2017 ANNUAL GROUNDWATER MONITORING AND CORRECTIVE ACTION REPORT

ALABAMA POWER COMPANY
PLANT GREENE COUNTY
ASH POND

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Prepared for

Alabama Power Company
Birmingham, Alabama

By

Southern Company Services
Earth Science and Environmental Engineering

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ABBREVATIONS

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

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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 Greene County Ash Pond and satisfies the requirements of §257.90(e). Semi-annual monitoring and reporting for Plant Greene County Ash Pond is performed in accordance with the monitoring requirements §257.90 through §257.94.

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2.0 SITE LOCATION AND DESCRIPTION

Alabama Power Company's Plant Greene County is in southeastern Greene County, Alabama. The physical address is 801 Steam Plant Road, Forkland, Alabama 36740. Plant Greene County lies in portions of Sections 21 and 28, Township 19 North, Range 3 East, data are based on visual inspection of USGS topographic quadrangle maps and GIS maps (USGS, 1980, 1982a, 1982b, 1983).

The Ash Pond is located south of the main plant along the Black Warrior River to the south and the barge canal to the east. **Figure 1**, **Site Location Map**, depicts the location of the Plant and Ash Pond with respect to the surrounding area.

3.0 SITE GEOLOGY AND HYDROGEOLOGY

3.1 Physical Setting

Plant Greene County is located in the East Gulf Coastal Plain physiographic province (Sapp and Emplaincourt, 1975). This province consists primarily of flat to gently rolling sandy uplands dissected by deeply entrenched, south to southwest flowing streams and rivers (Dejarnette and Crownover, 1987). Plant Greene County's topography is characterized by gentle relief. The lowest elevations are approximately 60 feet above mean sea level (MSL) at the northern and southern boundaries, near the Black Warrior River, and along the eastern boundary near the coal docks. Away from the river, in the central upland portion of the property, elevations typically range from approximately 80 to 100 ft above MSL.

3.2 Geology and Hydrogeology

The generalized geology of Greene County consists of a sequence of poorly consolidated Mesozoic sedimentary strata unconformably overlying Paleozoic rocks of the Appalachian thrust belt. Mesozoic strata are Cretaceous in age, and in descending stratigraphic order they include the Demopolis Chalk, the Mooreville Chalk, the Eutaw Formation, the McShan Formation, the Gordo Formation, and the Coker Formation. These Cretaceous strata are generally flat-lying and dip to the southwest at approximately 35 ft per mile (or less than two degrees). At Plant Greene County, the Cretaceous sequence is approximately 2,500 ft thick (McIntyre et al., 2010). Quaternary alluvium and low terrace deposits overlie the Mesozoic strata along stream and river valleys (McIntyre et al., 2010). **Figure 2**, **Site Geologic Map**, illustrates the surface geology at the site and neighboring areas.

Near the site, the geology consists of Quaternary alluvium deposits overlying Cretaceous Demopolis and Mooreville Chalk formations. Alluvial deposits at the site generally consist of 5 to 15 feet of reddish brown to reddish yellow, lean clay overlying reddish brown to tan, poorly graded sands with interbedded lenses

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of gravel and clay. The alluvial overburden is between 20 to 30 feet thick in the north and 40 to 60 ft thick in the south. The base of the alluvium/top of bedrock occurs between approximately 60 and 80 ft above mean sea level (MSL) on the northern side of the pond, and approximately 40 and 20 ft above MSL towards the southern edge of the pond. Chalk that was encountered during field investigations was described as bluish green to gray clay-like material. The Demopolis Chalk is a fossiliferous chalk. The Mooreville Chalk ranges from a clayey chalk to chalky marl. Both chalk formations are low permeability strata that retard vertical migration of groundwater in the area (Wahl, 1966). The vertical extent of these formations was not drilled during field investigations, but a search of area well logs stored on the Geological Survey of Alabama's website indicates that the thickness of the Mooreville and Demopolish Chalk formations are likely around 300 to 400 ft at Plant Greene County.

In Greene County, groundwater is available in sand and gravel aquifers of the Cretaceous Eutaw, McShan, Gordo, Coker Formations. These Cretaceous aquifers have a combined thickness of approximately 1000 ft beneath southern Greene County and exists between depths of approximately 400 to 1400 ft BGS (Wahl, 1966). Quaternary alluvial and low terrace deposits also produce sufficient groundwater for domestic or livestock uses. These deposits can be upwards of 80 ft in thickness near present day streams or rivers and consist of clay, sand, and gravel. Groundwater occurs in the sands and gravels of these alluvial deposits. The Quaternary alluvial and low terrace deposits are hydraulically separated from deeper Cretaceous aquifers by the low permeability, confining Mooreville and Demopolis Chalk formations. These units confine underlying aquifers and limit downward percolation of water from the alluvial and low terrace aquifers (Wahl, 1966). As described above, these formations are believed to be approximately 300 to 400 ft thick at Plant Greene County.

3.3 Uppermost Aquifer

The uppermost aquifer beneath the site corresponds to alluvial and low terrace deposits in which groundwater occurs in the coarser sand and gravel intervals. At the site, the uppermost aquifer is described as a reddish brown to tan, fine to coarse sand with intervals of gravel and clay. Depth to the uppermost aquifer generally occurs between 10 and 20 ft BGS and is 20 to 30 ft thick near the northern area of the pond and 40 to 60 ft near the southern edge of the pond where low permeability Demopolis Chalk is encountered. Groundwater recharge to the uppermost 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 Black Warrior River where surface water may infiltrate via hydraulically connected sand beds or infiltration of flooded water. Locally, the uppermost aquifer is hydraulically separated from deeper Cretaceous aquifer systems by 300 to 400 ft of low permeability chalk.

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3.4 Flow Interpretation

Groundwater flow at the site is a subdued replica of the natural topography where gravity is the dominant force driving flow. Groundwater flows from higher topographic elevations near the northernmost edge of the ash pond towards surface water bodies to the north, east, and south-southeast. A topographic high southwest of the pond, provides a localized mound where groundwater elevations are higher than neighboring monitoring wells. Groundwater flow is accomplished via porous or Darcian flow mechanics through sands and gravels of the uppermost aquifer. A potentiometric surface map for the site is presented in a later section.

4.0 GROUNDWATER MONITORING SYSTEM

Pursuant to §257.91, Plant Greene County has installed a groundwater monitoring system to monitor groundwater within the uppermost aquifer. The PE-certified groundwater monitoring system for the Plant Greene County 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 locations based on groundwater flow direction as determined by the potentiometric surface elevation measurements. All groundwater monitoring wells were designed and constructed using "Design and Installation of Groundwater Monitoring Wells in Aquifers", ASTM Subcommittee D18.21, as a guideline.

4.1 Monitoring Wells

The groundwater monitoring network is comprised of 29 monitoring wells and 4 piezometers. Monitoring well locations are presented on **Figure 3, Monitoring Well Location Map**. **Table 1, Groundwater Monitoring Well Network**, summarizes the monitoring well construction details and design purpose for the Plant Greene County Ash Pond.

4.1.1 Upgradient Wells

Monitoring well locations GC-AP-MW-11, GC-AP-MW-12, GC-AP-MW-23, GC-AP-MW-24, AND GC-AP-MW-26 through GC-AP-MW-33 serve as upgradient locations for the Ash Pond. Upgradient wells are located north of the Ash Pond as determined by water level monitoring and potentiometric surface maps constructed for the site.

4.1.2 Downgradient Wells

Monitoring well locations GC-AP-MW-1 through GC-AP-MW-10, GC-AP-MW-13 through GC-AP-MW-18, GC-AP-MW-21, and GC-AP-MW-25 are utilized as downgradient locations for the Ash Pond.

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Downgradient locations are located west, south, and east of the Ash Pond as determined by water level monitoring and potentiometric surface maps constructed for the site.

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Table 1. Groundwater Monitoring Well Network Details

Well ID	Purpose	Installation Date	Northing	Easting	Total Depth	Top of Casing Elevation (feet MSL)	Ground Elevation (feet MSL)	Top of Screen Elevation (feet MSL)
GC-AP-MW-1	Downgradient	8/26/2015	946095.058	1880860.84	28.45	107.69	104.35	89.63
GC-AP-MW-2	Downgradient	8/26/2015	946275.313	1880351.041	23.65	106.05	103.37	92.8
GC-AP-MW-3	Downgradient	5/7/2013	946518.731	1879899.751	25	106.37	103.06	89.77
GC-AP-PZ-4	Piezometer	8/26/2015	947156.411	1879158.907	27.66	103.48	100.7	86.22
GC-AP-MW-5	Downgradient	8/25/2015	945868.72	1879098.549	27.06	108.39	105.61	91.73
GC-AP-MW-6	Downgradient	8/25/2015	945091.716	1878587.509	29.55	102	98.51	82.85
GC-AP-MW-7	Downgradient	5/7/2013	944928.94	1877364.096	30	98.55	95.23	76.85
GC-AP-MW-8	Downgradient	8/24/2015	944228.778	1877306.867	30.54	97.06	93.81	76.92
GC-AP-MW-9	Downgradient	5/8/2013	943193.136	1877287.887	35	93.12	89.9	71.12
GC-AP-MW-10	Downgradient	9/2/2015	941883.884	1877251.528	25.72	88.27	85.42	72.95
GC-AP-MW-11	Upgradient	4/23/2013	940847.132	1877472.943	35	101.22	97.74	73.22
GC-AP-MW-12	Upgradient	8/24/2015	940132.799	1878416.082	36.85	103.18	100.18	76.73
GC-AP-MW-13	Downgradient	4/24/2013	940377.367	1879757.143	25	101.09	97.18	82.79
GC-AP-MW-14	Downgradient	8/24/2015	940941.085	1880988.087	22.8	85.62	83.17	73.22
GC-AP-MW-15	Downgradient	8/27/2015	941183.943	1881893.647	40.39	91.7	88.94	61.71
GC-AP-MW-16	Downgradient	8/21/2015	942161.114	1881839.309	48.81	108.74	106.1	70.33

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.

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Table 1. Groundwater Monitoring Well Network Details cont.

Well ID	Purpose	Installation Date	Northing	Easting	Total Depth	Top of Casing Elevation (feet MSL)	Ground Elevation (feet MSL)	Top of Screen Elevation (feet MSL)
GC-AP-MW-17	Downgradient	8/27/2015	943039.251	1881842.218	49.89	104.93	102.27	66.85
GC-AP-MW-18	Downgradient	8/21/2015	943761.404	1881853.449	48.18	105.36	102.14	67.15
GC-AP-PZ-19	Piezometer	8/20/2015	944430.495	1881853.918	39.47	104.81	101.98	75.74
GC-AP-PZ-20	Piezometer	8/26/2015	945700.675	1881467.967	34.28	104.89	102.06	81.01
GC-AP-MW-21	Downgradient	12/14/2015	940503.25	1877918.18	40.51	102.35	99.27	75.25
GC-AP-PZ-22	Piezometer	12/15/2015	947922.724	1882517.278	15.00	104.55	101.83	96.83
GC-AP-MW-23	Upgradient	12/15/2015	947562.08	1882485.06	18.53	106.00	103.25	94.22
GC-AP-MW-24	Upgradient	12/16/2015	947108.604	1882404.441	23.22	104.91	101.68	93.18
GC-AP-MW-25	Downgradient	5/6/2013	945490.181	1889127.695	35.00	90.14	87.44	78.21
GC-AP-MW-26	Upgradient	6/28/2016	944351.106	1890092.898	34.55	88.89	85.46	65.99
GC-AP-MW-27	Upgradient	6/28/2016	942187.048	1889946.802	37.12	88.85	86.57	62.17
GC-AP-MW-28	Upgradient	6/29/2016	944430.936	1889288.393	33.47	89.68	87.30	65.78
GC-AP-MW-29	Upgradient	6/29/2016	942938.832	1888319.488	34.71	93.68	90.94	65.37
GC-AP-MW-30	Upgradient	6/29/2016	945187.401	1873523.89	35.12	105.41	102.65	68.96
GC-AP-MW-31	Upgradient	7/8/2016	948128.48	1875424.052	32.00	108.70	106.06	83.81
GC-AP-MW-32	Upgradient	7/8/2016	946572.017	1875186.706	37.55	108.94	106.11	81.55
GC-AP-MW-33	Upgradient	7/8/2016	946571.93	1875186.73	33.10	104.93	102.27	86.24

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

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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 February 2016 to June 2017.

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

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

5.2 Historical Groundwater Flow

Historical potentiometric data from the site indicates that groundwater flow direction have been consistent at the site during the background monitoring period. Groundwater flow at the site is a subdued replica of the natural topography where gravity is the dominant force driving flow. Groundwater flows from higher topographic elevations near the northernmost edge of the ash pond towards the north, east, and south-southeast. A topographic high southwest of the pond, provides a localized mound where groundwater elevations are higher than neighboring monitoring wells.

Groundwater elevations fluctuate in response to rainfall. Seasonal variations of 1.5 to 14 feet are typical at the site. These fluctuations are consistent in response in monitoring wells across the site, but vary in magnitude. **Figure 4**, **Potentiometric Surface Map (August 2017),** confirms that groundwater flow direction is consistent despite seasonal fluctuations. Groundwater elevation data indicates that water levels tend to be higher in the spring and early summer and lower during the fall and winter seasons. **Table 3,**

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Historical Groundwater Elevations Summary below provides a summary of 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	**2/2016**	**4/2016**	**7/2016**	**8/2016**	**10/2016**	**1/2017 & 3/2017**	**5/2017**	**6/2017**	**8/2017**

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

Table 3. Historical Groundwater Elevation Summary

Well ID	Average GW Elevation (ft MSL)	Highest GW Elevation (ft MSL)	Lowest GW Elevation (ft MSL)	GW Elevation Variation (ft)
GC-AP-MW-1	91.38	90.67	92.37	1.7
GC-AP-MW-2	99.94	98.97	100.88	1.91
GC-AP-MW-3	99.55	98.55	100.52	1.97
GC-AP-PZ-4	93.51	91.65	95.26	3.61
GC-AP-MW-5	98.96	96.77	100.96	4.19
GC-AP-MW-6	97.12	94.54	98.78	4.24
GC-AP-MW-7	90.13	86.29	92.51	6.22
GC-AP-MW-8	88.65	84.86	91.16	6.3
GC-AP-MW-9	87.54	83.73	89.88	6.15
GC-AP-MW-10	83.49	82	84.69	2.69
GC-AP-MW-11	85.03	83.76	86.58	2.82
GC-AP-MW-12	85.94	84.87	87.65	2.78
GC-AP-MW-13	81.71	80	84.35	4.35
GC-AP-MW-14	79.42	76.19	84.38	8.19
GC-AP-MW-15	76.66	73.83	83.64	9.81
GC-AP-MW-16	76.89	74.19	84.14	9.95

*****Groundwater elevations are referenced to NAVD88

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Table 3. Historical Groundwater Elevation Summary cont.

Well ID	Average GW Elevation (ft MSL)	Highest GW Elevation (ft MSL)	Lowest GW Elevation (ft MSL)	GW Elevation Variation (ft)
GC-AP-MW-17	76.66	73.61	83.48	9.87
GC-AP-MW-18	77.92	75.05	84.8	9.75
GC-AP-PZ-19	77.39	74.69	88.07	13.38
GC-AP-PZ-20	86.69	85.06	89.58	4.52
GC-AP-MW-21	83.03	81.95	84.69	2.74
GC-AP-PZ-22	88.45	88.45	88.45	0
GC-AP-MW-23	91.07	87.12	92.17	5.05
GC-AP-MW-24	87.65	85.58	101.15	15.57
GC-AP-MW-25	84.91	82.79	86.38	3.59
GC-AP-MW-26	79.63	76.77	84.98	8.21
GC-AP-MW-27	77.91	75.34	82.75	7.41
GC-AP-MW-28	79.47	77.11	84.58	7.47
GC-AP-MW-29	84.24	81.62	89.66	8.04
GC-AP-MW-30	94.75	92.11	99.45	7.34
GC-AP-MW-31	97.98	90.22	103.35	13.13
GC-AP-MW-32	90.22	87.15	91.14	3.99
GC-AP-MW-33	84.62	82.64	92.59	9.95

*****Groundwater elevations are referenced to NAVD88

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6.0 GROUNDWATER SAMPLING AND ANALYSIS

6.1 Sampling Event Summary

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

6.2 Groundwater Sample Collection

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

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

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

6.3 Sample Preservation and Handling

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

6.4 Chain of Custody

All samples were handled under 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,

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

6.5 Laboratory Analysis

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

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

6.6 Quality Assurance/Quality Control

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

Groundwater quality data for the most recent sampling event was validated for the most recent sampling event following guidance from the EPA Region IV Environmental Investigations Standard Operating Procedures and Quality Assurance Manual (November 2001); the EPA Region IV Data Validation Standard Operating Procedures (US EPA Region IV, September 2011); and the analytical methods. Data validation generally consisted of reviewing sample integrity, holding times, laboratory method blanks, laboratory control samples, matrix spikes/matrix spike duplicate recoveries and relative percent differences, post digestion spikes, laboratory and field duplicate RPDs, field and equipment blanks, and reporting limits.

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

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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 most recent sampling event, static groundwater elevations obtained prior to purging and sampling ranged from 6.27 to 33.87 ft MSL. Groundwater levels for the most recent sampling event are included in **Table 4, Groundwater Elevations (August 2017)**.

The most recent potentiometric surface map presented in **Figure 4, Potentiometric Surface Map (August 2017)** shows that groundwater flows from higher topographic elevations near the northernmost edge of the ash pond towards the north, east, and south-southeast. A topographic high southwest of the pond, provides a localized mound where groundwater elevations are higher than neighboring monitoring wells.

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Table 4. Groundwater Elevations (August 2017)

Well ID	TOC Elev (ft MSL)	Depth to GW (ft TOC)	GW Elevation
GC-AP-MW-1	107.69	16.38	91.31
GC-AP-MW-2	106.05	7.08	98.97
GC-AP-MW-3	106.37	7.82	98.55
GC-AP-PZ-4	103.48	11.05	92.43
GC-AP-MW-5	108.39	11.49	96.90
GC-AP-MW-6	102.00	6.87	95.13
GC-AP-MW-7	98.55	10.76	87.79
GC-AP-MW-8	97.06	10.65	86.41
GC-AP-MW-9	93.12	8.07	85.05
GC-AP-MW-10	88.27	6.27	82.00
GC-AP-MW-11	101.22	17.46	83.76
GC-AP-MW-12	103.18	18.1	85.08
GC-AP-MW-13	101.09	20.36	80.73
GC-AP-MW-14	85.62	9.00	76.62
GC-AP-MW-15	91.70	17.28	74.42
GC-AP-MW-16	108.74	33.87	74.87
GC-AP-MW-17	104.93	30.48	74.45
GC-AP-MW-18	105.36	29.61	75.75
GC-AP-PZ-19	104.81	29.47	75.34
GC-AP-PZ-20	104.89	18.86	86.03
GC-AP-MW-21	102.35	20.34	82.01
GC-AP-PZ-22	104.55	DRY	DRY
GC-AP-MW-23	106.00	14.28	91.72
GC-AP-MW-24	104.91	18.21	86.70
GC-AP-MW-25	90.14	6.27	83.87
GC-AP-MW-26	88.89	7.88	81.01
GC-AP-MW-27	88.85	9.50	79.35
GC-AP-MW-28	89.68	9.09	80.59
GC-AP-MW-29	93.68	7.95	85.73
GC-AP-MW-30	105.41	9.42	95.99
GC-AP-MW-31	108.70	10.04	98.66
GC-AP-MW-32	108.94	18.20	90.74
GC-AP-MW-33	104.93	20.35	84.58

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8.0 BACKGROUND GROUNDWATER DATA QUALITY

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

8.1 Statistical Methodology and Tests

Statistical tests used to evaluate the groundwater monitoring data consist of interwell prediction limits combined with a 1-of-2 verification resample plan for each of the Appendix III parameters except pH, which was eligible for intrawell prediction limits combined with a 1-of-3 verification resample plan. Interwell prediction limits pool upgradient well data to establish a background limit for an individual constituent, and the most recent sample from each downgradient well is compared to the same limit for each parameter. Intrawell prediction limits are constructed from historical data within a given well, and the most recent sample is compared to background. If the most recent sample exceeds its respective background statistical limit, an initial statistically significant increase (SSI) is identified.

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

When data was evaluated using the Tukey box plot method, the reported value of 0.07 mg/L for selenium in well GC-AP-MW-13 was identified as an outlier, and flagged in the database. Note that the earliest measurements of radium were analyzed using the Georgia Tech analytical method which utilizes a reporting limit of 3 pCi/L. While reported nondetects remain in the data sets, they will be further evaluated as more data is collected to determine if they should be deselected prior to construction of confidence intervals, should that test be performed in the future. 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.

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 decreasing and increasing trends. All trends noted were relatively low in magnitude when compared to average concentrations, therefore, no adjustments were made to any of the data sets.

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Prediction limits are constructed as recommended in the USEPA Unified guidance, and based on the following:

- Annual false positive rate of 10% (semi-annual sampling)
- 1-of-2 verification resample plan option – interwell prediction limits
- 1-of-3 verification resample plan option – intrawell prediction limits
- Constituents = 7 (Appendix III)
- # of Downgradient wells = 16

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

The following adjustments were made:

- Statistical analyses are required on wells and analytes containing 100% non-detects (EPA Unified Guidance, 2009, Chapter 6).
- When data contain <15% nondetects in the background, simple substitution of one-half the reporting limit 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 August 2017 at the Ash Pond was statistically analyzed in accordance with the PE - certified statistical methods described above.

Based on the statistical analysis included in Appendix B, SSIs of the prediction limit were identified. Summary tables identifying the SSIs are included in Appendix B.

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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.

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9.0 MONITORING PROGRAM STATUS

Plant Greene County Ash Pond is in detection monitoring. SSIs of Appendix III parameters have been identified. Pursuant to §257.94(e)(1), Alabama Power Company 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).

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10.0 CONCLUSIONS AND FUTURE ACTIONS

In accordance with §257.94(e)(1-2), APC will conduct an alternate source demonstration or initiate assessment monitoring program within 90 days. 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 July 2017. Groundwater sampling for the first detection monitoring event was performed in August 2017. Constituents listed in Appendix III were collected and analyzed for detection monitoring. APC will perform the following future actions:

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

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11.0 REFERENCES

ASTM Standard D5092, 2004(2010)e1, Standard Practice for Design and Installation of Groundwater Monitoring Wells, ASTM International, West Conshohocken, PA, DOI 10.1520/D5092-04R10E01, www.astm.org

Dejarnette, S.S., Crownover, J.E., 1987, Geohydrology and Susceptibility of Major Aquifers to Surface Contamination in Alabama; Area 6, USGS Water-Resources Investigations Report 87-4113.

McIntyre, M.R., Pashin, J.C., McKinney III, G.M., 2010, Report on Plant Geology prepared for SCS by the Geological Survey of Alabama.

Sapp, D.C., Emplaincourt, J., 1975, Physiographic Regions of Alabama, Geological Survey of Alabama, Map 168.

U.S. Environmental Protection Agency (EPA Waste Management Division, Office of Solid Waste, 1989. EPA 530/SW-89-031 Interim Final RCRA Investigation (RFI) Guidance, Volumes I and II.

U.S. Environmental Protection Agency (EPA), 2004, Evaluation of Sampling and Field-Filtration Methods for the Analysis of Trace Metals In Groundwater Project Summary, EPA/600/SR-94/119

USEPA. 2009. Statistical Analysis of Groundwater Monitoring Data at RCRA Facilities, Unified Guidance. Office of Resource Conservation and Recovery – Program Implementation and Information Division. March.

