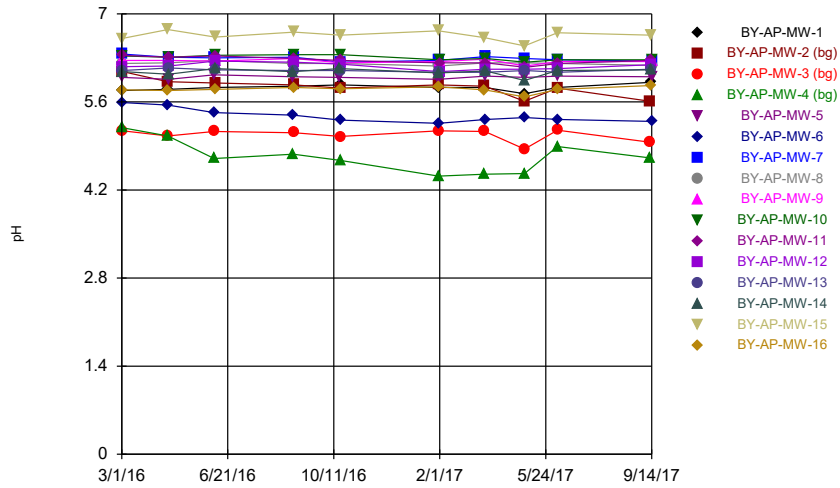
Constituent: Chloride Analysis Run 12/13/2017 1:10 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



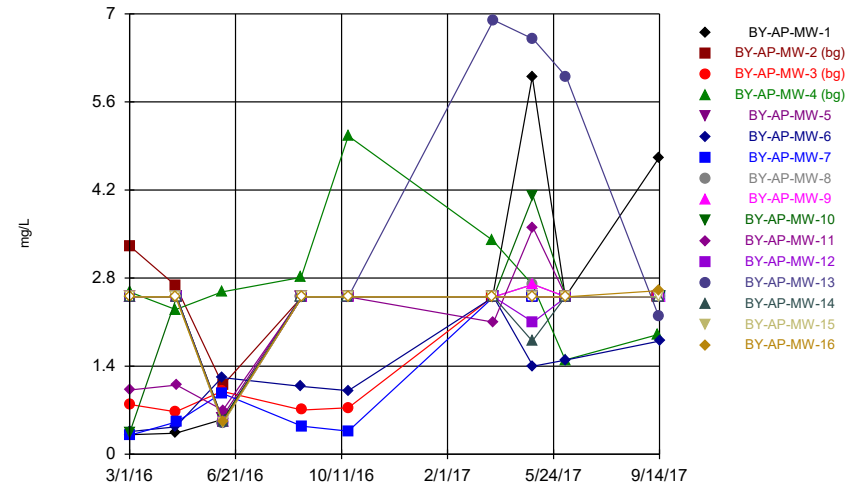
Constituent: Fluoride Analysis Run 12/13/2017 1:10 PM View: Descriptive
Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



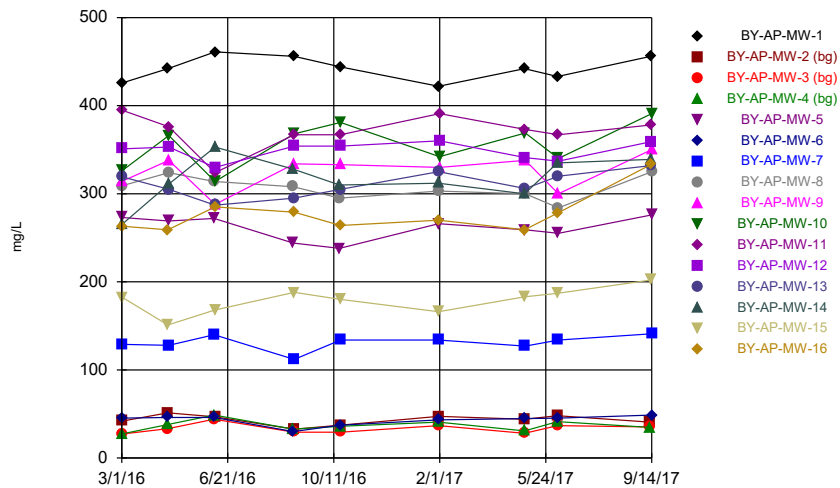
Constituent: pH Analysis Run 12/13/2017 1:11 PM View: Descriptive
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



Constituent: Sulfate Analysis Run 12/13/2017 1:11 PM View: Descriptive
 Plant Barry Client: Southern Company Data: Barry Ash Pond

Time Series



Constituent: TDS Analysis Run 12/13/2017 1:11 PM View: Descriptive
 Plant Barry Client: Southern Company Data: Barry Ash Pond