USEPA. 2014. National Functional Guidelines for Inorganic Superfund Data Review. Office of Superfund Remediation and Technology Innovation (OSRTI). August

USEPA. 2015. Federal Register. Volume 80. No. 74. Friday April 17, 2015. Part II. Environmental Protection Agency. *40 CFR Parts 257and 261. Hazardous and Solid Waste Management System; Disposal of Coal Combustion Residuals from Electric Utilities; Final Rule.* [EPA-HQ-RCRA–2009–0640; FRL–9919–44–OSWER]. RIN–2050–AE81. April.

USEPA, 1986 *RCRA Groundwater Monitoring Technical Enforcement Guidance Document*.

USEPA, 1993. *Subpart E, Groundwater Monitoring and Corrective Action*, in Chapter 5, *Solid Waste Disposal Facility Criteria Technical Manual*. EA530-R-93-017.

United States Geological Survey (USGS), 2005. Alabama Water Science Center, Water use by County in Alabama, Shelby County. URL: http://ga2.er.usgs.gov/alabama/wateruse-county.cfm?code=117. Accessed December, 2010.

United States Geological Survey (USGS), 1980a. Columbiana, Alabama Quadrangle, 7.5 Minute Series Topographic Map.

United States Geological Survey (USGS), 2010a. National Hydrography Dataset. URL: http://nhd.usgs.gov/data.html. Accessed December, 2010.

United States Geological Survey (USGS), 2010b. National Water Information System: Web Interface. URL: http://waterdata.usgs.gov/nwis. Accessed December, 2010.

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United States Geological Survey (USGS), 1980b. Wilsonville, Alabama Quadrangle, 7.5 Minute Series Topographic Map.

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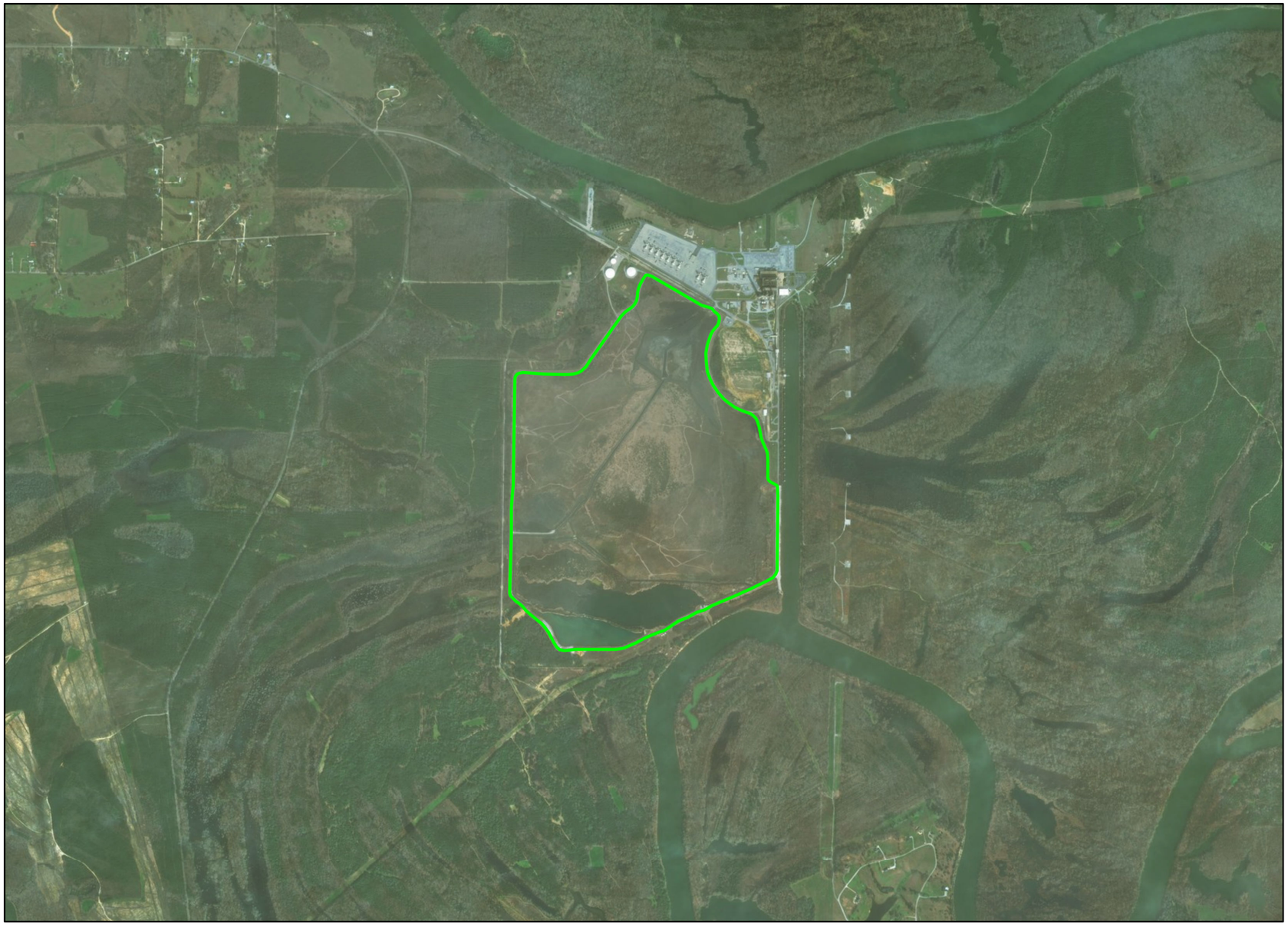
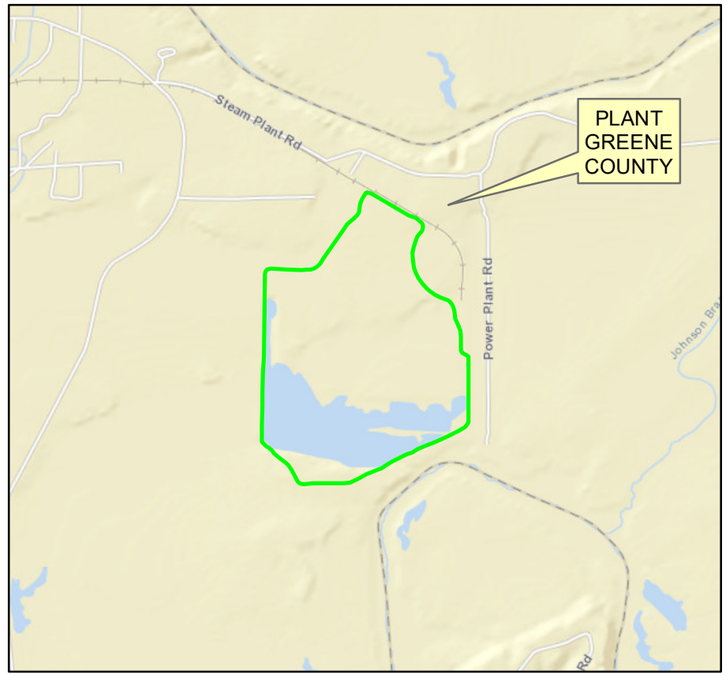
Figures





0 0.5 1 1.5 2 2.5 Miles

Legend

Ash Pond Boundary

N W E S

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

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Southern Company Generation
Earth Science and Environmental Engineering

FOR

Alabama Power Company

PLANT GREENE COUNTY
ASH POND
FIGURE 1
SITE LOCATION MAP

SCALE	PROJ I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
		ES4058-S1	1		

Legend

MAP_UNIT

- Alluvial, coastal, and low terrace deposits
- Demopolis Chalk
- Ash Pond Boundary

N

W E

S

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

Feet

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PLANT GREENE COUNTY
ASH POND
FIGURE 2
SITE GEOLOGIC MAP

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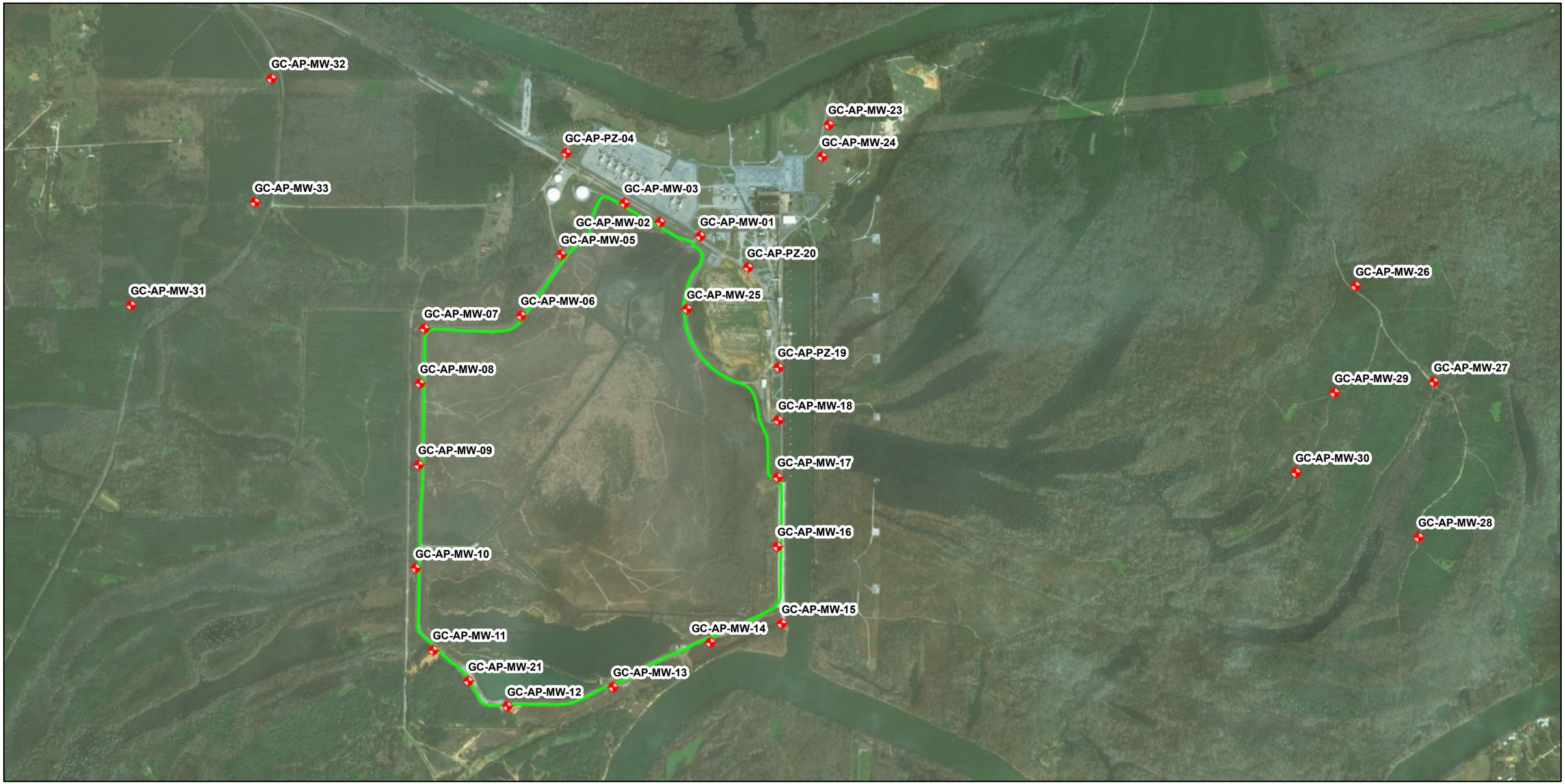
SCALE	PROJ I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
		ES4058-S2	1		



Legend

- Monitoring Well
- Ash Pond Boundary

N
W E
S

0 500 1,000 2,000 3,000 4,000 5,000 Feet

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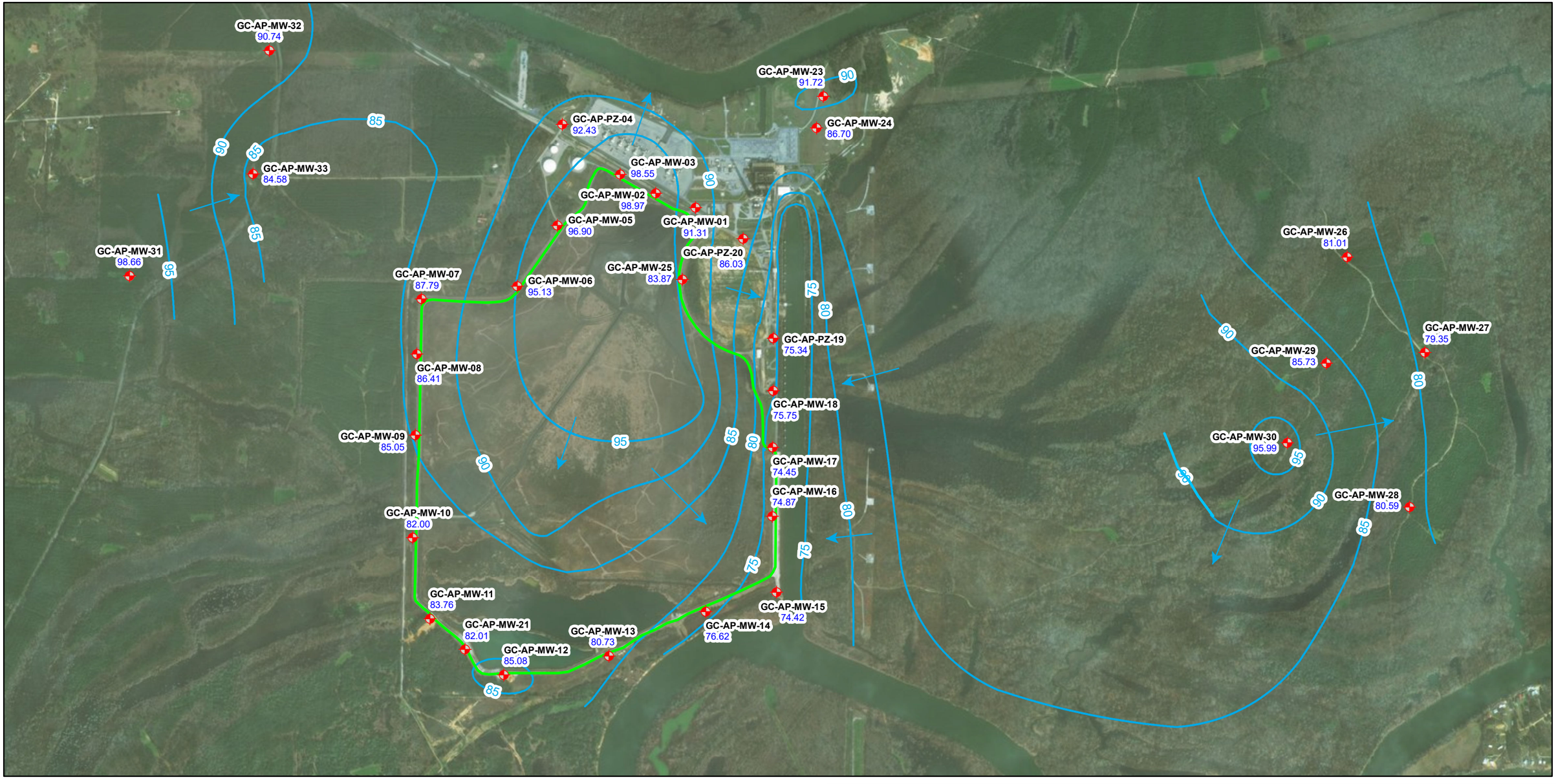
PLANT GREENE COUNTY
ASH POND
FIGURE 3
MONITORING WELL LOCATION MAP

SCALE	PROJ I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
		ES4058-S3	1		



Legend

- Monitoring Well — GC-AP-MW-1 (Well ID), 91.31 (Groundwater Elevation)
- Potentiometric Surface Contour (ft NAVD88)
- Approximate Groundwater Flow Direction
- Ash Pond Boundary

N W E S

0 500 1,000 2,000 3,000 4,000 5,000 Feet

NOTE: NAVD88 indicates North American Vertical Datum of 1988.

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PLANT GREENE COUNTY
ASH POND
FIGURE 4
POTENTIOMETRIC SURFACE MAP
AUGUST 28, 2017

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SCALE	PROJ I.D.	DRAWING NUMBER	SHEET	CONT'D	REV
		ES4058-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

Lab & Field SERVICES

Sample Group : WMWGREAP_1044

Project/Site : Greene County Ash Pond
Demopolis, AL 36732

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
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Case Narrative

Alabama Power

Lab & Field SERVICES

Anions

Greene County Ash Pond

WMWGREAP_1044

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

Sample ID	Chloride Batch ID	Fluoride Batch ID	Sulfate Batch ID	Project ID
AW23922	576470	576473	576476	WMWGREAP_1044
AW23923	576471	576474	576477	WMWGREAP_1044
AW23924	576471	576474	576477	WMWGREAP_1044
AW23925	576471	576474	576477	WMWGREAP_1044
AW23926	576471	576474	576477	WMWGREAP_1044
AW23927	576471	576474	576477	WMWGREAP_1044
AW23928	576471	576474	576477	WMWGREAP_1044
AW23929	576471	576474	576477	WMWGREAP_1044
AW23930	576471	576474	576477	WMWGREAP_1044
AW23931	576471	576474	576477	WMWGREAP_1044
AW23932	576471	576474	576477	WMWGREAP_1044

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 576476 presented a negative concentration at the MDL of 0.3, at -0.300 mg/L. The associated batch sample AW23922 presented a positive sulfate concentration above the RL but below 10x the absolute value of the sulfate blank, and is qualified as a quantitatively estimated concentration with the potential for low bias on the reported result.
    2. The blank for anion sulfate in batch 576477 presented a negative concentration greater than the MDL of 0.3, at -0.302 mg/L. Two batch samples (AW23923 and AW23926) presented positive sulfate concentrations above the RL but below 10x the absolute value of the sulfate blank, and one batch sample (AW23930) presented a positive sulfate value above the MDL and below 10x the absolute blank value; these respective samples are qualified as quantitatively estimated concentrations with the potential for low bias on the reported results.

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- 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 batch samples were analyzed without 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.

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Case Narrative

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Metals ICP

Greene County Ash Pond

WMWGREAP_1044

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

Sample ID	Batch ID	Project ID
AW23922	20161012	WMWGREAP_1044
AW23923	20161012	WMWGREAP_1044
AW23924	20161012	WMWGREAP_1044
AW23925	20161012	WMWGREAP_1044
AW23926	20161012	WMWGREAP_1044
AW23927	20161012	WMWGREAP_1044
AW23928	20161012	WMWGREAP_1044
AW23929	20161012	WMWGREAP_1044
AW23930	20161012	WMWGREAP_1044
AW23931	20161012	WMWGREAP_1044
AW23932	20161012A	WMWGREAP_1044

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.

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- 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.

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Case Narrative

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Metals ICPMS

Greene County Ash Pond

WMWGREAP_1044

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

Sample ID	Batch ID	Project ID
AW23922	577520	WMWGREAP_1044
AW23923	577521	WMWGREAP_1044
AW23924	577521	WMWGREAP_1044
AW23925	577521	WMWGREAP_1044
AW23926	577521	WMWGREAP_1044
AW23927	577521	WMWGREAP_1044
AW23928	577521	WMWGREAP_1044
AW23929	577521	WMWGREAP_1044
AW23930	577521	WMWGREAP_1044
AW23931	577521	WMWGREAP_1044
AW23932	577521	WMWGREAP_1044

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. Samples AW23928, AW23930, and AW23931 are 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.

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- 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.

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Mercury

Greene County Ash Pond

WMWGREAP_1044

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

Sample ID	Batch ID	Project ID
AW23922	576792	WMWGREAP_1044
AW23923	576792	WMWGREAP_1044
AW23924	576792	WMWGREAP_1044
AW23925	576792	WMWGREAP_1044
AW23926	576792	WMWGREAP_1044
AW23927	576793	WMWGREAP_1044
AW23928	576793	WMWGREAP_1044
AW23929	576793	WMWGREAP_1044
AW23930	576793	WMWGREAP_1044
AW23931	576793	WMWGREAP_1044
AW23932	576793	WMWGREAP_1044

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.

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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.

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Case Narrative

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TDS

Greene County Ash Pond

WMWGREAP_1044

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

Sample ID	Batch ID	Project ID
AW23922	576375	WMWGREAP_1044
AW23923	576375	WMWGREAP_1044
AW23924	576375	WMWGREAP_1044
AW23925	576375	WMWGREAP_1044
AW23926	576375	WMWGREAP_1044
AW23927	576375	WMWGREAP_1044
AW23928	576375	WMWGREAP_1044
AW23929	576375	WMWGREAP_1044
AW23930	576375	WMWGREAP_1044
AW23931	576375	WMWGREAP_1044
AW23932	576577	WMWGREAP_1044

4. All of the above samples were analyzed by Standard Method 2540C.
5. All samples were analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.
7. The reporting limit for TDS was incorrectly listed as 2.5mg/L. It has been corrected based on filter volume and project limits.

General Quality Control Procedures:

- A blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5 mg of the previous weight.
- A sample duplicate was analyzed with each batch. RPD/2 was less than 5%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- All samples were between 2.5 mg and 200 mg residue with the exception of AW23925 and AW23932 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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 19-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AW23922

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010		0.0125	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/12/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/12/2016	EPA 200.7		1	0.1	0.5		9.26	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/28/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/12/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	9/22/2016	SM 2540C		1		25		44.7	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		1	0.04	0.25		4.13	mg/L
* Fluoride, Total	SES	9/22/2016	EPA 300.0		1	0.01	0.3	J	0.023	mg/L
* Sulfate, Total	SES	9/22/2016	EPA 300.0		1	0.3	1		1.44	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

Reported: 7/19/2017
Version: 2.0

Alabama Power General Test Laboratory
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Corrected Copy

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 19-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AW23922

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23922	Antimony, Total	mg/L	0.000112	0.00132	0.10	0.0972	0.0976	0.0920	0.085 to 0.115	97.2	70 to 130	0.377	20
AW23922	Thallium, Total	mg/L	0.00000932	0.00044	0.10	0.102	0.103	0.0987	0.085 to 0.115	102	70 to 130	0.396	20
AW23922	Beryllium, Total	mg/L	0.00000989	0.00132	0.10	0.103	0.105	0.105	0.085 to 0.115	103	70 to 130	1.89	20
AW23926	Mercury, Total by CVAA	mg/L	0.0000749	0.0005	0.004	0.00390	0.00390	0.00388	0.0034 to 0.0046	97.5	70 to 130	0.0564	20
AW23922	Cobalt, Total	mg/L	-0.00000228	0.0044	0.10	0.101	0.101	0.100	0.085 to 0.115	101	70 to 130	0.0105	20
AW23922	Selenium, Total	mg/L	0.0000635	0.0044	0.10	0.0915	0.0915	0.106	0.085 to 0.115	91.5	70 to 130	0.00380	20
AW23922	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0943	0.0935	0.0981	0.085 to 0.115	94.3	70 to 130	0.832	20
AW23922	Barium, Total	mg/L	-0.00000547	0.0044	0.10	0.103	0.104	0.0915	0.085 to 0.115	90.1	70 to 130	1.30	20
AW23922	Chromium, Total	mg/L	0.0000238	0.0044	0.10	0.0993	0.0988	0.100	0.085 to 0.115	99.3	70 to 130	0.548	20
AW23922	Lead, Total	mg/L	0.00000917	0.0022	0.10	0.0992	0.100	0.0998	0.085 to 0.115	99.2	70 to 130	0.994	20
AW23931	Calcium, Total	mg/L	-0.0322	0.22	5.00	10.6	10.6	4.87	4.25 to 5.75	93.3	70 to 130	0.00	20
AW23922	Cadmium, Total	mg/L	-0.00000148	0.00044	0.10	0.0962	0.0963	0.0990	0.085 to 0.115	96.2	70 to 130	0.114	20
AW23922	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.103	0.104	0.0975	0.085 to 0.115	103	70 to 130	0.719	20
AW23931	Boron, Total	mg/L	0.00341	0.044	1.00	0.936	0.925	0.937	0.85 to 1.15	93.6	70 to 130	1.18	20
AW23931	Lithium, Total	mg/L	0.000148	0.022	0.20	0.210	0.206	0.206	0.17 to 0.23	105	70 to 130	1.92	20

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Expiration: June 30, 2018

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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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 19-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AW23922

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23922	Sulfate, Total	mg/L	-0.30	1.0	20.00	20.8	1.44	18.8	18 to 22	96.8	80 to 120	0.00	20
AW23931	Solids, Dissolved	mg/L	-1.00	25			56.7	48.0	40 to 60			2.83	5
AW23922	Chloride, Total	mg/L	0.00	0.25	10.00	13.8	4.13	9.95	9 to 11	96.7	80 to 120	0.00	20
AW23922	Fluoride, Total	mg/L	0.00	0.3	2.00	1.79	0.023	1.89	1.8 to 2.2	88.4	80 to 120	0.00	20

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Certificate Of Analysis

Alabama Power

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To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 19-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-32 Dup

Laboratory ID Number: AW23923

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010		0.0126	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/12/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/12/2016	EPA 200.7		1	0.1	0.5		9.21	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/28/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/12/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	9/22/2016	SM 2540C		1		25		51.3	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		1	0.04	0.25		4.13	mg/L
* Fluoride, Total	SES	9/22/2016	EPA 300.0		1	0.01	0.3	J	0.023	mg/L
* Sulfate, Total	SES	9/22/2016	EPA 300.0		1	0.3	1		1.43	mg/L

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Reported: 7/19/2017
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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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 19-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-32 Dup

Laboratory ID Number: AW23923

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23932	Chromium, Total	mg/L	0.0000238	0.0044	0.10	0.101	0.101	0.100	0.085 to 0.115	101	70 to 130	0.0286	20
AW23932	Cobalt, Total	mg/L	-0.00000228	0.0044	0.10	0.102	0.102	0.100	0.085 to 0.115	102	70 to 130	0.0361	20
AW23932	Barium, Total	mg/L	-0.00000547	0.0044	0.10	0.0941	0.0944	0.0915	0.085 to 0.115	94.1	70 to 130	0.387	20
AW23926	Mercury, Total by CVAA	mg/L	0.0000749	0.0005	0.004	0.00390	0.00390	0.00388	0.0034 to 0.0046	97.5	70 to 130	0.0564	20
AW23932	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0955	0.0953	0.0981	0.085 to 0.115	95.5	70 to 130	0.243	20
AW23931	Calcium, Total	mg/L	-0.0322	0.22	5.00	10.6	10.6	4.87	4.25 to 5.75	93.3	70 to 130	0.00	20
AW23932	Antimony, Total	mg/L	0.000112	0.00132	0.10	0.0985	0.0988	0.0920	0.085 to 0.115	98.5	70 to 130	0.304	20
AW23932	Selenium, Total	mg/L	0.0000635	0.0044	0.10	0.0937	0.0928	0.106	0.085 to 0.115	93.7	70 to 130	0.980	20
AW23932	Cadmium, Total	mg/L	-0.00000148	0.00044	0.10	0.0991	0.0989	0.0990	0.085 to 0.115	99.1	70 to 130	0.226	20
AW23932	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.105	0.105	0.0975	0.085 to 0.115	105	70 to 130	0.00205	20
AW23932	Thallium, Total	mg/L	0.00000932	0.00044	0.10	0.103	0.104	0.0987	0.085 to 0.115	103	70 to 130	1.20	20
AW23932	Beryllium, Total	mg/L	0.00000989	0.00132	0.10	0.104	0.104	0.105	0.085 to 0.115	104	70 to 130	0.0706	20
AW23932	Lead, Total	mg/L	0.00000917	0.0022	0.10	0.101	0.101	0.0998	0.085 to 0.115	101	70 to 130	0.200	20
AW23931	Boron, Total	mg/L	0.00341	0.044	1.00	0.936	0.925	0.937	0.85 to 1.15	93.6	70 to 130	1.18	20
AW23931	Lithium, Total	mg/L	0.000148	0.022	0.20	0.210	0.206	0.206	0.17 to 0.23	105	70 to 130	1.92	20

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Expiration: June 30, 2018

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Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Reported: 7/19/2017
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Calera, AL 35040
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 19-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-32 Dup

Laboratory ID Number: AW23923

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23932	Chloride, Total	mg/L	0.00	0.25	10.00	9.87	0.00	9.96	9 to 11	98.7	80 to 120	0	20
AW23931	Solids, Dissolved	mg/L	-1.00	25			56.7	48.0	40 to 60			2.83	5
AW23932	Fluoride, Total	mg/L	0.00	0.3	2.00	1.94	0.00	1.96	1.8 to 2.2	97.0	80 to 120	0	20
AW23932	Sulfate, Total	mg/L	-0.302	1.0	20.00	19.8	-0.296	19.0	18 to 22	99.0	80 to 120	0	20

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CC:

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 19-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AW23924

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010		0.0215	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/12/2016	EPA 200.7		1	0.02	0.1	J	0.0225	mg/L
* Calcium, Total	HRG	10/12/2016	EPA 200.7		1	0.1	0.5		3.01	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	J	0.00539	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/28/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/12/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	9/22/2016	SM 2540C		1		25		80.0	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		1	0.04	0.25		4.45	mg/L
* Fluoride, Total	SES	9/22/2016	EPA 300.0		1	0.01	0.3	J	0.018	mg/L
* Sulfate, Total	SES	9/22/2016	EPA 300.0		1	0.3	1		11.2	mg/L

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Reported: 7/19/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 19-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AW23924

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23932	Chromium, Total	mg/L	0.0000238	0.0044	0.10	0.101	0.101	0.100	0.085 to 0.115	101	70 to 130	0.0286	20
AW23932	Cobalt, Total	mg/L	-0.00000228	0.0044	0.10	0.102	0.102	0.100	0.085 to 0.115	102	70 to 130	0.0361	20
AW23932	Barium, Total	mg/L	-0.00000547	0.0044	0.10	0.0941	0.0944	0.0915	0.085 to 0.115	94.1	70 to 130	0.387	20
AW23926	Mercury, Total by CVAA	mg/L	0.0000749	0.0005	0.004	0.00390	0.00390	0.00388	0.0034 to 0.0046	97.5	70 to 130	0.0564	20
AW23932	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0955	0.0953	0.0981	0.085 to 0.115	95.5	70 to 130	0.243	20
AW23931	Calcium, Total	mg/L	-0.0322	0.22	5.00	10.6	10.6	4.87	4.25 to 5.75	93.3	70 to 130	0.00	20
AW23932	Antimony, Total	mg/L	0.000112	0.00132	0.10	0.0985	0.0988	0.0920	0.085 to 0.115	98.5	70 to 130	0.304	20
AW23932	Selenium, Total	mg/L	0.0000635	0.0044	0.10	0.0937	0.0928	0.106	0.085 to 0.115	93.7	70 to 130	0.980	20
AW23932	Cadmium, Total	mg/L	-0.00000148	0.00044	0.10	0.0991	0.0989	0.0990	0.085 to 0.115	99.1	70 to 130	0.226	20
AW23932	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.105	0.105	0.0975	0.085 to 0.115	105	70 to 130	0.00205	20
AW23932	Thallium, Total	mg/L	0.00000932	0.00044	0.10	0.103	0.104	0.0987	0.085 to 0.115	103	70 to 130	1.20	20
AW23931	Boron, Total	mg/L	0.00341	0.044	1.00	0.936	0.925	0.937	0.85 to 1.15	93.6	70 to 130	1.18	20
AW23931	Lithium, Total	mg/L	0.000148	0.022	0.20	0.210	0.206	0.206	0.17 to 0.23	105	70 to 130	1.92	20
AW23932	Beryllium, Total	mg/L	0.00000989	0.00132	0.10	0.104	0.104	0.105	0.085 to 0.115	104	70 to 130	0.0706	20
AW23932	Lead, Total	mg/L	0.00000917	0.0022	0.10	0.101	0.101	0.0998	0.085 to 0.115	101	70 to 130	0.200	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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 19-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AW23924

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23932	Chloride, Total	mg/L	0.00	0.25	10.00	9.87	0.00	9.96	9 to 11	98.7	80 to 120	0	20
AW23931	Solids, Dissolved	mg/L	-1.00	25			56.7	48.0	40 to 60			2.83	5
AW23932	Fluoride, Total	mg/L	0.00	0.3	2.00	1.94	0.00	1.96	1.8 to 2.2	97.0	80 to 120	0	20
AW23932	Sulfate, Total	mg/L	-0.302	1.0	20.00	19.8	-0.296	19.0	18 to 22	99.0	80 to 120	0	20

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CC:

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Version: 2.0

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 19-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW23925

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/12/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/12/2016	EPA 200.7		1	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/28/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/12/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	9/22/2016	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	9/22/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	9/22/2016	EPA 300.0		1	0.3	1	U	Not Detected	mg/L

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Corrected Copy

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 19-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW23925

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23932	Chromium, Total	mg/L	0.0000238	0.0044	0.10	0.101	0.101	0.100	0.085 to 0.115	101	70 to 130	0.0286	20
AW23932	Cobalt, Total	mg/L	-0.00000228	0.0044	0.10	0.102	0.102	0.100	0.085 to 0.115	102	70 to 130	0.0361	20
AW23932	Barium, Total	mg/L	-0.00000547	0.0044	0.10	0.0941	0.0944	0.0915	0.085 to 0.115	94.1	70 to 130	0.387	20
AW23926	Mercury, Total by CVAA	mg/L	0.0000749	0.0005	0.004	0.00390	0.00390	0.00388	0.0034 to 0.0046	97.5	70 to 130	0.0564	20
AW23932	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0955	0.0953	0.0981	0.085 to 0.115	95.5	70 to 130	0.243	20
AW23931	Calcium, Total	mg/L	-0.0322	0.22	5.00	10.6	10.6	4.87	4.25 to 5.75	93.3	70 to 130	0.00	20
AW23932	Antimony, Total	mg/L	0.000112	0.00132	0.10	0.0985	0.0988	0.0920	0.085 to 0.115	98.5	70 to 130	0.304	20
AW23932	Selenium, Total	mg/L	0.0000635	0.0044	0.10	0.0937	0.0928	0.106	0.085 to 0.115	93.7	70 to 130	0.980	20
AW23932	Beryllium, Total	mg/L	0.00000989	0.00132	0.10	0.104	0.104	0.105	0.085 to 0.115	104	70 to 130	0.0706	20
AW23932	Lead, Total	mg/L	0.00000917	0.0022	0.10	0.101	0.101	0.0998	0.085 to 0.115	101	70 to 130	0.200	20
AW23931	Boron, Total	mg/L	0.00341	0.044	1.00	0.936	0.925	0.937	0.85 to 1.15	93.6	70 to 130	1.18	20
AW23931	Lithium, Total	mg/L	0.000148	0.022	0.20	0.210	0.206	0.206	0.17 to 0.23	105	70 to 130	1.92	20
AW23932	Cadmium, Total	mg/L	-0.00000148	0.00044	0.10	0.0991	0.0989	0.0990	0.085 to 0.115	99.1	70 to 130	0.226	20
AW23932	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.105	0.105	0.0975	0.085 to 0.115	105	70 to 130	0.00205	20
AW23932	Thallium, Total	mg/L	0.00000932	0.00044	0.10	0.103	0.104	0.0987	0.085 to 0.115	103	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

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Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 19-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW23925

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23932	Chloride, Total	mg/L	0.00	0.25	10.00	9.87	0.00	9.96	9 to 11	98.7	80 to 120	0	20
AW23931	Solids, Dissolved	mg/L	-1.00	25			56.7	48.0	40 to 60			2.83	5
AW23932	Fluoride, Total	mg/L	0.00	0.3	2.00	1.94	0.00	1.96	1.8 to 2.2	97.0	80 to 120	0	20
AW23932	Sulfate, Total	mg/L	-0.302	1.0	20.00	19.8	-0.296	19.0	18 to 22	99.0	80 to 120	0	20

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 19-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AW23926

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	J	0.00121	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010		0.0202	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/12/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/12/2016	EPA 200.7		1	0.1	0.5		34.5	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	J	0.00242	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/28/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/12/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	9/22/2016	SM 2540C		1		25		121	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		1	0.04	0.25		5.29	mg/L
* Fluoride, Total	SES	9/22/2016	EPA 300.0		1	0.01	0.3	J	0.045	mg/L
* Sulfate, Total	SES	9/22/2016	EPA 300.0		1	0.3	1		2.06	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 19-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AW23926

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23932	Chromium, Total	mg/L	0.0000238	0.0044	0.10	0.101	0.101	0.100	0.085 to 0.115	101	70 to 130	0.0286	20
AW23932	Cobalt, Total	mg/L	-0.00000228	0.0044	0.10	0.102	0.102	0.100	0.085 to 0.115	102	70 to 130	0.0361	20
AW23932	Barium, Total	mg/L	-0.00000547	0.0044	0.10	0.0941	0.0944	0.0915	0.085 to 0.115	94.1	70 to 130	0.387	20
AW23932	Beryllium, Total	mg/L	0.00000989	0.00132	0.10	0.104	0.104	0.105	0.085 to 0.115	104	70 to 130	0.0706	20
AW23932	Lead, Total	mg/L	0.00000917	0.0022	0.10	0.101	0.101	0.0998	0.085 to 0.115	101	70 to 130	0.200	20
AW23926	Mercury, Total by CVAA	mg/L	0.0000749	0.0005	0.004	0.00390	0.00390	0.00388	0.0034 to 0.0046	97.5	70 to 130	0.0564	20
AW23932	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0955	0.0953	0.0981	0.085 to 0.115	95.5	70 to 130	0.243	20
AW23931	Calcium, Total	mg/L	-0.0322	0.22	5.00	10.6	10.6	4.87	4.25 to 5.75	93.3	70 to 130	0.00	20
AW23932	Antimony, Total	mg/L	0.000112	0.00132	0.10	0.0985	0.0988	0.0920	0.085 to 0.115	98.5	70 to 130	0.304	20
AW23932	Selenium, Total	mg/L	0.0000635	0.0044	0.10	0.0937	0.0928	0.106	0.085 to 0.115	93.7	70 to 130	0.980	20
AW23932	Cadmium, Total	mg/L	-0.00000148	0.00044	0.10	0.0991	0.0989	0.0990	0.085 to 0.115	99.1	70 to 130	0.226	20
AW23932	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.105	0.105	0.0975	0.085 to 0.115	105	70 to 130	0.00205	20
AW23932	Thallium, Total	mg/L	0.00000932	0.00044	0.10	0.103	0.104	0.0987	0.085 to 0.115	103	70 to 130	1.20	20
AW23931	Boron, Total	mg/L	0.00341	0.044	1.00	0.936	0.925	0.937	0.85 to 1.15	93.6	70 to 130	1.18	20
AW23931	Lithium, Total	mg/L	0.000148	0.022	0.20	0.210	0.206	0.206	0.17 to 0.23	105	70 to 130	1.92	20

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Reported: 7/19/2017
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Batch QC Summary

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 19-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AW23926

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23932	Chloride, Total	mg/L	0.00	0.25	10.00	9.87	0.00	9.96	9 to 11	98.7	80 to 120	0	20
AW23931	Solids, Dissolved	mg/L	-1.00	25			56.7	48.0	40 to 60			2.83	5
AW23932	Fluoride, Total	mg/L	0.00	0.3	2.00	1.94	0.00	1.96	1.8 to 2.2	97.0	80 to 120	0	20
AW23932	Sulfate, Total	mg/L	-0.302	1.0	20.00	19.8	-0.296	19.0	18 to 22	99.0	80 to 120	0	20

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 20-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AW23927

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010		0.0348	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/12/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/12/2016	EPA 200.7		1	0.1	0.5		1.11	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	J	0.00260	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/28/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/12/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	9/22/2016	SM 2540C		1		25		26.7	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		1	0.04	0.25		2.51	mg/L
* Fluoride, Total	SES	9/22/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	9/22/2016	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

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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

Reported: 7/19/2017
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

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Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AW23927

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23932	Chromium, Total	mg/L	0.0000238	0.0044	0.10	0.101	0.101	0.100	0.085 to 0.115	101	70 to 130	0.0286	20
AW23932	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0955	0.0953	0.0981	0.085 to 0.115	95.5	70 to 130	0.243	20
AW23932	Barium, Total	mg/L	-0.00000547	0.0044	0.10	0.0941	0.0944	0.0915	0.085 to 0.115	94.1	70 to 130	0.387	20
AW23932	Cadmium, Total	mg/L	-0.00000148	0.00044	0.10	0.0991	0.0989	0.0990	0.085 to 0.115	99.1	70 to 130	0.226	20
AW23932	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.105	0.105	0.0975	0.085 to 0.115	105	70 to 130	0.00205	20
AW23932	Thallium, Total	mg/L	0.00000932	0.00044	0.10	0.103	0.104	0.0987	0.085 to 0.115	103	70 to 130	1.20	20
AW23932	Cobalt, Total	mg/L	-0.00000228	0.0044	0.10	0.102	0.102	0.100	0.085 to 0.115	102	70 to 130	0.0361	20
AW24073	Mercury, Total by CVAA	mg/L	0.0000782	0.0005	0.004	0.00387	0.00385	0.00379	0.0034 to 0.0046	96.8	70 to 130	0.487	20
AW23932	Beryllium, Total	mg/L	0.00000989	0.00132	0.10	0.104	0.104	0.105	0.085 to 0.115	104	70 to 130	0.0706	20
AW23932	Lead, Total	mg/L	0.00000917	0.0022	0.10	0.101	0.101	0.0998	0.085 to 0.115	101	70 to 130	0.200	20
AW23931	Boron, Total	mg/L	0.00341	0.044	1.00	0.936	0.925	0.937	0.85 to 1.15	93.6	70 to 130	1.18	20
AW23931	Lithium, Total	mg/L	0.000148	0.022	0.20	0.210	0.206	0.206	0.17 to 0.23	105	70 to 130	1.92	20
AW23931	Calcium, Total	mg/L	-0.0322	0.22	5.00	10.6	10.6	4.87	4.25 to 5.75	93.3	70 to 130	0.00	20
AW23932	Antimony, Total	mg/L	0.000112	0.00132	0.10	0.0985	0.0988	0.0920	0.085 to 0.115	98.5	70 to 130	0.304	20
AW23932	Selenium, Total	mg/L	0.0000635	0.0044	0.10	0.0937	0.0928	0.106	0.085 to 0.115	93.7	70 to 130	0.980	20

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 20-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AW23927

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23931	Solids, Dissolved	mg/L	-1.00	25			56.7	48.0	40 to 60			2.83	5
AW23932	Chloride, Total	mg/L	0.00	0.25	10.00	9.87	0.00	9.96	9 to 11	98.7	80 to 120	0	20
AW23932	Fluoride, Total	mg/L	0.00	0.3	2.00	1.94	0.00	1.96	1.8 to 2.2	97.0	80 to 120	0	20
AW23932	Sulfate, Total	mg/L	-0.302	1.0	20.00	19.8	-0.296	19.0	18 to 22	99.0	80 to 120	0	20

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To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 20-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AW23928

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	J	0.00155	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010		0.0698	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/12/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/12/2016	EPA 200.7		1	0.1	0.5		1.22	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010		0.0120	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/28/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/12/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	9/22/2016	SM 2540C		1		25		42.7	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		1	0.04	0.25		2.12	mg/L
* Fluoride, Total	SES	9/22/2016	EPA 300.0		1	0.01	0.3	J	0.015	mg/L
* Sulfate, Total	SES	9/22/2016	EPA 300.0		1	0.3	1	U	Not Detected	mg/L

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Batch QC Summary

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John Pugh

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Sample Date: 20-Sep-16
Customer ID:
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Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AW23928

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23932	Chromium, Total	mg/L	0.0000238	0.0044	0.10	0.101	0.101	0.100	0.085 to 0.115	101	70 to 130	0.0286	20
AW23932	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0955	0.0953	0.0981	0.085 to 0.115	95.5	70 to 130	0.243	20
AW23932	Barium, Total	mg/L	-0.00000547	0.0044	0.10	0.0941	0.0944	0.0915	0.085 to 0.115	94.1	70 to 130	0.387	20
AW23932	Cobalt, Total	mg/L	-0.00000228	0.0044	0.10	0.102	0.102	0.100	0.085 to 0.115	102	70 to 130	0.0361	20
AW24073	Mercury, Total by CVAA	mg/L	0.0000782	0.0005	0.004	0.00387	0.00385	0.00379	0.0034 to 0.0046	96.8	70 to 130	0.487	20
AW23931	Calcium, Total	mg/L	-0.0322	0.22	5.00	10.6	10.6	4.87	4.25 to 5.75	93.3	70 to 130	0.00	20
AW23932	Antimony, Total	mg/L	0.000112	0.00132	0.10	0.0985	0.0988	0.0920	0.085 to 0.115	98.5	70 to 130	0.304	20
AW23932	Selenium, Total	mg/L	0.0000635	0.0044	0.10	0.0937	0.0928	0.106	0.085 to 0.115	93.7	70 to 130	0.980	20
AW23932	Beryllium, Total	mg/L	0.00000989	0.00132	0.10	0.104	0.104	0.105	0.085 to 0.115	104	70 to 130	0.0706	20
AW23932	Lead, Total	mg/L	0.00000917	0.0022	0.10	0.101	0.101	0.0998	0.085 to 0.115	101	70 to 130	0.200	20
AW23932	Cadmium, Total	mg/L	-0.00000148	0.00044	0.10	0.0991	0.0989	0.0990	0.085 to 0.115	99.1	70 to 130	0.226	20
AW23932	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.105	0.105	0.0975	0.085 to 0.115	105	70 to 130	0.00205	20
AW23932	Thallium, Total	mg/L	0.00000932	0.00044	0.10	0.103	0.104	0.0987	0.085 to 0.115	103	70 to 130	1.20	20
AW23931	Boron, Total	mg/L	0.00341	0.044	1.00	0.936	0.925	0.937	0.85 to 1.15	93.6	70 to 130	1.18	20
AW23931	Lithium, Total	mg/L	0.000148	0.022	0.20	0.210	0.206	0.206	0.17 to 0.23	105	70 to 130	1.92	20

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Batch QC Summary

Alabama Power

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To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 20-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AW23928

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23931	Solids, Dissolved	mg/L	-1.00	25			56.7	48.0	40 to 60			2.83	5
AW23932	Chloride, Total	mg/L	0.00	0.25	10.00	9.87	0.00	9.96	9 to 11	98.7	80 to 120	0	20
AW23932	Fluoride, Total	mg/L	0.00	0.3	2.00	1.94	0.00	1.96	1.8 to 2.2	97.0	80 to 120	0	20
AW23932	Sulfate, Total	mg/L	-0.302	1.0	20.00	19.8	-0.296	19.0	18 to 22	99.0	80 to 120	0	20

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Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AW23929

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010		0.341	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/12/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/12/2016	EPA 200.7		1	0.1	0.5		2.43	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	J	0.000857	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	J	0.00466	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/28/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/12/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	9/22/2016	SM 2540C		1		25		44.0	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		1	0.04	0.25		1.56	mg/L
* Fluoride, Total	SES	9/22/2016	EPA 300.0		1	0.01	0.3	J	0.021	mg/L
* Sulfate, Total	SES	9/22/2016	EPA 300.0		1	0.3	1		8.30	mg/L

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John Pugh

Customer Account: WMWGREAP
Sample Date: 20-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AW23929

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23932	Chromium, Total	mg/L	0.0000238	0.0044	0.10	0.101	0.101	0.100	0.085 to 0.115	101	70 to 130	0.0286	20
AW23932	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0955	0.0953	0.0981	0.085 to 0.115	95.5	70 to 130	0.243	20
AW23932	Barium, Total	mg/L	-0.00000547	0.0044	0.10	0.0941	0.0944	0.0915	0.085 to 0.115	94.1	70 to 130	0.387	20
AW23932	Cobalt, Total	mg/L	-0.00000228	0.0044	0.10	0.102	0.102	0.100	0.085 to 0.115	102	70 to 130	0.0361	20
AW24073	Mercury, Total by CVAA	mg/L	0.0000782	0.0005	0.004	0.00387	0.00385	0.00379	0.0034 to 0.0046	96.8	70 to 130	0.487	20
AW23931	Calcium, Total	mg/L	-0.0322	0.22	5.00	10.6	10.6	4.87	4.25 to 5.75	93.3	70 to 130	0.00	20
AW23932	Antimony, Total	mg/L	0.000112	0.00132	0.10	0.0985	0.0988	0.0920	0.085 to 0.115	98.5	70 to 130	0.304	20
AW23932	Selenium, Total	mg/L	0.0000635	0.0044	0.10	0.0937	0.0928	0.106	0.085 to 0.115	93.7	70 to 130	0.980	20
AW23932	Beryllium, Total	mg/L	0.00000989	0.00132	0.10	0.104	0.104	0.105	0.085 to 0.115	104	70 to 130	0.0706	20
AW23932	Lead, Total	mg/L	0.00000917	0.0022	0.10	0.101	0.101	0.0998	0.085 to 0.115	101	70 to 130	0.200	20
AW23932	Cadmium, Total	mg/L	-0.00000148	0.00044	0.10	0.0991	0.0989	0.0990	0.085 to 0.115	99.1	70 to 130	0.226	20
AW23932	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.105	0.105	0.0975	0.085 to 0.115	105	70 to 130	0.00205	20
AW23932	Thallium, Total	mg/L	0.00000932	0.00044	0.10	0.103	0.104	0.0987	0.085 to 0.115	103	70 to 130	1.20	20
AW23931	Boron, Total	mg/L	0.00341	0.044	1.00	0.936	0.925	0.937	0.85 to 1.15	93.6	70 to 130	1.18	20
AW23931	Lithium, Total	mg/L	0.000148	0.022	0.20	0.210	0.206	0.206	0.17 to 0.23	105	70 to 130	1.92	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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 20-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AW23929

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23932	Chloride, Total	mg/L	0.00	0.25	10.00	9.87	0.00	9.96	9 to 11	98.7	80 to 120	0	20
AW23931	Solids, Dissolved	mg/L	-1.00	25			56.7	48.0	40 to 60			2.83	5
AW23932	Fluoride, Total	mg/L	0.00	0.3	2.00	1.94	0.00	1.96	1.8 to 2.2	97.0	80 to 120	0	20
AW23932	Sulfate, Total	mg/L	-0.302	1.0	20.00	19.8	-0.296	19.0	18 to 22	99.0	80 to 120	0	20

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Expiration: June 30, 2018

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CC:

Reported: 7/19/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 20-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AW23930

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010		0.0679	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/12/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/12/2016	EPA 200.7		1	0.1	0.5		0.771	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	J	0.00232	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/28/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/12/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	9/22/2016	SM 2540C		1		25		25.3	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		1	0.04	0.25		1.61	mg/L
* Fluoride, Total	SES	9/22/2016	EPA 300.0		1	0.01	0.3	J	0.010	mg/L
* Sulfate, Total	SES	9/22/2016	EPA 300.0		1	0.3	1	J	0.478	mg/L

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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.

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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 20-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AW23930

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23932	Chromium, Total	mg/L	0.0000238	0.0044	0.10	0.101	0.101	0.100	0.085 to 0.115	101	70 to 130	0.0286	20
AW23932	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0955	0.0953	0.0981	0.085 to 0.115	95.5	70 to 130	0.243	20
AW23932	Barium, Total	mg/L	-0.00000547	0.0044	0.10	0.0941	0.0944	0.0915	0.085 to 0.115	94.1	70 to 130	0.387	20
AW23931	Calcium, Total	mg/L	-0.0322	0.22	5.00	10.6	10.6	4.87	4.25 to 5.75	93.3	70 to 130	0.00	20
AW23932	Antimony, Total	mg/L	0.000112	0.00132	0.10	0.0985	0.0988	0.0920	0.085 to 0.115	98.5	70 to 130	0.304	20
AW23932	Selenium, Total	mg/L	0.0000635	0.0044	0.10	0.0937	0.0928	0.106	0.085 to 0.115	93.7	70 to 130	0.980	20
AW23932	Cobalt, Total	mg/L	-0.00000228	0.0044	0.10	0.102	0.102	0.100	0.085 to 0.115	102	70 to 130	0.0361	20
AW24073	Mercury, Total by CVAA	mg/L	0.0000782	0.0005	0.004	0.00387	0.00385	0.00379	0.0034 to 0.0046	96.8	70 to 130	0.487	20
AW23932	Beryllium, Total	mg/L	0.00000989	0.00132	0.10	0.104	0.104	0.105	0.085 to 0.115	104	70 to 130	0.0706	20
AW23932	Lead, Total	mg/L	0.00000917	0.0022	0.10	0.101	0.101	0.0998	0.085 to 0.115	101	70 to 130	0.200	20
AW23932	Cadmium, Total	mg/L	-0.00000148	0.00044	0.10	0.0991	0.0989	0.0990	0.085 to 0.115	99.1	70 to 130	0.226	20
AW23932	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.105	0.105	0.0975	0.085 to 0.115	105	70 to 130	0.00205	20
AW23932	Thallium, Total	mg/L	0.00000932	0.00044	0.10	0.103	0.104	0.0987	0.085 to 0.115	103	70 to 130	1.20	20
AW23931	Boron, Total	mg/L	0.00341	0.044	1.00	0.936	0.925	0.937	0.85 to 1.15	93.6	70 to 130	1.18	20
AW23931	Lithium, Total	mg/L	0.000148	0.022	0.20	0.210	0.206	0.206	0.17 to 0.23	105	70 to 130	1.92	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. The result for Cd has been correctly changed to Not Detected. SGC 3/20/17

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 20-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AW23930

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23932	Chloride, Total	mg/L	0.00	0.25	10.00	9.87	0.00	9.96	9 to 11	98.7	80 to 120	0	20
AW23931	Solids, Dissolved	mg/L	-1.00	25			56.7	48.0	40 to 60			2.83	5
AW23932	Fluoride, Total	mg/L	0.00	0.3	2.00	1.94	0.00	1.96	1.8 to 2.2	97.0	80 to 120	0	20
AW23932	Sulfate, Total	mg/L	-0.302	1.0	20.00	19.8	-0.296	19.0	18 to 22	99.0	80 to 120	0	20

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CC:

Reported: 7/19/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 20-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AW23931

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	J	0.00283	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010		0.0436	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	J	0.00155	mg/L
* Boron, Total	HRG	10/12/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/12/2016	EPA 200.7		1	0.1	0.5		5.95	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010		0.0122	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/28/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/12/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	9/22/2016	SM 2540C		1		25		60.0	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		1	0.04	0.25		2.54	mg/L
* Fluoride, Total	SES	9/22/2016	EPA 300.0		1	0.01	0.3	J	0.126	mg/L
* Sulfate, Total	SES	9/22/2016	EPA 300.0		1	0.3	1		14.9	mg/L

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Expiration: June 30, 2018

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Cadmium MDL was increased from 0.0001 to 0.0002. The result for Cd has been correctly changed to Not Detected. SGC 3/20/17

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 20-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AW23931

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23932	Chromium, Total	mg/L	0.0000238	0.0044	0.10	0.101	0.101	0.100	0.085 to 0.115	101	70 to 130	0.0286	20
AW23932	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0955	0.0953	0.0981	0.085 to 0.115	95.5	70 to 130	0.243	20
AW23932	Barium, Total	mg/L	-0.00000547	0.0044	0.10	0.0941	0.0944	0.0915	0.085 to 0.115	94.1	70 to 130	0.387	20
AW23932	Beryllium, Total	mg/L	0.00000989	0.00132	0.10	0.104	0.104	0.105	0.085 to 0.115	104	70 to 130	0.0706	20
AW23932	Lead, Total	mg/L	0.00000917	0.0022	0.10	0.101	0.101	0.0998	0.085 to 0.115	101	70 to 130	0.200	20
AW23931	Boron, Total	mg/L	0.00341	0.044	1.00	0.936	0.925	0.937	0.85 to 1.15	93.6	70 to 130	1.18	20
AW23931	Lithium, Total	mg/L	0.000148	0.022	0.20	0.210	0.206	0.206	0.17 to 0.23	105	70 to 130	1.92	20
AW23932	Cobalt, Total	mg/L	-0.00000228	0.0044	0.10	0.102	0.102	0.100	0.085 to 0.115	102	70 to 130	0.0361	20
AW24073	Mercury, Total by CVAA	mg/L	0.0000782	0.0005	0.004	0.00387	0.00385	0.00379	0.0034 to 0.0046	96.8	70 to 130	0.487	20
AW23932	Cadmium, Total	mg/L	-0.00000148	0.00044	0.10	0.0991	0.0989	0.0990	0.085 to 0.115	99.1	70 to 130	0.226	20
AW23932	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.105	0.105	0.0975	0.085 to 0.115	105	70 to 130	0.00205	20
AW23932	Thallium, Total	mg/L	0.00000932	0.00044	0.10	0.103	0.104	0.0987	0.085 to 0.115	103	70 to 130	1.20	20
AW23931	Calcium, Total	mg/L	-0.0322	0.22	5.00	10.6	10.6	4.87	4.25 to 5.75	93.3	70 to 130	0.00	20
AW23932	Antimony, Total	mg/L	0.000112	0.00132	0.10	0.0985	0.0988	0.0920	0.085 to 0.115	98.5	70 to 130	0.304	20
AW23932	Selenium, Total	mg/L	0.0000635	0.0044	0.10	0.0937	0.0928	0.106	0.085 to 0.115	93.7	70 to 130	0.980	20

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Laboratory certification ID: E571114
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Expiration: June 30, 2018

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Reported: 7/19/2017
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

Alabama Power

Corrected Copy

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 20-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AW23931

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23932	Chloride, Total	mg/L	0.00	0.25	10.00	9.87	0.00	9.96	9 to 11	98.7	80 to 120	0	20
AW23931	Solids, Dissolved	mg/L	-1.00	25			56.7	48.0	40 to 60			2.83	5
AW23932	Fluoride, Total	mg/L	0.00	0.3	2.00	1.94	0.00	1.96	1.8 to 2.2	97.0	80 to 120	0	20
AW23932	Sulfate, Total	mg/L	-0.302	1.0	20.00	19.8	-0.296	19.0	18 to 22	99.0	80 to 120	0	20

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Expiration: June 30, 2018

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CC:

Reported: 7/19/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 20-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW23932

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	12/6/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Beryllium, Total	JHK	10/5/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/12/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/12/2016	EPA 200.7		1	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	JHK	10/5/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	9/28/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/12/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	10/5/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	10/5/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	10/5/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	9/26/2016	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	9/22/2016	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	9/22/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	9/22/2016	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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 20-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW23932

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW23932	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0955	0.0953	0.0981	0.085 to 0.115	95.5	70 to 130	0.243	20
AW23932	Cobalt, Total	mg/L	-0.00000228	0.0044	0.10	0.102	0.102	0.100	0.085 to 0.115	102	70 to 130	0.0361	20
AW24073	Mercury, Total by CVAA	mg/L	0.0000782	0.0005	0.004	0.00387	0.00385	0.00379	0.0034 to 0.0046	96.8	70 to 130	0.487	20
AW23932	Beryllium, Total	mg/L	0.00000989	0.00132	0.10	0.104	0.104	0.105	0.085 to 0.115	104	70 to 130	0.0706	20
AW23932	Lead, Total	mg/L	0.00000917	0.0022	0.10	0.101	0.101	0.0998	0.085 to 0.115	101	70 to 130	0.200	20
AW23932	Barium, Total	mg/L	-0.00000547	0.0044	0.10	0.0941	0.0944	0.0915	0.085 to 0.115	94.1	70 to 130	0.387	20
AW24079	Lithium, Total	mg/L	0.000213	0.022	0.20	0.215	0.213	0.203	0.17 to 0.23	108	70 to 130	0.935	20
AW23932	Chromium, Total	mg/L	0.0000238	0.0044	0.10	0.101	0.101	0.100	0.085 to 0.115	101	70 to 130	0.0286	20
AW24079	Calcium, Total	mg/L	-0.0320	0.22	5.00	16.5	16.4	4.79	4.25 to 5.75	95.1	70 to 130	0.608	20
AW23932	Cadmium, Total	mg/L	-0.00000148	0.00044	0.10	0.0991	0.0989	0.0990	0.085 to 0.115	99.1	70 to 130	0.226	20
AW23932	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.105	0.105	0.0975	0.085 to 0.115	105	70 to 130	0.00205	20
AW23932	Thallium, Total	mg/L	0.00000932	0.00044	0.10	0.103	0.104	0.0987	0.085 to 0.115	103	70 to 130	1.20	20
AW24079	Boron, Total	mg/L	0.00230	0.044	1.00	0.952	0.950	0.923	0.85 to 1.15	95.2	70 to 130	0.210	20
AW23932	Antimony, Total	mg/L	0.000112	0.00132	0.10	0.0985	0.0988	0.0920	0.085 to 0.115	98.5	70 to 130	0.304	20
AW23932	Selenium, Total	mg/L	0.0000635	0.0044	0.10	0.0937	0.0928	0.106	0.085 to 0.115	93.7	70 to 130	0.980	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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 20-Sep-16
Customer ID:
Delivery Date: 21-Sep-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW23932

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW24077	Solids, Dissolved	mg/L	2.00	25			370	50.0	40 to 60			0.00	5
AW23932	Chloride, Total	mg/L	0.00	0.25	10.00	9.87	0.00	9.96	9 to 11	98.7	80 to 120	0	20
AW23932	Fluoride, Total	mg/L	0.00	0.3	2.00	1.94	0.00	1.96	1.8 to 2.2	97.0	80 to 120	0	20
AW23932	Sulfate, Total	mg/L	-0.302	1.0	20.00	19.8	-0.296	19.0	18 to 22	99.0	80 to 120	0	20

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

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

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

Reported: 7/19/2017
Version: 2.0

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

Alabama Power

Lab & Field SERVICES

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	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Greene Ash Pond

Analysis Requested	Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle
Comments	Radium Duplicate MW-30

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-32	09/19/2016	12:34	3	Groundwater		AW23922
MW-32DUP	09/19/2016	12:34	3	Sample Duplicate		AW23923
MW-33	09/19/2016	13:28	3	Groundwater		AW23924
FB-1	09/19/2016	13:34	3	Field Blank		AW23925
MW-31	09/19/2016	14:35	3	Groundwater		AW23926
MW-30	09/20/2016	09:40	5	Groundwater		AW23927
MW-29	09/20/2016	10:29	3	Groundwater		AW23928
MW-28	09/20/2016	11:10	3	Groundwater		AW23929
MW-27	09/20/2016	11:50	3	Groundwater		AW23930
MW-26	09/20/2016	12:58	3	Groundwater		AW23931
EB-1	09/20/2016	13:08	3	Equipment Blank		AW23932

Relinquished By	Received By	Date/Time
Anthony Goggins	Sarah Copeland Digitally signed by Sarah Copeland Date: 2016.09.21 09:27:00 -05'00'	09/21/2016 09:27

SmarTroll ID	5151-26193-1-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	5160-26211-1-1	Cooler Temp	1.2 degrees C
		Thermometer ID	5408-27568-2-2
		pH Strip ID	5521-28276-20-20

4.1

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 400-127850-1
TestAmerica SDG: Greene County Ash Pond (2)
Client Project/Site: CCR Plant Greene

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

Attn: Sarah Copeland

Cheyenne Whitmire

Authorized for release by:
10/26/2016 3:16:09 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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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Job ID: 400-127850-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-127850-1

RAD

Method(s) PrecSep_0: Radium-226 Prep Batch 160-272827: The following samples were prepared at a reduced aliquot due to limited volume: AW23922 MW-32 (400-127850-1), AW23923 MW-32 DUP (400-127850-2), AW23924 MW-33 (400-127850-3), AW23925 FB-1 (400-127850-4), AW23926 MW-31 (400-127850-5), AW23927 MW-30 (400-127850-6), AW23927 MW-30 (400-127850-6[MS]), AW23927 MW-30 (400-127850-6[MSD]), AW23928 MW-29 (400-127850-7), AW23929 MW-28 (400-127850-8), AW23930 MW-27 (400-127850-9), AW23931 MW-26 (400-127850-10) and AW23932 EB-1 (400-127850-11).

Method(s) PrecSep-21: Radium-226 Prep Batch 160-272801: The following samples were prepared at a reduced aliquot due to limited volume: AW23922 MW-32 (400-127850-1), AW23923 MW-32 DUP (400-127850-2), AW23924 MW-33 (400-127850-3), AW23925 FB-1 (400-127850-4), AW23926 MW-31 (400-127850-5), AW23927 MW-30 (400-127850-6), AW23927 MW-30 (400-127850-6[MS]), AW23927 MW-30 (400-127850-6[MSD]), AW23928 MW-29 (400-127850-7), AW23929 MW-28 (400-127850-8), AW23930 MW-27 (400-127850-9), AW23931 MW-26 (400-127850-10) and AW23932 EB-1 (400-127850-11).

Method Summary

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

TestAmerica Job ID: 400-127850-1
SDG: Greene County 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 Greene

TestAmerica Job ID: 400-127850-1
SDG: Greene County Ash Pond (2)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-127850-1	AW23922 MW-32	Water	09/19/16 12:34	09/29/16 15:42
400-127850-2	AW23923 MW-32 DUP	Water	09/19/16 12:34	09/29/16 15:42
400-127850-3	AW23924 MW-33	Water	09/19/16 13:28	09/29/16 15:42
400-127850-4	AW23925 FB-1	Water	09/19/16 13:34	09/29/16 15:42
400-127850-5	AW23926 MW-31	Water	09/19/16 14:35	09/29/16 15:42
400-127850-6	AW23927 MW-30	Water	09/20/16 09:40	09/29/16 15:42
400-127850-7	AW23928 MW-29	Water	09/20/16 10:29	09/29/16 15:42
400-127850-8	AW23929 MW-28	Water	09/20/16 11:10	09/29/16 15:42
400-127850-9	AW23930 MW-27	Water	09/20/16 11:50	09/29/16 15:42
400-127850-10	AW23931 MW-26	Water	09/20/16 12:58	09/29/16 15:42
400-127850-11	AW23932 EB-1	Water	09/20/16 13:09	09/29/16 15:42

Client Sample ID: AW23922 MW-32

Date Collected: 09/19/16 12:34
Date Received: 09/29/16 15:42

Lab Sample ID: 400-127850-1

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	0.0937	U	0.0807	0.0812	1.00	0.124	pCi/L	10/03/16 14:16	10/25/16 07:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.3*		*40 - 110*	*10/03/16 14:16*	*10/25/16 07:04*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.148	U	0.339	0.339	1.00	0.578	pCi/L	10/03/16 17:56	10/20/16 17:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.3*		*40 - 110*	*10/03/16 17:56*	*10/20/16 17:54*	*1*
Y Carrier	*87.5*		*40 - 110*	*10/03/16 17:56*	*10/20/16 17:54*	*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	0.242	U	0.348	0.349	5.00	0.578	pCi/L		10/26/16 09:01	1

Client Sample ID: AW23923 MW-32 DUP

Date Collected: 09/19/16 12:34
Date Received: 09/29/16 15:42

Lab Sample ID: 400-127850-2

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	0.200		0.106	0.108	1.00	0.148	pCi/L	10/03/16 14:16	10/25/16 07:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.4*		*40 - 110*	*10/03/16 14:16*	*10/25/16 07:05*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.259	U	0.331	0.332	1.00	0.549	pCi/L	10/03/16 17:56	10/20/16 17:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.4*		*40 - 110*	*10/03/16 17:56*	*10/20/16 17:54*	*1*
Y Carrier	*82.6*		*40 - 110*	*10/03/16 17:56*	*10/20/16 17:54*	*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	0.459	U	0.347	0.349	5.00	0.549	pCi/L		10/26/16 09:01	1

Client Sample ID: AW23924 MW-33

Date Collected: 09/19/16 13:28
Date Received: 09/29/16 15:42

Lab Sample ID: 400-127850-3

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	0.103	U	0.0876	0.0881	1.00	0.135	pCi/L	10/03/16 14:16	10/25/16 07:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.6*		*40 - 110*	*10/03/16 14:16*	*10/25/16 07:05*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.135	U	0.296	0.296	1.00	0.506	pCi/L	10/03/16 17:56	10/20/16 17:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.6*		*40 - 110*	*10/03/16 17:56*	*10/20/16 17:54*	*1*
Y Carrier	*86.4*		*40 - 110*	*10/03/16 17:56*	*10/20/16 17:54*	*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	0.238	U	0.309	0.309	5.00	0.506	pCi/L		10/26/16 09:01	1

Client Sample ID: AW23925 FB-1
Date Collected: 09/19/16 13:34
Date Received: 09/29/16 15:42

Lab Sample ID: 400-127850-4
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	0.0279	U	0.0672	0.0672	1.00	0.121	pCi/L	10/03/16 14:16	10/25/16 07:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.3*		*40 - 110*	*10/03/16 14:16*	*10/25/16 07:05*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.170	U	0.277	0.278	1.00	0.468	pCi/L	10/03/16 17:56	10/20/16 17:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.3*		*40 - 110*	*10/03/16 17:56*	*10/20/16 17:54*	*1*
Y Carrier	*85.6*		*40 - 110*	*10/03/16 17:56*	*10/20/16 17:54*	*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	0.198	U	0.285	0.286	5.00	0.468	pCi/L		10/26/16 09:01	1

Client Sample ID: AW23926 MW-31

Date Collected: 09/19/16 14:35
Date Received: 09/29/16 15:42

Lab Sample ID: 400-127850-5

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	0.220		0.0975	0.0995	1.00	0.119	pCi/L	10/03/16 14:16	10/25/16 07:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.9*		*40 - 110*	*10/03/16 14:16*	*10/25/16 07:06*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.341	U	0.347	0.348	1.00	0.565	pCi/L	10/03/16 17:56	10/20/16 17:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.9*		*40 - 110*	*10/03/16 17:56*	*10/20/16 17:54*	*1*
Y Carrier	*82.2*		*40 - 110*	*10/03/16 17:56*	*10/20/16 17:54*	*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	0.561	U	0.360	0.362	5.00	0.565	pCi/L		10/26/16 09:01	1

Client Sample ID: AW23927 MW-30

Date Collected: 09/20/16 09:40
Date Received: 09/29/16 15:42

Lab Sample ID: 400-127850-6

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	**0.136**		0.0851	0.0860	1.00	0.118	pCi/L	10/03/16 14:16	10/25/16 07:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.6*		*40 - 110*	*10/03/16 14:16*	*10/25/16 07:06*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.374	U	0.317	0.319	1.00	0.506	pCi/L	10/03/16 17:56	10/20/16 18:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.6*		*40 - 110*	*10/03/16 17:56*	*10/20/16 18:09*	*1*
Y Carrier	*85.6*		*40 - 110*	*10/03/16 17:56*	*10/20/16 18:09*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.510**		0.328	0.330	5.00	0.506	pCi/L		10/26/16 09:01	1

Client Sample ID: AW23928 MW-29

Date Collected: 09/20/16 10:29
Date Received: 09/29/16 15:42

Lab Sample ID: 400-127850-7

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	**0.329**		0.107	0.111	1.00	0.105	pCi/L	10/03/16 14:16	10/25/16 07:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.4*		*40 - 110*	*10/03/16 14:16*	*10/25/16 07:06*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.417	U	0.300	0.302	1.00	0.465	pCi/L	10/03/16 17:56	10/20/16 18:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.4*		*40 - 110*	*10/03/16 17:56*	*10/20/16 18:09*	*1*
Y Carrier	*83.4*		*40 - 110*	*10/03/16 17:56*	*10/20/16 18:09*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.746**		0.319	0.322	5.00	0.465	pCi/L		10/26/16 09:01	1

Client Sample ID: AW23929 MW-28

Date Collected: 09/20/16 11:10
Date Received: 09/29/16 15:42

Lab Sample ID: 400-127850-8

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	0.669		0.143	0.155	1.00	0.104	pCi/L	10/03/16 14:16	10/25/16 10:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.0*		*40 - 110*	*10/03/16 14:16*	*10/25/16 10:26*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.570		0.312	0.316	1.00	0.464	pCi/L	10/03/16 17:56	10/20/16 18:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.0*		*40 - 110*	*10/03/16 17:56*	*10/20/16 18:09*	*1*
Y Carrier	*83.7*		*40 - 110*	*10/03/16 17:56*	*10/20/16 18:09*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.24		0.343	0.352	5.00	0.464	pCi/L		10/26/16 09:01	1

Client Sample ID: AW23930 MW-27

Date Collected: 09/20/16 11:50
Date Received: 09/29/16 15:42

Lab Sample ID: 400-127850-9

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	0.232		0.102	0.104	1.00	0.123	pCi/L	10/03/16 14:16	10/25/16 10:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*40 - 110*	*10/03/16 14:16*	*10/25/16 10:26*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.562		0.338	0.342	1.00	0.515	pCi/L	10/03/16 17:56	10/20/16 18:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*40 - 110*	*10/03/16 17:56*	*10/20/16 18:09*	*1*
Y Carrier	*88.2*		*40 - 110*	*10/03/16 17:56*	*10/20/16 18:09*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.794		0.353	0.358	5.00	0.515	pCi/L		10/26/16 09:01	1

Client Sample ID: AW23931 MW-26

Date Collected: 09/20/16 12:58
Date Received: 09/29/16 15:42

Lab Sample ID: 400-127850-10

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	**0.187**		0.0930	0.0945	1.00	0.118	pCi/L	10/03/16 14:16	10/25/16 10:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.6*		*40 - 110*	*10/03/16 14:16*	*10/25/16 10:26*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.395	U	0.293	0.296	1.00	0.460	pCi/L	10/03/16 17:56	10/20/16 18:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.6*		*40 - 110*	*10/03/16 17:56*	*10/20/16 18:09*	*1*
Y Carrier	*86.4*		*40 - 110*	*10/03/16 17:56*	*10/20/16 18:09*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.582**		0.308	0.310	5.00	0.460	pCi/L		10/26/16 09:01	1

Client Sample ID: AW23932 EB-1

Date Collected: 09/20/16 13:09
Date Received: 09/29/16 15:42

Lab Sample ID: 400-127850-11

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	0.0566	U	0.0703	0.0705	1.00	0.116	pCi/L	10/03/16 14:16	10/25/16 10:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.3*		*40 - 110*	*10/03/16 14:16*	*10/25/16 10:26*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.376	U	0.308	0.310	1.00	0.490	pCi/L	10/03/16 17:56	10/20/16 18:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.3*		*40 - 110*	*10/03/16 17:56*	*10/20/16 18:10*	*1*
Y Carrier	*87.9*		*40 - 110*	*10/03/16 17:56*	*10/20/16 18:10*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.432	U	0.316	0.318	5.00	0.490	pCi/L		10/26/16 09:01	1

Qualifiers

Rad

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

Glossary

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

Lab Chronicle

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

TestAmerica Job ID: 400-127850-1
SDG: Greene County Ash Pond (2)

Client Sample ID: AW23922 MW-32
Date Collected: 09/19/16 12:34
Date Received: 09/29/16 15:42

Lab Sample ID: 400-127850-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272801	10/03/16 14:16	CMC	TAL SL
Total/NA	Analysis	9315		1	275933	10/25/16 07:04	ALS	TAL SL
Total/NA	Prep	PrecSep_0			272827	10/03/16 17:56	CMC	TAL SL
Total/NA	Analysis	9320		1	275241	10/20/16 17:54	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	276028	10/26/16 09:01	RTM	TAL SL

Client Sample ID: AW23923 MW-32 DUP
Date Collected: 09/19/16 12:34
Date Received: 09/29/16 15:42

Lab Sample ID: 400-127850-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272801	10/03/16 14:16	CMC	TAL SL
Total/NA	Analysis	9315		1	275935	10/25/16 07:05	ALS	TAL SL
Total/NA	Prep	PrecSep_0			272827	10/03/16 17:56	CMC	TAL SL
Total/NA	Analysis	9320		1	275241	10/20/16 17:54	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	276028	10/26/16 09:01	RTM	TAL SL

Client Sample ID: AW23924 MW-33
Date Collected: 09/19/16 13:28
Date Received: 09/29/16 15:42

Lab Sample ID: 400-127850-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272801	10/03/16 14:16	CMC	TAL SL
Total/NA	Analysis	9315		1	275935	10/25/16 07:05	ALS	TAL SL
Total/NA	Prep	PrecSep_0			272827	10/03/16 17:56	CMC	TAL SL
Total/NA	Analysis	9320		1	275241	10/20/16 17:54	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	276028	10/26/16 09:01	RTM	TAL SL

Client Sample ID: AW23925 FB-1
Date Collected: 09/19/16 13:34
Date Received: 09/29/16 15:42

Lab Sample ID: 400-127850-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272801	10/03/16 14:16	CMC	TAL SL
Total/NA	Analysis	9315		1	275935	10/25/16 07:05	ALS	TAL SL
Total/NA	Prep	PrecSep_0			272827	10/03/16 17:56	CMC	TAL SL
Total/NA	Analysis	9320		1	275241	10/20/16 17:54	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	276028	10/26/16 09:01	RTM	TAL SL

Client Sample ID: AW23926 MW-31

Lab Sample ID: 400-127850-5

Date Collected: 09/19/16 14:35

Matrix: Water

Date Received: 09/29/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272801	10/03/16 14:16	CMC	TAL SL
Total/NA	Analysis	9315		1	275935	10/25/16 07:06	ALS	TAL SL
Total/NA	Prep	PrecSep_0			272827	10/03/16 17:56	CMC	TAL SL
Total/NA	Analysis	9320		1	275241	10/20/16 17:54	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	276028	10/26/16 09:01	RTM	TAL SL

Client Sample ID: AW23927 MW-30

Lab Sample ID: 400-127850-6

Date Collected: 09/20/16 09:40

Matrix: Water

Date Received: 09/29/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272801	10/03/16 14:16	CMC	TAL SL
Total/NA	Analysis	9315		1	275935	10/25/16 07:06	ALS	TAL SL
Total/NA	Prep	PrecSep_0			272827	10/03/16 17:56	CMC	TAL SL
Total/NA	Analysis	9320		1	275247	10/20/16 18:09	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	276028	10/26/16 09:01	RTM	TAL SL

Client Sample ID: AW23928 MW-29

Lab Sample ID: 400-127850-7

Date Collected: 09/20/16 10:29

Matrix: Water

Date Received: 09/29/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272801	10/03/16 14:16	CMC	TAL SL
Total/NA	Analysis	9315		1	275935	10/25/16 07:06	ALS	TAL SL
Total/NA	Prep	PrecSep_0			272827	10/03/16 17:56	CMC	TAL SL
Total/NA	Analysis	9320		1	275247	10/20/16 18:09	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	276028	10/26/16 09:01	RTM	TAL SL

Client Sample ID: AW23929 MW-28

Lab Sample ID: 400-127850-8

Date Collected: 09/20/16 11:10

Matrix: Water

Date Received: 09/29/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272801	10/03/16 14:16	CMC	TAL SL
Total/NA	Analysis	9315		1	275929	10/25/16 10:26	RTM	TAL SL
Total/NA	Prep	PrecSep_0			272827	10/03/16 17:56	CMC	TAL SL
Total/NA	Analysis	9320		1	275247	10/20/16 18:09	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	276028	10/26/16 09:01	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-127850-1
SDG: Greene County Ash Pond (2)

Client Sample ID: AW23930 MW-27

Lab Sample ID: 400-127850-9
Matrix: Water
Date Collected: 09/20/16 11:50
Date Received: 09/29/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272801	10/03/16 14:16	CMC	TAL SL
Total/NA	Analysis	9315		1	275929	10/25/16 10:26	RTM	TAL SL
Total/NA	Prep	PrecSep_0			272827	10/03/16 17:56	CMC	TAL SL
Total/NA	Analysis	9320		1	275247	10/20/16 18:09	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	276028	10/26/16 09:01	RTM	TAL SL

Client Sample ID: AW23931 MW-26

Lab Sample ID: 400-127850-10
Matrix: Water
Date Collected: 09/20/16 12:58
Date Received: 09/29/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272801	10/03/16 14:16	CMC	TAL SL
Total/NA	Analysis	9315		1	275929	10/25/16 10:26	RTM	TAL SL
Total/NA	Prep	PrecSep_0			272827	10/03/16 17:56	CMC	TAL SL
Total/NA	Analysis	9320		1	275247	10/20/16 18:09	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	276028	10/26/16 09:01	RTM	TAL SL

Client Sample ID: AW23932 EB-1

Lab Sample ID: 400-127850-11
Matrix: Water
Date Collected: 09/20/16 13:09
Date Received: 09/29/16 15:42

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			272801	10/03/16 14:16	CMC	TAL SL
Total/NA	Analysis	9315		1	275929	10/25/16 10:26	RTM	TAL SL
Total/NA	Prep	PrecSep_0			272827	10/03/16 17:56	CMC	TAL SL
Total/NA	Analysis	9320		1	275247	10/20/16 18:10	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	276028	10/26/16 09:01	RTM	TAL SL

Laboratory References:

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

Rad

Prep Batch: 272801

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127850-1	AW23922 MW-32	Total/NA	Water	PrecSep-21	
400-127850-2	AW23923 MW-32 DUP	Total/NA	Water	PrecSep-21	
400-127850-3	AW23924 MW-33	Total/NA	Water	PrecSep-21	
400-127850-4	AW23925 FB-1	Total/NA	Water	PrecSep-21	
400-127850-5	AW23926 MW-31	Total/NA	Water	PrecSep-21	
400-127850-6	AW23927 MW-30	Total/NA	Water	PrecSep-21	
400-127850-7	AW23928 MW-29	Total/NA	Water	PrecSep-21	
400-127850-8	AW23929 MW-28	Total/NA	Water	PrecSep-21	
400-127850-9	AW23930 MW-27	Total/NA	Water	PrecSep-21	
400-127850-10	AW23931 MW-26	Total/NA	Water	PrecSep-21	
400-127850-11	AW23932 EB-1	Total/NA	Water	PrecSep-21	
MB 160-272801/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-272801/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-127850-6 MS	AW23927 MW-30	Total/NA	Water	PrecSep-21	
400-127850-6 MSD	AW23927 MW-30	Total/NA	Water	PrecSep-21	

Prep Batch: 272827

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127850-1	AW23922 MW-32	Total/NA	Water	PrecSep_0	
400-127850-2	AW23923 MW-32 DUP	Total/NA	Water	PrecSep_0	
400-127850-3	AW23924 MW-33	Total/NA	Water	PrecSep_0	
400-127850-4	AW23925 FB-1	Total/NA	Water	PrecSep_0	
400-127850-5	AW23926 MW-31	Total/NA	Water	PrecSep_0	
400-127850-6	AW23927 MW-30	Total/NA	Water	PrecSep_0	
400-127850-7	AW23928 MW-29	Total/NA	Water	PrecSep_0	
400-127850-8	AW23929 MW-28	Total/NA	Water	PrecSep_0	
400-127850-9	AW23930 MW-27	Total/NA	Water	PrecSep_0	
400-127850-10	AW23931 MW-26	Total/NA	Water	PrecSep_0	
400-127850-11	AW23932 EB-1	Total/NA	Water	PrecSep_0	
MB 160-272827/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-272827/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-127850-6 MS	AW23927 MW-30	Total/NA	Water	PrecSep_0	
400-127850-6 MSD	AW23927 MW-30	Total/NA	Water	PrecSep_0	

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-272801/1-A
Matrix: Water
Analysis Batch: 275929

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272801

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1334		0.0700	0.0710	1.00	0.0905	pCi/L	10/03/16 14:16	10/25/16 06:59	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.9*		*40 - 110*	*10/03/16 14:16*	*10/25/16 06:59*	*1*

Lab Sample ID: LCS 160-272801/2-A
Matrix: Water
Analysis Batch: 275929

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272801

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.1	13.26		1.31	1.00	0.0882	pCi/L	119	68 - 137		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*91.5*		*40 - 110*

Lab Sample ID: 400-127850-6 MS
Matrix: Water
Analysis Batch: 275935

Client Sample ID: AW23927 MW-30
Prep Type: Total/NA
Prep Batch: 272801

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.136		14.8	17.53		1.73	1.00	0.106	pCi/L	117	75 - 138		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*95.2*		*40 - 110*

Lab Sample ID: 400-127850-6 MSD
Matrix: Water
Analysis Batch: 275929

Client Sample ID: AW23927 MW-30
Prep Type: Total/NA
Prep Batch: 272801

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	0.136		14.8	17.33		1.71	1.00	0.115	pCi/L	116	75 - 138	0.06	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*98.0*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-272827/1-A
Matrix: Water
Analysis Batch: 275241

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 272827

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2118	U	0.268	0.269	1.00	0.445	pCi/L	10/03/16 17:56	10/20/16 17:52	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.9*		*40 - 110*	*10/03/16 17:56*	*10/20/16 17:52*	*1*
Y Carrier	*85.2*		*40 - 110*	*10/03/16 17:56*	*10/20/16 17:52*	*1*

Lab Sample ID: LCS 160-272827/2-A
Matrix: Water
Analysis Batch: 275241

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 272827

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			14.4	15.18		1.62	1.00	0.405	pCi/L	105	56 - 140		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*91.5*		*40 - 110*
Y Carrier	*86.7*		*40 - 110*

Lab Sample ID: 400-127850-6 MS
Matrix: Water
Analysis Batch: 275247

Client Sample ID: AW23927 MW-30
Prep Type: Total/NA
Prep Batch: 272827

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	0.374	U	19.2	18.61		2.00	1.00	0.441	pCi/L	97	45 - 150		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*95.2*		*40 - 110*
Y Carrier	*88.6*		*40 - 110*

Lab Sample ID: 400-127850-6 MSD
Matrix: Water
Analysis Batch: 275247

Client Sample ID: AW23927 MW-30
Prep Type: Total/NA
Prep Batch: 272827

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	0.374	U	19.2	19.91		2.12	1.00	0.430	pCi/L	104	45 - 150	0.31	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*98.0*		*40 - 110*
Y Carrier	*84.9*		*40 - 110*

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Anthony Goggins	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 1
Company: Alabama Power General Test Laboratory				Job #: 400-127850

Address: 744 County Rd 87 GSC #8	Due Date Requested:
City: Calera	TAT Requested (days): Routine
State, Zip: AL, 35040	PO #:
Phone: 205-664-6121(Tel)	WO #:
Email: sgcopela@southernco.com	Project #: 40007143
Project Name: CCR	SSOW#:
Site: Greene County Ash Pond (2)	

Analysis Requested

400-127850 COC

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
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)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D		
AW23922	9/19/16	1234	G	Water			X	1	MW-32
AW23923	9/19/16	1234	G	Water			X	1	MW-32 Dup (Sample Duplicate)
AW23924	9/19/16	1328	G	Water			X	1	MW-33
AW23925	9/19/16	1334	G	Water			X	1	FB-1 (Field Blank)
AW23926	9/19/16	1435	G	Water			X	1	MW-31
AW23927	9/20/16	0940	G	Water		X	X	3	MW-30
AW23928	9/20/16	1029	G	Water			X	1	MW-29
AW23929	9/20/16	1110	G	Water			X	1	MW-28
AW23930	9/20/16	1150	G	Water			X	1	MW-27
AW23931	9/20/16	1258	G	Water			X	1	MW-26
AW23932	9/20/16	1309	G	Water			X	1	EB-1 (Equipment Blank)

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Sarah Copeland	Date/Time: 09/28/2016; 0845	Company APC	Received by:	Date/Time: 9-29-16 10:15	Company TSA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 25.4°C ; 25.0°C IR-6

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-127850-1
SDG Number: Greene County Ash Pond (2)

Login Number: 127850
List Number: 1
Creator: Siddoway, Benjamin

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	N/A	
Cooler Temperature is recorded.	True	25.4°C, 25.0°C IR-6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

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

TestAmerica Job ID: 400-127850-1
SDG: Greene County Ash Pond (2)

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16 *
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	MO00054	06-30-17
California	State Program	9	2886	03-31-18
Connecticut	State Program	1	PH-0241	03-31-17
Florida	NELAP	4	E87689	06-30-17
Illinois	NELAP	5	003757	11-30-16 *
Iowa	State Program	7	373	12-01-16 *
Kansas	NELAP	7	E-10236	10-31-17
Kentucky (DW)	State Program	4	90125	12-31-16
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-17
Louisiana (DW)	NELAP	6	LA160008	12-31-16
Maryland	State Program	3	310	09-30-17
Missouri	State Program	7	780	06-30-17
Nevada	State Program	9	MO000542016-1	07-31-17
New Jersey	NELAP	2	MO002	06-30-17
New York	NELAP	2	11616	03-31-17
North Dakota	State Program	8	R207	06-30-17
NRC	NRC		24-24817-01	12-31-22

* Certification renewal pending - certification considered valid.

Certification Summary

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

TestAmerica Job ID: 400-127850-1
SDG: Greene County Ash Pond (2)

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Oklahoma	State Program	6	9997	08-31-17
Pennsylvania	NELAP	3	68-00540	02-28-17 *
South Carolina	State Program	4	85002001	06-30-17
Texas	NELAP	6	T104704193-16-10	07-31-17
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

Lab & Field SERVICES

Sample Group : WMWGREAP_14

Project/Site : Greene County Ash Pond
Demopolis, AL 36732

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
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Case Narrative

Alabama Power

Lab & Field SERVICES

Anions

Greene County Ash Pond

WMWGREAP_14

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

Sample ID	Chloride Batch ID	Sulfate Batch ID	Fluoride Batch ID	Project ID
AW03820	564656	564662	564659	WMWGREAP_14
AW03822	564656	564662	564659	WMWGREAP_14
AW03823	564656	564662	564659	WMWGREAP_14
AW03824	564656	564662	564659	WMWGREAP_14
AW03825	564656	564662	564659	WMWGREAP_14
AW03826	564656	564662	564659	WMWGREAP_14
AW03827	564656	564662	564659	WMWGREAP_14
AW03828	564656	564662	564659	WMWGREAP_14
AW03829	564656	564662	564659	WMWGREAP_14
AW04059	564657	564663	564660	WMWGREAP_14
AW04060	564657	564663	564660	WMWGREAP_14
AW04061	564657	564663	564660	WMWGREAP_14
AW04063	564657	564663	564660	WMWGREAP_14
AW04064	564657	564663	564660	WMWGREAP_14
AW04065	564657	564663	564660	WMWGREAP_14
AW04066	564657	564663	564660	WMWGREAP_14
AW04067	564657	564663	564660	WMWGREAP_14
AW04068	564657	564663	564660	WMWGREAP_14
AW04069	564658	564664	564661	WMWGREAP_14
AW04070	564658	564664	564661	WMWGREAP_14
AW04071	564658	564664	564661	WMWGREAP_14
AW04072	564658	564664	564661	WMWGREAP_14
AW04073	564658	564664	564661	WMWGREAP_14
AW04074	564658	564664	564661	WMWGREAP_14
AW04075	564658	564664	564661	WMWGREAP_14
AW04076	564658	564664	564661	WMWGREAP_14
AW04077	564658	564664	564661	WMWGREAP_14
AW04078	564658	564664	564661	WMWGREAP_14

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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. It is noted that since the sulfate anion concentration in the initial batch QC sample (AW03829& AW04068) exceeded the detector calibrated range, and its concentration exceeded 4x the LFM spike-added concentration, another LFM sample (AW03824 & AW04066) was analyzed for sulfate in a subsequent analysis sequence on 02/22/2016 & 2/23/2016. All acceptance criteria for accuracy for the reported anions 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.

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Alabama Power

Lab & Field SERVICES

7. Samples AW03825, AW03827, AW03828 and AW03829 were re-analyzed for sulfate at a 2x dilution due to undiluted results exceeding the calibrated range of the detector. Samples AW04059, AW04067 and AW04068 were re-analyzed for sulfate at a 4x dilution, and sample AW04060 at an 8x dilution, due to undiluted results exceeding the calibrated range of the detector. Sample AW04069 was re-analyzed for sulfate at a 10x dilution, and sample AW04070 at a 5x dilution, due to undiluted results exceeding the calibrated range of the detector. The dilution results for sulfate for these samples should be used; reporting limit (RL) values are adjusted upward to reflect the dilution factor applied.

Sample ID		Analyte		Dilution Factor
AW03825		Sulfate		2X
AW03827		Sulfate		2X
AW03828		Sulfate		2X
AW03829		Sulfate		2X
AW04059		Sulfate		4X
AW04067		Sulfate		4X
AW04068		Sulfate		4X
AW04060		Sulfate		8X
AW04069		Sulfate		10X
AW04070		Sulfate		5X

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

Alabama Power General Test Laboratory
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Case Narrative

Alabama Power

Lab & Field SERVICES

Metals ICP

Greene County Ash Pond

WMWGREAP_14

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

Sample ID	Batch ID	Project ID
AW03820	20160225A	WMWGREAP_14
AW03822	20160225A	WMWGREAP_14
AW03823	20160225A	WMWGREAP_14
AW03824	20160225A	WMWGREAP_14
AW03825	20160225A	WMWGREAP_14
AW03826	20160225A	WMWGREAP_14
AW03827	20160225A	WMWGREAP_14
AW03828	20160225A	WMWGREAP_14
AW03829	20160225A	WMWGREAP_14
AW04059	20160303C/D	WMWGREAP_14
AW04060	20160303C/D	WMWGREAP_14
AW04061	20160303C/D	WMWGREAP_14
AW04063	20160303C/D	WMWGREAP_14
AW04064	20160303C/D	WMWGREAP_14
AW04065	20160303C/D	WMWGREAP_14
AW04066	20160303C/D	WMWGREAP_14
AW04067	20160303C/D	WMWGREAP_14
AW04068	20160303C/D	WMWGREAP_14
AW04069	20160303C/D	WMWGREAP_14
AW04070	20160303C/D	WMWGREAP_14
AW04071	20160303C/D	WMWGREAP_14
AW04072	20160303C/D	WMWGREAP_14
AW04073	20160303C/D	WMWGREAP_14
AW04074	20160303C/D	WMWGREAP_14
AW04075	20160303C/D	WMWGREAP_14
AW04076	20160303C/D	WMWGREAP_14
AW04077	20160303C/D	WMWGREAP_14
AW04078	20160303C/D	WMWGREAP_14

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

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 except for the following:

Analyte	Sample ID
Boron	All in this batch

  The ICB for Boron was greater than half the limit of quantitation however the result was less than the limit of quantitation. Spectral interference check solution and the following rinse was below half the limit of quantitation. The following CCBs were less than half the reporting limit.

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

Matrix Specific Quality Control Procedures:

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

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

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Analyte	Sample ID
Calcium	AW03829
Calcium	AW04069

The concentrations of these analytes in the sample were 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.

Analyte	Sample ID
Boron	AW03829 MSD

Matrix spike duplicate was reanalyzed. The result of the spike was acceptable indicating that the matrix was not significantly affecting quantitation of this analyte. Confirmation analysis of AX03829 on 03/08/2016 indicated that the matrix was not significantly affecting the quantitation of this analyte.

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met with the following exceptions:

Analyte	Sample ID
Calcium	AW03829
Calcium	AW04069

The concentrations of these analytes in the sample were 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.

Analyte	Sample ID
Boron	AW03829 MS/MSD

The reanalysis of MS/MSD spike was performed. The result of the spike was acceptable indicating that the matrix was not significantly affecting quantitation of this analyte. Confirmation analysis of AW03829 on 03/08/2016 indicated that the matrix was not significantly affecting the quantitation of this analyte.

7. All samples were analyzed without a dilution with the following exceptions: The following samples were diluted due to sample concentrations from the undiluted analysis were over the high standard of the calibration curve. For this Batch the undiluted dilution factor was 1.015. The following samples were diluted 1: 10 by adding 9mL of water to 1mL of the undiluted digested sample for a total volume of 10 mL. This gave a dilution factor of 10.15x. AX04069, AX04069MS and AX4069MSD were diluted 1:20 dilution by adding 9.5 mL of water to 0.5 mL of the undiluted digested sample for a total volume of 10 mL. This gave a dilution factor of 20.3x.

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Sample ID	Analyte	Dilution Factor
AW03820	Calcium	10.15x
AW03822	Calcium	10.15x
AW03825	Calcium	10.15x
AW03829MS	Calcium	10.15x
AW03829MSD	Calcium	10.15x
AW04059	Calcium	10.15x
AW04060	Calcium	10.15x
AW04063	Calcium	10.15x
AW04067	Calcium	10.15x
AW04068	Calcium	10.15x
AW04069	Calcium	20.3x
AW04069MS	Calcium	20.3x
AW04069MSD	Calcium	20.3x
AW04070	Calcium	10.15x
AW04071	Calcium	10.15x
AW04072	Calcium	10.15x
AW04073	Calcium	10.15x
AW04074	Calcium	10.15x

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

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Case Narrative

Alabama Power

Lab & Field SERVICES

Metals ICPMS

Greene County Ash Pond

WMWGREAP_14

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

Sample ID	Batch ID	Project ID
AW03820	558825	WMWGREAP_14
AW03822	558825	WMWGREAP_14
AW03823	558825	WMWGREAP_14
AW03824	558825	WMWGREAP_14
AW03825	558825	WMWGREAP_14
AW03826	558825	WMWGREAP_14
AW03827	558825	WMWGREAP_14
AW03828	558825	WMWGREAP_14
AW03829	558825	WMWGREAP_14
AW04059	558801	WMWGREAP_14
AW04061	558801	WMWGREAP_14
AW04063	558801	WMWGREAP_14
AW04064	558801	WMWGREAP_14
AW04065	558801	WMWGREAP_14
AW04066	558801	WMWGREAP_14
AW04067	558801	WMWGREAP_14
AW04068	558801	WMWGREAP_14
AW04069	558801	WMWGREAP_14
AW04070	558813	WMWGREAP_14
AW04071	558813	WMWGREAP_14
AW04072	558813	WMWGREAP_14
AW04073	558813	WMWGREAP_14
AW04074	558813	WMWGREAP_14
AW04075	558813	WMWGREAP_14
AW04076	558813	WMWGREAP_14
AW04077	558813	WMWGREAP_14
AW04078	558813	WMWGREAP_14
AW04060	558854	WMWGREAP_14

Alabama Power General Test Laboratory
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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 0.0001 mg/L to 0.0002 mg/L. Samples AW04067 and AW04078 are now listed as Not Detected.

General Quality Control Procedures:

- All tune and calibration met criteria for all requested analytes. The highest point of the calibration curve for batch 558825, (1.25ppm), was removed for Be and Se 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.

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Case Narrative

Alabama Power

Lab & Field SERVICES

Mercury

Greene County Ash Pond

WMWGREAP_14

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

Sample ID	Batch ID	Project ID
AW03820	558726	WMWGREAP_14
AW03822	558726	WMWGREAP_14
AW03823	558726	WMWGREAP_14
AW03824	558726	WMWGREAP_14
AW03825	558726	WMWGREAP_14
AW03826	558726	WMWGREAP_14
AW03827	558726	WMWGREAP_14
AW03828	558726	WMWGREAP_14
AW03829	558726	WMWGREAP_14
AW04059	558726	WMWGREAP_14
AW04060	559075	WMWGREAP_14
AW04061	559075	WMWGREAP_14
AW04063	559075	WMWGREAP_14
AW04064	559075	WMWGREAP_14
AW04065	559075	WMWGREAP_14
AW04066	559075	WMWGREAP_14
AW04067	559075	WMWGREAP_14
AW04068	559075	WMWGREAP_14
AW04069	559075	WMWGREAP_14
AW04070	559075	WMWGREAP_14
AW04071	559076	WMWGREAP_14
AW04072	559076	WMWGREAP_14
AW04073	559076	WMWGREAP_14
AW04074	559076	WMWGREAP_14
AW04075	559076	WMWGREAP_14
AW04076	559076	WMWGREAP_14
AW04077	559076	WMWGREAP_14
AW04078	559076	WMWGREAP_14

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.

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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.

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Case Narrative

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Total Dissolved Solids

Greene County Ash Pond

WMWGREAP_14

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

Sample ID	Batch ID	Project ID
AW03820	558426	WMWGREAP_14
AW03822	558426	WMWGREAP_14
AW03823	558426	WMWGREAP_14
AW03824	558426	WMWGREAP_14
AW03825	558426	WMWGREAP_14
AW03826	558426	WMWGREAP_14
AW03827	558426	WMWGREAP_14
AW03828	558426	WMWGREAP_14
AW03829	558426	WMWGREAP_14
AW04059	558711	WMWGREAP_14
AW04060	558711	WMWGREAP_14
AW04061	558711	WMWGREAP_14
AW04063	558711	WMWGREAP_14
AW04064	558711	WMWGREAP_14
AW04065	558711	WMWGREAP_14
AW04066	558711	WMWGREAP_14
AW04067	558711	WMWGREAP_14
AW04068	558711	WMWGREAP_14
AW04069	558711	WMWGREAP_14
AW04070	558638	WMWGREAP_14
AW04071	558638	WMWGREAP_14
AW04072	558638	WMWGREAP_14
AW04073	558638	WMWGREAP_14
AW04074	558638	WMWGREAP_14
AW04075	558638	WMWGREAP_14
AW04076	558638	WMWGREAP_14
AW04077	558638	WMWGREAP_14
AW04078	558638	WMWGREAP_14

4. All of the above samples were analyzed by SM 2540C.
5. All samples were analyzed within the established hold times.
6. TDS reporting limit was originally listed as 2.5 mg/L. This has been corrected to 25mg/L. AW03826, AW04064, and AW04075 results are now listed as Not Detected.

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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:

Sample ID	Milligram Difference
AW03826	1.5
AW04059	0.9
AW04060	1.4
AW04064	1.1
AW04065	1.6
AW04066	1.4
AW04067	1.5
AW04068	1.8
AW04069	2.3
AW04069 duplicate	1.7

Samples with a milligram difference of 1.0 mg and above will be qualified. Samples with a milligram difference of less than 1.0 mg will remain unqualified, as this amount does not significantly affect reported results.

- A sample duplicate was analyzed with each batch. RPD/2 was less than 5%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- All samples were between 2.5 mg and 200 mg residue with the exception of the following: AW03826, AW04064, and AW04074 which were <2.5.

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AW03820

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	J	0.000786	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005		0.0123	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.179	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	2/25/2016	EPA 200.7		1.015	0.02	0.1		1.44	mg/L
* Calcium, Total	HRG	2/25/2016	EPA 200.7		10.15	1.0	5.0		76.3	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0135	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/23/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/25/2016	EPA 200.7		1.015	0.01	0.05		0.115	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0101	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/19/2016	SM 2540C		1		50		312	mg/L
* Chloride, Total	SES	2/19/2016	EPA 300.0		1	0.04	0.25		18.4	mg/L
* Fluoride, Total	SES	2/19/2016	EPA 300.0		1	0.01	0.3	J	0.23	mg/L
* Sulfate, Total	SES	2/19/2016	EPA 300.0		1	0.3	1		9.03	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, 2017

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

Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AW03820

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW03829	Calcium, Total	mg/L	-0.00485	0.22	5.00	31.1	45.8	5.13	4.25 to 5.75	-186	70 to 130	38.2	20
AW03829	Antimony, Total	mg/L	0.000146	0.00132	0.10	0.105	0.105	0.103	0.085 to 0.115	105	70 to 130	0.583	20
AW03829	Lithium, Total	mg/L	-0.000128	0.022	0.20	0.756	0.759	0.209	0.17 to 0.23	122	70 to 130	0.355	20
AW03829	Boron, Total	mg/L	0.0170	0.044	1.00	1.39	2.10	0.993	0.85 to 1.15	110	70 to 130	40.8	20
AW03829	Cobalt, Total	mg/L	-0.000000462	0.0044	0.10	0.0933	0.0935	0.0961	0.085 to 0.115	93.3	70 to 130	0.285	20
AW03829	Arsenic, Total	mg/L	0.00000532	0.0022	0.10	0.100	0.100	0.0993	0.085 to 0.115	100	70 to 130	0.186	20
AW03829	Thallium, Total	mg/L	0.00000412	0.00044	0.10	0.0968	0.0972	0.0946	0.085 to 0.115	96.8	70 to 130	0.422	20
AW03829	Barium, Total	mg/L	0.000000440	0.0044	0.10	0.141	0.143	0.102	0.085 to 0.115	103	70 to 130	1.09	20
AW03829	Beryllium, Total	mg/L	0.00000513	0.00132	0.10	0.0929	0.0926	0.0964	0.085 to 0.115	92.9	70 to 130	0.336	20
AW04059	Mercury, Total by CVAA	mg/L	0.00011	0.0005	0.004	0.00393	0.00394	0.0039	0.0034 to 0.0046	98.2	70 to 130	0.254	20
AW03829	Cadmium, Total	mg/L	0.00000133	0.00044	0.10	0.0949	0.0957	0.0956	0.085 to 0.115	94.9	70 to 130	0.886	20
AW03829	Molybdenum, Total	mg/L	0.00000248	0.0044	0.10	0.140	0.140	0.0964	0.085 to 0.115	96.7	70 to 130	0.0532	20
AW03829	Selenium, Total	mg/L	0.0000531	0.0044	0.10	0.0992	0.100	0.101	0.085 to 0.115	99.2	70 to 130	0.938	20
AW03829	Chromium, Total	mg/L	0.0000119	0.0044	0.10	0.0958	0.0955	0.0952	0.085 to 0.115	95.8	70 to 130	0.281	20
AW03829	Lead, Total	mg/L	0.00000659	0.0022	0.10	0.0969	0.0967	0.0959	0.085 to 0.115	96.9	70 to 130	0.181	20

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report
Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

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

Reported: 6/7/2017
Version: 2.0

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Calera, AL 35040
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AW03820

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW03829	Solids, Dissolved	mg/L	-6	25			284	41.0	40 to 60			3.65	5
AW03824	Sulfate, Total	mg/L	0.00	1.0	20.0	62.3	44.6	18.5	18 to 22	88.5	80 to 120	0.00	20
AW03824	Chloride, Total	mg/L	0.00	0.25	10.0	25.6	15.6	9.70	9 to 11	100	80 to 120	0.00	20
AW03824	Fluoride, Total	mg/L	0.00	0.3	2.0	2.46	0.152	2.03	1.8 to 2.2	116	80 to 120	1.32	20

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report
Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

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: 6/7/2017
Version: 2.0

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AW03822

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.117	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	2/25/2016	EPA 200.7		1.015	0.02	0.1		1.54	mg/L
* Calcium, Total	HRG	2/25/2016	EPA 200.7		10.15	1.0	5.0		75.9	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0129	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/23/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/25/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/19/2016	SM 2540C		1		100		656	mg/L
* Chloride, Total	SES	2/19/2016	EPA 300.0		1	0.04	0.25		67.9	mg/L
* Fluoride, Total	SES	2/19/2016	EPA 300.0		1	0.01	0.3	J	0.08	mg/L
* Sulfate, Total	SES	2/19/2016	EPA 300.0		1	0.3	1		49.4	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

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

Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AW03822

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW03829	Lithium, Total	mg/L	-0.000128	0.022	0.20	0.756	0.759	0.209	0.17 to 0.23	122	70 to 130	0.355	20
AW03829	Calcium, Total	mg/L	-0.00485	0.22	5.00	31.1	45.8	5.13	4.25 to 5.75	-186	70 to 130	38.2	20
AW03829	Antimony, Total	mg/L	0.000146	0.00132	0.10	0.105	0.105	0.103	0.085 to 0.115	105	70 to 130	0.583	20
AW03829	Arsenic, Total	mg/L	0.00000532	0.0022	0.10	0.100	0.100	0.0993	0.085 to 0.115	100	70 to 130	0.186	20
AW03829	Thallium, Total	mg/L	0.00000412	0.00044	0.10	0.0968	0.0972	0.0946	0.085 to 0.115	96.8	70 to 130	0.422	20
AW03829	Cadmium, Total	mg/L	0.00000133	0.00044	0.10	0.0949	0.0957	0.0956	0.085 to 0.115	94.9	70 to 130	0.886	20
AW03829	Molybdenum, Total	mg/L	0.00000248	0.0044	0.10	0.140	0.140	0.0964	0.085 to 0.115	96.7	70 to 130	0.0532	20
AW03829	Selenium, Total	mg/L	0.0000531	0.0044	0.10	0.0992	0.100	0.101	0.085 to 0.115	99.2	70 to 130	0.938	20
AW03829	Barium, Total	mg/L	0.000000440	0.0044	0.10	0.141	0.143	0.102	0.085 to 0.115	103	70 to 130	1.09	20
AW03829	Beryllium, Total	mg/L	0.00000513	0.00132	0.10	0.0929	0.0926	0.0964	0.085 to 0.115	92.9	70 to 130	0.336	20
AW04059	Mercury, Total by CVAA	mg/L	0.00011	0.0005	0.004	0.00393	0.00394	0.0039	0.0034 to 0.0046	98.2	70 to 130	0.254	20
AW03829	Boron, Total	mg/L	0.0170	0.044	1.00	1.39	2.10	0.993	0.85 to 1.15	110	70 to 130	40.8	20
AW03829	Cobalt, Total	mg/L	-0.000000462	0.0044	0.10	0.0933	0.0935	0.0961	0.085 to 0.115	93.3	70 to 130	0.285	20
AW03829	Chromium, Total	mg/L	0.0000119	0.0044	0.10	0.0958	0.0955	0.0952	0.085 to 0.115	95.8	70 to 130	0.281	20
AW03829	Lead, Total	mg/L	0.00000659	0.0022	0.10	0.0969	0.0967	0.0959	0.085 to 0.115	96.9	70 to 130	0.181	20

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Reported: 6/7/2017
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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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AW03822

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW03824	Sulfate, Total	mg/L	0.00	1.0	20.0	62.3	44.6	18.5	18 to 22	88.5	80 to 120	0.00	20
AW03829	Solids, Dissolved	mg/L	-6	25			284	41.0	40 to 60			3.65	5
AW03824	Chloride, Total	mg/L	0.00	0.25	10.0	25.6	15.6	9.70	9 to 11	100	80 to 120	0.00	20
AW03824	Fluoride, Total	mg/L	0.00	0.3	2.0	2.46	0.152	2.03	1.8 to 2.2	116	80 to 120	1.32	20

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CC:

Reported: 6/7/2017
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AW03823

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005		0.00507	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0637	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	2/25/2016	EPA 200.7		1.015	0.02	0.1		0.412	mg/L
* Calcium, Total	HRG	2/25/2016	EPA 200.7		1.015	0.1	0.5		33.9	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	J	0.00869	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/23/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/25/2016	EPA 200.7		1.015	0.01	0.05	J	0.0359	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/19/2016	SM 2540C		1		25		226	mg/L
* Chloride, Total	SES	2/19/2016	EPA 300.0		1	0.04	0.25		15.6	mg/L
* Fluoride, Total	SES	2/19/2016	EPA 300.0		1	0.01	0.3	J	0.16	mg/L
* Sulfate, Total	SES	2/19/2016	EPA 300.0		1	0.3	1		45.2	mg/L

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Reported: 6/7/2017
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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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AW03823

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW03829	Antimony, Total	mg/L	0.000146	0.00132	0.10	0.105	0.105	0.103	0.085 to 0.115	105	70 to 130	0.583	20
AW03829	Lithium, Total	mg/L	-0.000128	0.022	0.20	0.756	0.759	0.209	0.17 to 0.23	122	70 to 130	0.355	20
AW03829	Calcium, Total	mg/L	-0.00485	0.22	5.00	31.1	45.8	5.13	4.25 to 5.75	-186	70 to 130	38.2	20
AW03829	Chromium, Total	mg/L	0.0000119	0.0044	0.10	0.0958	0.0955	0.0952	0.085 to 0.115	95.8	70 to 130	0.281	20
AW03829	Lead, Total	mg/L	0.00000659	0.0022	0.10	0.0969	0.0967	0.0959	0.085 to 0.115	96.9	70 to 130	0.181	20
AW03829	Arsenic, Total	mg/L	0.00000532	0.0022	0.10	0.100	0.100	0.0993	0.085 to 0.115	100	70 to 130	0.186	20
AW03829	Thallium, Total	mg/L	0.00000412	0.00044	0.10	0.0968	0.0972	0.0946	0.085 to 0.115	96.8	70 to 130	0.422	20
AW03829	Boron, Total	mg/L	0.0170	0.044	1.00	1.39	2.10	0.993	0.85 to 1.15	110	70 to 130	40.8	20
AW03829	Cobalt, Total	mg/L	-0.000000462	0.0044	0.10	0.0933	0.0935	0.0961	0.085 to 0.115	93.3	70 to 130	0.285	20
AW03829	Barium, Total	mg/L	0.000000440	0.0044	0.10	0.141	0.143	0.102	0.085 to 0.115	103	70 to 130	1.09	20
AW03829	Beryllium, Total	mg/L	0.00000513	0.00132	0.10	0.0929	0.0926	0.0964	0.085 to 0.115	92.9	70 to 130	0.336	20
AW04059	Mercury, Total by CVAA	mg/L	0.00011	0.0005	0.004	0.00393	0.00394	0.0039	0.0034 to 0.0046	98.2	70 to 130	0.254	20
AW03829	Cadmium, Total	mg/L	0.00000133	0.00044	0.10	0.0949	0.0957	0.0956	0.085 to 0.115	94.9	70 to 130	0.886	20
AW03829	Molybdenum, Total	mg/L	0.00000248	0.0044	0.10	0.140	0.140	0.0964	0.085 to 0.115	96.7	70 to 130	0.0532	20
AW03829	Selenium, Total	mg/L	0.0000531	0.0044	0.10	0.0992	0.100	0.101	0.085 to 0.115	99.2	70 to 130	0.938	20

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Version: 2.0

Alabama Power General Test Laboratory
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AW03823

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW03829	Solids, Dissolved	mg/L	-6	25			284	41.0	40 to 60			3.65	5
AW03824	Sulfate, Total	mg/L	0.00	1.0	20.0	62.3	44.6	18.5	18 to 22	88.5	80 to 120	0.00	20
AW03824	Chloride, Total	mg/L	0.00	0.25	10.0	25.6	15.6	9.70	9 to 11	100	80 to 120	0.00	20
AW03824	Fluoride, Total	mg/L	0.00	0.3	2.0	2.46	0.152	2.03	1.8 to 2.2	116	80 to 120	1.32	20

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-9 dup

Laboratory ID Number: AW03824

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005		0.00506	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0623	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	2/25/2016	EPA 200.7		1.015	0.02	0.1		0.400	mg/L
* Calcium, Total	HRG	2/25/2016	EPA 200.7		1.015	0.1	0.5		34.0	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	J	0.00854	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/23/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/25/2016	EPA 200.7		1.015	0.01	0.05	J	0.0347	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/19/2016	SM 2540C		1		25		229	mg/L
* Chloride, Total	SES	2/23/2016	EPA 300.0		1	0.04	0.25		15.6	mg/L
* Fluoride, Total	SES	2/23/2016	EPA 300.0		1	0.01	0.3	J	0.15	mg/L
* Sulfate, Total	SES	2/23/2016	EPA 300.0		1	0.3	1		44.6	mg/L

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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

Reported: 6/7/2017
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Batch QC Summary

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-9 dup

Laboratory ID Number: AW03824

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW03829	Antimony, Total	mg/L	0.000146	0.00132	0.10	0.105	0.105	0.103	0.085 to 0.115	105	70 to 130	0.583	20
AW03829	Lithium, Total	mg/L	-0.000128	0.022	0.20	0.756	0.759	0.209	0.17 to 0.23	122	70 to 130	0.355	20
AW03829	Calcium, Total	mg/L	-0.00485	0.22	5.00	31.1	45.8	5.13	4.25 to 5.75	-186	70 to 130	38.2	20
AW03829	Chromium, Total	mg/L	0.0000119	0.0044	0.10	0.0958	0.0955	0.0952	0.085 to 0.115	95.8	70 to 130	0.281	20
AW03829	Lead, Total	mg/L	0.00000659	0.0022	0.10	0.0969	0.0967	0.0959	0.085 to 0.115	96.9	70 to 130	0.181	20
AW03829	Cadmium, Total	mg/L	0.00000133	0.00044	0.10	0.0949	0.0957	0.0956	0.085 to 0.115	94.9	70 to 130	0.886	20
AW03829	Molybdenum, Total	mg/L	0.00000248	0.0044	0.10	0.140	0.140	0.0964	0.085 to 0.115	96.7	70 to 130	0.0532	20
AW03829	Selenium, Total	mg/L	0.0000531	0.0044	0.10	0.0992	0.100	0.101	0.085 to 0.115	99.2	70 to 130	0.938	20
AW03829	Barium, Total	mg/L	0.000000440	0.0044	0.10	0.141	0.143	0.102	0.085 to 0.115	103	70 to 130	1.09	20
AW03829	Beryllium, Total	mg/L	0.00000513	0.00132	0.10	0.0929	0.0926	0.0964	0.085 to 0.115	92.9	70 to 130	0.336	20
AW04059	Mercury, Total by CVAA	mg/L	0.00011	0.0005	0.004	0.00393	0.00394	0.0039	0.0034 to 0.0046	98.2	70 to 130	0.254	20
AW03829	Arsenic, Total	mg/L	0.00000532	0.0022	0.10	0.100	0.100	0.0993	0.085 to 0.115	100	70 to 130	0.186	20
AW03829	Thallium, Total	mg/L	0.00000412	0.00044	0.10	0.0968	0.0972	0.0946	0.085 to 0.115	96.8	70 to 130	0.422	20
AW03829	Boron, Total	mg/L	0.0170	0.044	1.00	1.39	2.10	0.993	0.85 to 1.15	110	70 to 130	40.8	20
AW03829	Cobalt, Total	mg/L	-0.000000462	0.0044	0.10	0.0933	0.0935	0.0961	0.085 to 0.115	93.3	70 to 130	0.285	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

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

Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-9 dup

Laboratory ID Number: AW03824

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW03829	Solids, Dissolved	mg/L	-6	25			284	41.0	40 to 60			3.65	5
AW03824	Sulfate, Total	mg/L	0.00	1.0	20.0	62.3	44.6	18.5	18 to 22	88.5	80 to 120	0.00	20
AW03824	Chloride, Total	mg/L	0.00	0.25	10.0	25.6	15.6	9.70	9 to 11	100	80 to 120	0.00	20
AW03824	Fluoride, Total	mg/L	0.00	0.3	2.0	2.46	0.152	2.03	1.8 to 2.2	116	80 to 120	1.32	20

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CC:

Reported: 6/7/2017
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AW03825

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005		0.0202	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0447	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	2/25/2016	EPA 200.7		1.015	0.02	0.1		0.739	mg/L
* Calcium, Total	HRG	2/25/2016	EPA 200.7		10.15	1.0	5.0		44.4	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	J	0.00732	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/23/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/25/2016	EPA 200.7		1.015	0.01	0.05		0.632	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	J	0.00839	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/19/2016	SM 2540C		1		50		340	mg/L
* Chloride, Total	SES	2/19/2016	EPA 300.0		1	0.04	0.25		16.4	mg/L
* Fluoride, Total	SES	2/19/2016	EPA 300.0		1	0.01	0.3	J	0.13	mg/L
* Sulfate, Total	SES	2/22/2016	EPA 300.0		2	0.6	2		108	mg/L

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

Reported: 6/7/2017
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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: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AW03825

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW03829	Lithium, Total	mg/L	-0.000128	0.022	0.20	0.756	0.759	0.209	0.17 to 0.23	122	70 to 130	0.355	20
AW03829	Calcium, Total	mg/L	-0.00485	0.22	5.00	31.1	45.8	5.13	4.25 to 5.75	-186	70 to 130	38.2	20
AW03829	Antimony, Total	mg/L	0.000146	0.00132	0.10	0.105	0.105	0.103	0.085 to 0.115	105	70 to 130	0.583	20
AW03829	Cadmium, Total	mg/L	0.00000133	0.00044	0.10	0.0949	0.0957	0.0956	0.085 to 0.115	94.9	70 to 130	0.886	20
AW03829	Molybdenum, Total	mg/L	0.00000248	0.0044	0.10	0.140	0.140	0.0964	0.085 to 0.115	96.7	70 to 130	0.0532	20
AW03829	Selenium, Total	mg/L	0.0000531	0.0044	0.10	0.0992	0.100	0.101	0.085 to 0.115	99.2	70 to 130	0.938	20
AW03829	Chromium, Total	mg/L	0.0000119	0.0044	0.10	0.0958	0.0955	0.0952	0.085 to 0.115	95.8	70 to 130	0.281	20
AW03829	Lead, Total	mg/L	0.00000659	0.0022	0.10	0.0969	0.0967	0.0959	0.085 to 0.115	96.9	70 to 130	0.181	20
AW03829	Arsenic, Total	mg/L	0.00000532	0.0022	0.10	0.100	0.100	0.0993	0.085 to 0.115	100	70 to 130	0.186	20
AW03829	Thallium, Total	mg/L	0.00000412	0.00044	0.10	0.0968	0.0972	0.0946	0.085 to 0.115	96.8	70 to 130	0.422	20
AW03829	Boron, Total	mg/L	0.0170	0.044	1.00	1.39	2.10	0.993	0.85 to 1.15	110	70 to 130	40.8	20
AW03829	Cobalt, Total	mg/L	-0.000000462	0.0044	0.10	0.0933	0.0935	0.0961	0.085 to 0.115	93.3	70 to 130	0.285	20
AW03829	Barium, Total	mg/L	0.000000440	0.0044	0.10	0.141	0.143	0.102	0.085 to 0.115	103	70 to 130	1.09	20
AW03829	Beryllium, Total	mg/L	0.00000513	0.00132	0.10	0.0929	0.0926	0.0964	0.085 to 0.115	92.9	70 to 130	0.336	20
AW04059	Mercury, Total by CVAA	mg/L	0.00011	0.0005	0.004	0.00393	0.00394	0.0039	0.0034 to 0.0046	98.2	70 to 130	0.254	20

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Expiration: June 30, 2017

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Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AW03825

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW03824	Sulfate, Total	mg/L	0.00	1.0	20.0	62.3	44.6	18.5	18 to 22	88.5	80 to 120	0.00	20
AW03829	Solids, Dissolved	mg/L	-6	25			284	41.0	40 to 60			3.65	5
AW03824	Chloride, Total	mg/L	0.00	0.25	10.0	25.6	15.6	9.70	9 to 11	100	80 to 120	0.00	20
AW03824	Fluoride, Total	mg/L	0.00	0.3	2.0	2.46	0.152	2.03	1.8 to 2.2	116	80 to 120	1.32	20

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CC:

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW03826

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	2/25/2016	EPA 200.7		1.015	0.02	0.1	J	0.0202	mg/L
* Calcium, Total	HRG	2/25/2016	EPA 200.7		1.015	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/23/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/25/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/19/2016	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	2/19/2016	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	2/19/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	2/19/2016	EPA 300.0		1	0.3	1	U	Not Detected	mg/L

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Expiration: June 30, 2017

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The RL has now been corrected.
The result for TDS is now Not Detected. SGC 1/19/17
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17
Difference between the last two consecutive final weights for TDS
resulted in 1.5 mg, which is above the required 0.5 mg limit.

Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW03826

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW03829	Lithium, Total	mg/L	-0.000128	0.022	0.20	0.756	0.759	0.209	0.17 to 0.23	122	70 to 130	0.355	20
AW03829	Antimony, Total	mg/L	0.000146	0.00132	0.10	0.105	0.105	0.103	0.085 to 0.115	105	70 to 130	0.583	20
AW03829	Calcium, Total	mg/L	-0.00485	0.22	5.00	31.1	45.8	5.13	4.25 to 5.75	-186	70 to 130	38.2	20
AW03829	Boron, Total	mg/L	0.0170	0.044	1.00	1.39	2.10	0.993	0.85 to 1.15	110	70 to 130	40.8	20
AW03829	Cobalt, Total	mg/L	-0.000000462	0.0044	0.10	0.0933	0.0935	0.0961	0.085 to 0.115	93.3	70 to 130	0.285	20
AW03829	Arsenic, Total	mg/L	0.00000532	0.0022	0.10	0.100	0.100	0.0993	0.085 to 0.115	100	70 to 130	0.186	20
AW03829	Thallium, Total	mg/L	0.00000412	0.00044	0.10	0.0968	0.0972	0.0946	0.085 to 0.115	96.8	70 to 130	0.422	20
AW03829	Barium, Total	mg/L	0.000000440	0.0044	0.10	0.141	0.143	0.102	0.085 to 0.115	103	70 to 130	1.09	20
AW03829	Beryllium, Total	mg/L	0.00000513	0.00132	0.10	0.0929	0.0926	0.0964	0.085 to 0.115	92.9	70 to 130	0.336	20
AW04059	Mercury, Total by CVAA	mg/L	0.00011	0.0005	0.004	0.00393	0.00394	0.0039	0.0034 to 0.0046	98.2	70 to 130	0.254	20
AW03829	Cadmium, Total	mg/L	0.00000133	0.00044	0.10	0.0949	0.0957	0.0956	0.085 to 0.115	94.9	70 to 130	0.886	20
AW03829	Molybdenum, Total	mg/L	0.00000248	0.0044	0.10	0.140	0.140	0.0964	0.085 to 0.115	96.7	70 to 130	0.0532	20
AW03829	Selenium, Total	mg/L	0.0000531	0.0044	0.10	0.0992	0.100	0.101	0.085 to 0.115	99.2	70 to 130	0.938	20
AW03829	Chromium, Total	mg/L	0.0000119	0.0044	0.10	0.0958	0.0955	0.0952	0.085 to 0.115	95.8	70 to 130	0.281	20
AW03829	Lead, Total	mg/L	0.00000659	0.0022	0.10	0.0969	0.0967	0.0959	0.085 to 0.115	96.9	70 to 130	0.181	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L.
The RL has now been corrected.
The result for TDS is now Not Detected. SGC 1/19/17
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17
Difference between the last two consecutive final weights for TDS
resulted in 1.5 mg, which is above the required 0.5 mg limit.

Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW03826

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW03824	Sulfate, Total	mg/L	0.00	1.0	20.0	62.3	44.6	18.5	18 to 22	88.5	80 to 120	0.00	20
AW03829	Solids, Dissolved	mg/L	-6	25			284	41.0	40 to 60			3.65	5
AW03824	Chloride, Total	mg/L	0.00	0.25	10.0	25.6	15.6	9.70	9 to 11	100	80 to 120	0.00	20
AW03824	Fluoride, Total	mg/L	0.00	0.3	2.0	2.46	0.152	2.03	1.8 to 2.2	116	80 to 120	1.32	20

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The result for TDS is now Not Detected. SGC 1/19/17
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17
Difference between the last two consecutive final weights for TDS
resulted in 1.5 mg, which is above the required 0.5 mg limit.

CC:

Reported: 6/7/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AW03827

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	J	0.000972	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005		0.0141	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.113	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	2/25/2016	EPA 200.7		1.015	0.02	0.1		0.260	mg/L
* Calcium, Total	HRG	2/25/2016	EPA 200.7		1.015	0.1	0.5		29.8	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/23/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/25/2016	EPA 200.7		1.015	0.01	0.05		0.510	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0769	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0227	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/19/2016	SM 2540C		1		25		242	mg/L
* Chloride, Total	SES	2/19/2016	EPA 300.0		1	0.04	0.25		6.52	mg/L
* Fluoride, Total	SES	2/19/2016	EPA 300.0		1	0.01	0.3	J	0.14	mg/L
* Sulfate, Total	SES	2/22/2016	EPA 300.0		2	0.6	2		113	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

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

Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AW03827

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW03829	Lithium, Total	mg/L	-0.000128	0.022	0.20	0.756	0.759	0.209	0.17 to 0.23	122	70 to 130	0.355	20
AW03829	Antimony, Total	mg/L	0.000146	0.00132	0.10	0.105	0.105	0.103	0.085 to 0.115	105	70 to 130	0.583	20
AW03829	Calcium, Total	mg/L	-0.00485	0.22	5.00	31.1	45.8	5.13	4.25 to 5.75	-186	70 to 130	38.2	20
AW03829	Boron, Total	mg/L	0.0170	0.044	1.00	1.39	2.10	0.993	0.85 to 1.15	110	70 to 130	40.8	20
AW03829	Cobalt, Total	mg/L	-0.000000462	0.0044	0.10	0.0933	0.0935	0.0961	0.085 to 0.115	93.3	70 to 130	0.285	20
AW03829	Chromium, Total	mg/L	0.0000119	0.0044	0.10	0.0958	0.0955	0.0952	0.085 to 0.115	95.8	70 to 130	0.281	20
AW03829	Lead, Total	mg/L	0.00000659	0.0022	0.10	0.0969	0.0967	0.0959	0.085 to 0.115	96.9	70 to 130	0.181	20
AW03829	Arsenic, Total	mg/L	0.00000532	0.0022	0.10	0.100	0.100	0.0993	0.085 to 0.115	100	70 to 130	0.186	20
AW03829	Thallium, Total	mg/L	0.00000412	0.00044	0.10	0.0968	0.0972	0.0946	0.085 to 0.115	96.8	70 to 130	0.422	20
AW03829	Cadmium, Total	mg/L	0.00000133	0.00044	0.10	0.0949	0.0957	0.0956	0.085 to 0.115	94.9	70 to 130	0.886	20
AW03829	Molybdenum, Total	mg/L	0.00000248	0.0044	0.10	0.140	0.140	0.0964	0.085 to 0.115	96.7	70 to 130	0.0532	20
AW03829	Selenium, Total	mg/L	0.0000531	0.0044	0.10	0.0992	0.100	0.101	0.085 to 0.115	99.2	70 to 130	0.938	20
AW03829	Barium, Total	mg/L	0.000000440	0.0044	0.10	0.141	0.143	0.102	0.085 to 0.115	103	70 to 130	1.09	20
AW03829	Beryllium, Total	mg/L	0.00000513	0.00132	0.10	0.0929	0.0926	0.0964	0.085 to 0.115	92.9	70 to 130	0.336	20
AW04059	Mercury, Total by CVAA	mg/L	0.00011	0.0005	0.004	0.00393	0.00394	0.0039	0.0034 to 0.0046	98.2	70 to 130	0.254	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

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Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AW03827

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW03824	Sulfate, Total	mg/L	0.00	1.0	20.0	62.3	44.6	18.5	18 to 22	88.5	80 to 120	0.00	20
AW03829	Solids, Dissolved	mg/L	-6	25			284	41.0	40 to 60			3.65	5
AW03824	Chloride, Total	mg/L	0.00	0.25	10.0	25.6	15.6	9.70	9 to 11	100	80 to 120	0.00	20
AW03824	Fluoride, Total	mg/L	0.00	0.3	2.0	2.46	0.152	2.03	1.8 to 2.2	116	80 to 120	1.32	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

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: 6/7/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AW03828

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	J	0.000933	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0231	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	2/25/2016	EPA 200.7		1.015	0.02	0.1		0.273	mg/L
* Calcium, Total	HRG	2/25/2016	EPA 200.7		1.015	0.1	0.5		34.6	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/23/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/25/2016	EPA 200.7		1.015	0.01	0.05		0.502	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.107	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/19/2016	SM 2540C		1		25		264	mg/L
* Chloride, Total	SES	2/19/2016	EPA 300.0		1	0.04	0.25		10.8	mg/L
* Fluoride, Total	SES	2/19/2016	EPA 300.0		1	0.01	0.3	J	0.16	mg/L
* Sulfate, Total	SES	2/22/2016	EPA 300.0		2	0.6	2		119	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

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

Reported: 6/7/2017
Version: 2.0

Alabama Power General Test Laboratory
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Calera, AL 35040
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AW03828

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW03829	Antimony, Total	mg/L	0.000146	0.00132	0.10	0.105	0.105	0.103	0.085 to 0.115	105	70 to 130	0.583	20
AW03829	Lithium, Total	mg/L	-0.000128	0.022	0.20	0.756	0.759	0.209	0.17 to 0.23	122	70 to 130	0.355	20
AW03829	Calcium, Total	mg/L	-0.00485	0.22	5.00	31.1	45.8	5.13	4.25 to 5.75	-186	70 to 130	38.2	20
AW03829	Boron, Total	mg/L	0.0170	0.044	1.00	1.39	2.10	0.993	0.85 to 1.15	110	70 to 130	40.8	20
AW03829	Cobalt, Total	mg/L	-0.000000462	0.0044	0.10	0.0933	0.0935	0.0961	0.085 to 0.115	93.3	70 to 130	0.285	20
AW03829	Chromium, Total	mg/L	0.0000119	0.0044	0.10	0.0958	0.0955	0.0952	0.085 to 0.115	95.8	70 to 130	0.281	20
AW03829	Lead, Total	mg/L	0.00000659	0.0022	0.10	0.0969	0.0967	0.0959	0.085 to 0.115	96.9	70 to 130	0.181	20
AW03829	Arsenic, Total	mg/L	0.00000532	0.0022	0.10	0.100	0.100	0.0993	0.085 to 0.115	100	70 to 130	0.186	20
AW03829	Thallium, Total	mg/L	0.00000412	0.00044	0.10	0.0968	0.0972	0.0946	0.085 to 0.115	96.8	70 to 130	0.422	20
AW03829	Cadmium, Total	mg/L	0.00000133	0.00044	0.10	0.0949	0.0957	0.0956	0.085 to 0.115	94.9	70 to 130	0.886	20
AW03829	Molybdenum, Total	mg/L	0.00000248	0.0044	0.10	0.140	0.140	0.0964	0.085 to 0.115	96.7	70 to 130	0.0532	20
AW03829	Selenium, Total	mg/L	0.0000531	0.0044	0.10	0.0992	0.100	0.101	0.085 to 0.115	99.2	70 to 130	0.938	20
AW03829	Barium, Total	mg/L	0.000000440	0.0044	0.10	0.141	0.143	0.102	0.085 to 0.115	103	70 to 130	1.09	20
AW03829	Beryllium, Total	mg/L	0.00000513	0.00132	0.10	0.0929	0.0926	0.0964	0.085 to 0.115	92.9	70 to 130	0.336	20
AW04059	Mercury, Total by CVAA	mg/L	0.00011	0.0005	0.004	0.00393	0.00394	0.0039	0.0034 to 0.0046	98.2	70 to 130	0.254	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

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

Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AW03828

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW03829	Solids, Dissolved	mg/L	-6	25			284	41.0	40 to 60			3.65	5
AW03824	Sulfate, Total	mg/L	0.00	1.0	20.0	62.3	44.6	18.5	18 to 22	88.5	80 to 120	0.00	20
AW03824	Chloride, Total	mg/L	0.00	0.25	10.0	25.6	15.6	9.70	9 to 11	100	80 to 120	0.00	20
AW03824	Fluoride, Total	mg/L	0.00	0.3	2.0	2.46	0.152	2.03	1.8 to 2.2	116	80 to 120	1.32	20

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

CC:

Reported: 6/7/2017
Version: 2.0

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Calera, AL 35040
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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AW03829

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0379	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	2/25/2016	EPA 200.7		1.015	0.02030	0.1015		0.286	mg/L
* Calcium, Total	HRG	2/25/2016	EPA 200.7		1.015	0.1	0.5		40.4	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/23/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/25/2016	EPA 200.7		1.015	0.01	0.05		0.513	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0433	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/19/2016	SM 2540C		1		50		264	mg/L
* Chloride, Total	SES	2/19/2016	EPA 300.0		1	0.04	0.25		9.95	mg/L
* Fluoride, Total	SES	2/19/2016	EPA 300.0		1	0.01	0.3	J	0.18	mg/L
* Sulfate, Total	SES	2/22/2016	EPA 300.0		2	0.6	2		125	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

Comments: Precision and Recovery for both Calcium and Boron are out of range.
Spike amount is less than 30% of sample amount for Ca.
Boron was run for confirmation, matrix does not affect analyte concentration.
SGC 9/22/16
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

Reported: 6/7/2017
Version: 2.0

Alabama Power General Test Laboratory
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AW03829

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW03829	Antimony, Total	mg/L	0.000146	0.00132	0.10	0.105	0.105	0.103	0.085 to 0.115	105	70 to 130	0.583	20
AW03829	Calcium, Total	mg/L	-0.00485	0.22	5.00	31.1	45.8	5.13	4.25 to 5.75	-186	70 to 130	38.2	20
AW03829	Lithium, Total	mg/L	-0.000128	0.022	0.20	0.756	0.759	0.209	0.17 to 0.23	122	70 to 130	0.355	20
AW03829	Barium, Total	mg/L	0.000000440	0.0044	0.10	0.141	0.143	0.102	0.085 to 0.115	103	70 to 130	1.09	20
AW03829	Beryllium, Total	mg/L	0.00000513	0.00132	0.10	0.0929	0.0926	0.0964	0.085 to 0.115	92.9	70 to 130	0.336	20
AW04059	Mercury, Total by CVAA	mg/L	0.00011	0.0005	0.004	0.00393	0.00394	0.0039	0.0034 to 0.0046	98.2	70 to 130	0.254	20
AW03829	Chromium, Total	mg/L	0.0000119	0.0044	0.10	0.0958	0.0955	0.0952	0.085 to 0.115	95.8	70 to 130	0.281	20
AW03829	Lead, Total	mg/L	0.00000659	0.0022	0.10	0.0969	0.0967	0.0959	0.085 to 0.115	96.9	70 to 130	0.181	20
AW03829	Cadmium, Total	mg/L	0.00000133	0.00044	0.10	0.0949	0.0957	0.0956	0.085 to 0.115	94.9	70 to 130	0.886	20
AW03829	Molybdenum, Total	mg/L	0.00000248	0.0044	0.10	0.140	0.140	0.0964	0.085 to 0.115	96.7	70 to 130	0.0532	20
AW03829	Selenium, Total	mg/L	0.0000531	0.0044	0.10	0.0992	0.100	0.101	0.085 to 0.115	99.2	70 to 130	0.938	20
AW03829	Arsenic, Total	mg/L	0.00000532	0.0022	0.10	0.100	0.100	0.0993	0.085 to 0.115	100	70 to 130	0.186	20
AW03829	Thallium, Total	mg/L	0.00000412	0.00044	0.10	0.0968	0.0972	0.0946	0.085 to 0.115	96.8	70 to 130	0.422	20
AW03829	Boron, Total	mg/L	0.0170	0.044	1.00	1.39	2.10	0.993	0.85 to 1.15	110	70 to 130	40.8	20
AW03829	Cobalt, Total	mg/L	-0.000000462	0.0044	0.10	0.0933	0.0935	0.0961	0.085 to 0.115	93.3	70 to 130	0.285	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, 2017

Comments: Precision and Recovery for both Calcium and Boron are out of range.
Spike amount is less than 30% of sample amount for Ca.
Boron was run for confirmation, matrix does not affect analyte concentration.
SGC 9/22/16
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

Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Feb-16
Customer ID:
Delivery Date: 17-Feb-16

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AW03829

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW03829	Solids, Dissolved	mg/L	-6	25			284	41.0	40 to 60			3.65	5
AW03824	Sulfate, Total	mg/L	0.00	1.0	20.0	62.3	44.6	18.5	18 to 22	88.5	80 to 120	0.00	20
AW03824	Chloride, Total	mg/L	0.00	0.25	10.0	25.6	15.6	9.70	9 to 11	100	80 to 120	0.00	20
AW03824	Fluoride, Total	mg/L	0.00	0.3	2.0	2.46	0.152	2.03	1.8 to 2.2	116	80 to 120	1.32	20

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Expiration: June 30, 2017

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

CC:

Reported: 6/7/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AW04059

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0455	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	3/3/2016	EPA 200.7		1.015	0.02	0.1		2.12	mg/L
* Calcium, Total	HRG	3/4/2016	EPA 200.7		10.15	1.0	5.0		128	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/23/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000639	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/23/2016	SM 2540C		1		100		640	mg/L
* Chloride, Total	SES	2/20/2016	EPA 300.0		1	0.04	0.25		31.8	mg/L
* Fluoride, Total	SES	2/20/2016	EPA 300.0		1	0.01	0.3	J	0.17	mg/L
* Sulfate, Total	SES	2/21/2016	EPA 300.0		4	1.2	4		132	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

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

Reported: 6/7/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AW04059

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04069	Lithium, Total	mg/L	0.0000249	0.022	0.200	0.251	0.259	0.206	0.17 to 0.23	126	70 to 130	3.14	20
AW04069	Cobalt, Total	mg/L	-0.000109	0.0044	0.10	0.148	0.148	0.104	0.085 to 0.115	108	70 to 130	0.00649	20
AW04069	Boron, Total	mg/L	0.00882	0.044	1.000	1.22	1.27	1.00	0.85 to 1.15	100	70 to 130	4.02	20
AW04069	Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.104	0.103	0.0961	0.085 to 0.115	104	70 to 130	1.36	20
AW04069	Chromium, Total	mg/L	0.0000668	0.0044	0.10	0.105	0.104	0.101	0.085 to 0.115	105	70 to 130	0.770	20
AW04069	Antimony, Total	mg/L	0.0000742	0.00132	0.10	0.0952	0.0942	0.0870	0.085 to 0.115	95.2	70 to 130	1.01	20
AW04069	Thallium, Total	mg/L	0.0000558	0.00044	0.10	0.103	0.103	0.0999	0.085 to 0.115	102	70 to 130	0.282	20
AW04069	Barium, Total	mg/L	0.0000177	0.0044	0.10	0.131	0.131	0.0870	0.085 to 0.115	94.6	70 to 130	0.440	20
AW04069	Lead, Total	mg/L	0.0000602	0.0022	0.10	0.101	0.101	0.101	0.085 to 0.115	101	70 to 130	0.234	20
AW04069	Selenium, Total	mg/L	0.0000444	0.0044	0.10	0.101	0.101	0.110	0.085 to 0.115	98.2	70 to 130	0.309	20
AW04069	Beryllium, Total	mg/L	0.0000277	0.00132	0.10	0.110	0.108	0.109	0.085 to 0.115	110	70 to 130	2.15	20
AW04069	Molybdenum, Total	mg/L	0.0000241	0.0044	0.10	0.109	0.108	0.105	0.085 to 0.115	109	70 to 130	0.568	20
AW04059	Mercury, Total by CVAA	mg/L	0.00011	0.0005	0.004	0.00393	0.00394	0.0039	0.0034 to 0.0046	98.2	70 to 130	0.254	20
AW04069	Arsenic, Total	mg/L	0.0000116	0.0022	0.10	0.119	0.118	0.108	0.085 to 0.115	101	70 to 130	0.564	20
AW04069	Calcium, Total	mg/L	0.000343	0.22	5.0	206.1	203.6	5.18	4.25 to 5.75	42.0	70 to 130	1.22	20

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Laboratory certification ID: E571114
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Expiration: June 30, 2017

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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

Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AW04059

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04066	Fluoride, Total	mg/L	0.00	0.3	2.0	2.19	0.00	2.03	1.8 to 2.2	109	80 to 120	200	20
AW04066	Chloride, Total	mg/L	0.00	0.25	10.0	9.83	0.00	9.67	9 to 11	98.3	80 to 120	0	20
AW04066	Sulfate, Total	mg/L	0.00	1.0	20.0	18.8	0.00	18.5	18 to 22	94.0	80 to 120	0	20
AW04069	Solids, Dissolved	mg/L	-19	25			1540	52.0	40 to 60			0.325	5

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Expiration: June 30, 2017

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

CC:

Reported: 6/7/2017
Version: 2.0

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AW04060

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0772	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	3/3/2016	EPA 200.7		1.015	0.02	0.1		0.503	mg/L
* Calcium, Total	HRG	3/4/2016	EPA 200.7		10.15	1.0	5.0		158	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/25/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000420	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/23/2016	SM 2540C		1		100		892	mg/L
* Chloride, Total	SES	2/20/2016	EPA 300.0		1	0.04	0.25		62.7	mg/L
* Fluoride, Total	SES	2/20/2016	EPA 300.0		1	0.01	0.3	J	0.07	mg/L
* Sulfate, Total	SES	2/21/2016	EPA 300.0		8	2.4	8		311	mg/L

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Laboratory certification ID: E571114
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Expiration: June 30, 2017

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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
Difference between the last two consecutive final weights for TDS
resulted in 1.4mg, which is above the required 0.5mg limit.

Reported: 6/7/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AW04060

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04070	Mercury, Total by CVAA	mg/L	0	0.0005	0.004	0.00376	0.00382	0.0038	0.0034 to 0.0046	94.0	70 to 130	1.58	20
AW04060	Antimony, Total	mg/L	0.0000829	0.00132	0.10	0.0884	0.0903	0.0903	0.085 to 0.115	88.4	70 to 130	2.13	20
AW04060	Selenium, Total	mg/L	0.0000525	0.0044	0.10	0.0987	0.102	0.105	0.085 to 0.115	98.7	70 to 130	3.63	20
AW04060	Thallium, Total	mg/L	0.0000783	0.00044	0.10	0.0924	0.0974	0.0922	0.085 to 0.115	92.0	70 to 130	5.21	20
AW04060	Arsenic, Total	mg/L	0.0000170	0.0022	0.10	0.0930	0.0962	0.0939	0.085 to 0.115	93.0	70 to 130	3.35	20
AW04060	Lead, Total	mg/L	0.0000768	0.0022	0.10	0.0936	0.0973	0.0930	0.085 to 0.115	93.6	70 to 130	3.82	20
AW04069	Calcium, Total	mg/L	0.000343	0.22	5.0	206.1	203.6	5.18	4.25 to 5.75	42.0	70 to 130	1.22	20
AW04060	Cadmium, Total	mg/L	-0.0000109	0.00044	0.10	0.0899	0.0921	0.0908	0.085 to 0.115	89.9	70 to 130	2.38	20
AW04069	Lithium, Total	mg/L	0.0000249	0.022	0.200	0.251	0.259	0.206	0.17 to 0.23	126	70 to 130	3.14	20
AW04060	Barium, Total	mg/L	0.0000255	0.0044	0.10	0.162	0.168	0.0892	0.085 to 0.115	84.8	70 to 130	3.41	20
AW04060	Chromium, Total	mg/L	0.0000498	0.0044	0.10	0.0929	0.0961	0.0951	0.085 to 0.115	92.9	70 to 130	3.31	20
AW04060	Cobalt, Total	mg/L	-0.000113	0.0044	0.10	0.0970	0.0997	0.0980	0.085 to 0.115	97.0	70 to 130	2.76	20
AW04060	Molybdenum, Total	mg/L	0.0000301	0.0044	0.10	0.0945	0.0960	0.0956	0.085 to 0.115	94.5	70 to 130	1.58	20
AW04060	Beryllium, Total	mg/L	0.0000185	0.00132	0.10	0.0916	0.0965	0.0980	0.085 to 0.115	91.6	70 to 130	5.17	20
AW04069	Boron, Total	mg/L	0.00882	0.044	1.000	1.22	1.27	1.00	0.85 to 1.15	100	70 to 130	4.02	20

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Laboratory certification ID: E571114
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Expiration: June 30, 2017

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
Difference between the last two consecutive final weights for TDS
resulted in 1.4mg, which is above the required 0.5mg limit.

Reported: 6/7/2017
Version: 2.0

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

Batch QC Summary

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AW04060

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04066	Fluoride, Total	mg/L	0.00	0.3	2.0	2.19	0.00	2.03	1.8 to 2.2	109	80 to 120	200	20
AW04066	Chloride, Total	mg/L	0.00	0.25	10.0	9.83	0.00	9.67	9 to 11	98.3	80 to 120	0	20
AW04066	Sulfate, Total	mg/L	0.00	1.0	20.0	18.8	0.00	18.5	18 to 22	94.0	80 to 120	0	20
AW04069	Solids, Dissolved	mg/L	-19	25			1540	52.0	40 to 60			0.325	5

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Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17
Difference between the last two consecutive final weights for TDS
resulted in 1.4mg, which is above the required 0.5mg limit.

CC:

Reported: 6/7/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AW04061

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	J	0.00437	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.105	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	3/3/2016	EPA 200.7		1.015	0.02	0.1		0.581	mg/L
* Calcium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.1	0.5		18.6	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0504	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/25/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.01	0.05		0.0777	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	J	0.00651	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000869	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/23/2016	SM 2540C		1		25		158	mg/L
* Chloride, Total	SES	2/20/2016	EPA 300.0		1	0.04	0.25		16.6	mg/L
* Fluoride, Total	SES	2/20/2016	EPA 300.0		1	0.01	0.3	J	0.11	mg/L
* Sulfate, Total	SES	2/20/2016	EPA 300.0		1	0.3	1		40.2	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

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

Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AW04061

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04069	Lithium, Total	mg/L	0.0000249	0.022	0.200	0.251	0.259	0.206	0.17 to 0.23	126	70 to 130	3.14	20
AW04069	Cobalt, Total	mg/L	-0.000109	0.0044	0.10	0.148	0.148	0.104	0.085 to 0.115	108	70 to 130	0.00649	20
AW04069	Arsenic, Total	mg/L	0.0000116	0.0022	0.10	0.119	0.118	0.108	0.085 to 0.115	101	70 to 130	0.564	20
AW04069	Calcium, Total	mg/L	0.000343	0.22	5.0	206.1	203.6	5.18	4.25 to 5.75	42.0	70 to 130	1.22	20
AW04069	Boron, Total	mg/L	0.00882	0.044	1.000	1.22	1.27	1.00	0.85 to 1.15	100	70 to 130	4.02	20
AW04069	Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.104	0.103	0.0961	0.085 to 0.115	104	70 to 130	1.36	20
AW04069	Chromium, Total	mg/L	0.0000668	0.0044	0.10	0.105	0.104	0.101	0.085 to 0.115	105	70 to 130	0.770	20
AW04069	Antimony, Total	mg/L	0.0000742	0.00132	0.10	0.0952	0.0942	0.0870	0.085 to 0.115	95.2	70 to 130	1.01	20
AW04069	Thallium, Total	mg/L	0.0000558	0.00044	0.10	0.103	0.103	0.0999	0.085 to 0.115	102	70 to 130	0.282	20
AW04070	Mercury, Total by CVAA	mg/L	0	0.0005	0.004	0.00376	0.00382	0.0038	0.0034 to 0.0046	94.0	70 to 130	1.58	20
AW04069	Beryllium, Total	mg/L	0.0000277	0.00132	0.10	0.110	0.108	0.109	0.085 to 0.115	110	70 to 130	2.15	20
AW04069	Molybdenum, Total	mg/L	0.0000241	0.0044	0.10	0.109	0.108	0.105	0.085 to 0.115	109	70 to 130	0.568	20
AW04069	Barium, Total	mg/L	0.0000177	0.0044	0.10	0.131	0.131	0.0870	0.085 to 0.115	94.6	70 to 130	0.440	20
AW04069	Lead, Total	mg/L	0.0000602	0.0022	0.10	0.101	0.101	0.101	0.085 to 0.115	101	70 to 130	0.234	20
AW04069	Selenium, Total	mg/L	0.0000444	0.0044	0.10	0.101	0.101	0.110	0.085 to 0.115	98.2	70 to 130	0.309	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

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The RL has now been corrected. SGC 1/19/17
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AW04061

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04066	Fluoride, Total	mg/L	0.00	0.3	2.0	2.19	0.00	2.03	1.8 to 2.2	109	80 to 120	200	20
AW04066	Chloride, Total	mg/L	0.00	0.25	10.0	9.83	0.00	9.67	9 to 11	98.3	80 to 120	0	20
AW04066	Sulfate, Total	mg/L	0.00	1.0	20.0	18.8	0.00	18.5	18 to 22	94.0	80 to 120	0	20
AW04069	Solids, Dissolved	mg/L	-19	25			1540	52.0	40 to 60			0.325	5

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

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: 6/7/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AW04063

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005		0.353	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.397	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	3/3/2016	EPA 200.7		1.015	0.02	0.1		0.478	mg/L
* Calcium, Total	HRG	3/4/2016	EPA 200.7		10.15	1.0	5.0		59.8	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0216	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/25/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.01	0.05		0.0883	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	J	0.00347	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000779	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/23/2016	SM 2540C		1		50		238	mg/L
* Chloride, Total	SES	2/20/2016	EPA 300.0		1	0.04	0.25		16.4	mg/L
* Fluoride, Total	SES	2/20/2016	EPA 300.0		1	0.01	0.3	J	0.22	mg/L
* Sulfate, Total	SES	2/20/2016	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, 2017

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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

Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AW04063

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04069	Lithium, Total	mg/L	0.0000249	0.022	0.200	0.251	0.259	0.206	0.17 to 0.23	126	70 to 130	3.14	20
AW04069	Cobalt, Total	mg/L	-0.000109	0.0044	0.10	0.148	0.148	0.104	0.085 to 0.115	108	70 to 130	0.00649	20
AW04069	Boron, Total	mg/L	0.00882	0.044	1.000	1.22	1.27	1.00	0.85 to 1.15	100	70 to 130	4.02	20
AW04069	Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.104	0.103	0.0961	0.085 to 0.115	104	70 to 130	1.36	20
AW04069	Chromium, Total	mg/L	0.0000668	0.0044	0.10	0.105	0.104	0.101	0.085 to 0.115	105	70 to 130	0.770	20
AW04069	Antimony, Total	mg/L	0.0000742	0.00132	0.10	0.0952	0.0942	0.0870	0.085 to 0.115	95.2	70 to 130	1.01	20
AW04069	Thallium, Total	mg/L	0.0000558	0.00044	0.10	0.103	0.103	0.0999	0.085 to 0.115	102	70 to 130	0.282	20
AW04070	Mercury, Total by CVAA	mg/L	0	0.0005	0.004	0.00376	0.00382	0.0038	0.0034 to 0.0046	94.0	70 to 130	1.58	20
AW04069	Arsenic, Total	mg/L	0.0000116	0.0022	0.10	0.119	0.118	0.108	0.085 to 0.115	101	70 to 130	0.564	20
AW04069	Calcium, Total	mg/L	0.000343	0.22	5.0	206.1	203.6	5.18	4.25 to 5.75	42.0	70 to 130	1.22	20
AW04069	Beryllium, Total	mg/L	0.0000277	0.00132	0.10	0.110	0.108	0.109	0.085 to 0.115	110	70 to 130	2.15	20
AW04069	Molybdenum, Total	mg/L	0.0000241	0.0044	0.10	0.109	0.108	0.105	0.085 to 0.115	109	70 to 130	0.568	20
AW04069	Barium, Total	mg/L	0.0000177	0.0044	0.10	0.131	0.131	0.0870	0.085 to 0.115	94.6	70 to 130	0.440	20
AW04069	Lead, Total	mg/L	0.0000602	0.0022	0.10	0.101	0.101	0.101	0.085 to 0.115	101	70 to 130	0.234	20
AW04069	Selenium, Total	mg/L	0.0000444	0.0044	0.10	0.101	0.101	0.110	0.085 to 0.115	98.2	70 to 130	0.309	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

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

Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AW04063

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04066	Fluoride, Total	mg/L	0.00	0.3	2.0	2.19	0.00	2.03	1.8 to 2.2	109	80 to 120	200	20
AW04066	Chloride, Total	mg/L	0.00	0.25	10.0	9.83	0.00	9.67	9 to 11	98.3	80 to 120	0	20
AW04066	Sulfate, Total	mg/L	0.00	1.0	20.0	18.8	0.00	18.5	18 to 22	94.0	80 to 120	0	20
AW04069	Solids, Dissolved	mg/L	-19	25			1540	52.0	40 to 60			0.325	5

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Expiration: June 30, 2017

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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

CC:

Reported: 6/7/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW04064

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	3/3/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/25/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000569	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/23/2016	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	2/20/2016	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	2/20/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	2/20/2016	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, 2017

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L.
The RL has now been corrected.
The result for TDS is now Not Detected. SGC 1/19/17
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17
Difference between the last two consecutive final weights for TDS
resulted in 1.1mg, which is above the required 0.5mg limit.

Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW04064

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04069	Lithium, Total	mg/L	0.0000249	0.022	0.200	0.251	0.259	0.206	0.17 to 0.23	126	70 to 130	3.14	20
AW04069	Cobalt, Total	mg/L	-0.000109	0.0044	0.10	0.148	0.148	0.104	0.085 to 0.115	108	70 to 130	0.00649	20
AW04069	Boron, Total	mg/L	0.00882	0.044	1.000	1.22	1.27	1.00	0.85 to 1.15	100	70 to 130	4.02	20
AW04069	Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.104	0.103	0.0961	0.085 to 0.115	104	70 to 130	1.36	20
AW04069	Chromium, Total	mg/L	0.0000668	0.0044	0.10	0.105	0.104	0.101	0.085 to 0.115	105	70 to 130	0.770	20
AW04069	Beryllium, Total	mg/L	0.0000277	0.00132	0.10	0.110	0.108	0.109	0.085 to 0.115	110	70 to 130	2.15	20
AW04069	Molybdenum, Total	mg/L	0.0000241	0.0044	0.10	0.109	0.108	0.105	0.085 to 0.115	109	70 to 130	0.568	20
AW04069	Arsenic, Total	mg/L	0.0000116	0.0022	0.10	0.119	0.118	0.108	0.085 to 0.115	101	70 to 130	0.564	20
AW04069	Calcium, Total	mg/L	0.000343	0.22	5.0	206.1	203.6	5.18	4.25 to 5.75	42.0	70 to 130	1.22	20
AW04069	Antimony, Total	mg/L	0.0000742	0.00132	0.10	0.0952	0.0942	0.0870	0.085 to 0.115	95.2	70 to 130	1.01	20
AW04069	Thallium, Total	mg/L	0.0000558	0.00044	0.10	0.103	0.103	0.0999	0.085 to 0.115	102	70 to 130	0.282	20
AW04070	Mercury, Total by CVAA	mg/L	0	0.0005	0.004	0.00376	0.00382	0.0038	0.0034 to 0.0046	94.0	70 to 130	1.58	20
AW04069	Barium, Total	mg/L	0.0000177	0.0044	0.10	0.131	0.131	0.0870	0.085 to 0.115	94.6	70 to 130	0.440	20
AW04069	Lead, Total	mg/L	0.0000602	0.0022	0.10	0.101	0.101	0.101	0.085 to 0.115	101	70 to 130	0.234	20
AW04069	Selenium, Total	mg/L	0.0000444	0.0044	0.10	0.101	0.101	0.110	0.085 to 0.115	98.2	70 to 130	0.309	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, 2017

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L.
The RL has now been corrected.
The result for TDS is now Not Detected. SGC 1/19/17
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17
Difference between the last two consecutive final weights for TDS
resulted in 1.1mg, which is above the required 0.5mg limit.

Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW04064

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04066	Fluoride, Total	mg/L	0.00	0.3	2.0	2.19	0.00	2.03	1.8 to 2.2	109	80 to 120	200	20
AW04066	Chloride, Total	mg/L	0.00	0.25	10.0	9.83	0.00	9.67	9 to 11	98.3	80 to 120	0	20
AW04066	Sulfate, Total	mg/L	0.00	1.0	20.0	18.8	0.00	18.5	18 to 22	94.0	80 to 120	0	20
AW04069	Solids, Dissolved	mg/L	-19	25			1540	52.0	40 to 60			0.325	5

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Difference between the last two consecutive final weights for TDS
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CC:

Reported: 6/7/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AW04065

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005		0.177	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0402	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	3/3/2016	EPA 200.7		1.015	0.02	0.1		1.66	mg/L
* Calcium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.1	0.5		30.7	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0101	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/25/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.01	0.05		0.612	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0660	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000670	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/23/2016	SM 2540C		1		50		328	mg/L
* Chloride, Total	SES	2/20/2016	EPA 300.0		1	0.04	0.25		14.6	mg/L
* Fluoride, Total	SES	2/20/2016	EPA 300.0		1	0.01	0.3		0.53	mg/L
* Sulfate, Total	SES	2/20/2016	EPA 300.0		1	0.3	1		72.3	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

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Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17
Difference between the last two consecutive final weights for TDS
resulted in 1.6mg, which is above the required 0.5mg limit.

Reported: 6/7/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AW04065

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04069	Cobalt, Total	mg/L	-0.000109	0.0044	0.10	0.148	0.148	0.104	0.085 to 0.115	108	70 to 130	0.00649	20
AW04069	Lithium, Total	mg/L	0.0000249	0.022	0.200	0.251	0.259	0.206	0.17 to 0.23	126	70 to 130	3.14	20
AW04069	Arsenic, Total	mg/L	0.0000116	0.0022	0.10	0.119	0.118	0.108	0.085 to 0.115	101	70 to 130	0.564	20
AW04069	Calcium, Total	mg/L	0.000343	0.22	5.0	206.1	203.6	5.18	4.25 to 5.75	42.0	70 to 130	1.22	20
AW04069	Antimony, Total	mg/L	0.0000742	0.00132	0.10	0.0952	0.0942	0.0870	0.085 to 0.115	95.2	70 to 130	1.01	20
AW04069	Thallium, Total	mg/L	0.0000558	0.00044	0.10	0.103	0.103	0.0999	0.085 to 0.115	102	70 to 130	0.282	20
AW04070	Mercury, Total by CVAA	mg/L	0	0.0005	0.004	0.00376	0.00382	0.0038	0.0034 to 0.0046	94.0	70 to 130	1.58	20
AW04069	Beryllium, Total	mg/L	0.0000277	0.00132	0.10	0.110	0.108	0.109	0.085 to 0.115	110	70 to 130	2.15	20
AW04069	Molybdenum, Total	mg/L	0.0000241	0.0044	0.10	0.109	0.108	0.105	0.085 to 0.115	109	70 to 130	0.568	20
AW04069	Barium, Total	mg/L	0.0000177	0.0044	0.10	0.131	0.131	0.0870	0.085 to 0.115	94.6	70 to 130	0.440	20
AW04069	Lead, Total	mg/L	0.0000602	0.0022	0.10	0.101	0.101	0.101	0.085 to 0.115	101	70 to 130	0.234	20
AW04069	Selenium, Total	mg/L	0.0000444	0.0044	0.10	0.101	0.101	0.110	0.085 to 0.115	98.2	70 to 130	0.309	20
AW04069	Boron, Total	mg/L	0.00882	0.044	1.000	1.22	1.27	1.00	0.85 to 1.15	100	70 to 130	4.02	20
AW04069	Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.104	0.103	0.0961	0.085 to 0.115	104	70 to 130	1.36	20
AW04069	Chromium, Total	mg/L	0.0000668	0.0044	0.10	0.105	0.104	0.101	0.085 to 0.115	105	70 to 130	0.770	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

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Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AW04065

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04066	Fluoride, Total	mg/L	0.00	0.3	2.0	2.19	0.00	2.03	1.8 to 2.2	109	80 to 120	200	20
AW04066	Chloride, Total	mg/L	0.00	0.25	10.0	9.83	0.00	9.67	9 to 11	98.3	80 to 120	0	20
AW04066	Sulfate, Total	mg/L	0.00	1.0	20.0	18.8	0.00	18.5	18 to 22	94.0	80 to 120	0	20
AW04069	Solids, Dissolved	mg/L	-19	25			1540	52.0	40 to 60			0.325	5

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CC:

Reported: 6/7/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW04066

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	3/3/2016	EPA 200.7		1.015	0.02	0.1	J	0.0231	mg/L
* Calcium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/25/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000703	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/23/2016	SM 2540C		1		25		35.0	mg/L
* Chloride, Total	SES	2/20/2016	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	2/23/2016	EPA 300.0		1	0.01	0.3	J	0.01	mg/L
* Sulfate, Total	SES	2/23/2016	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, 2017

Comments: Precision for Fluoride is out of range.
Fluoride sample result is an estimate. SGC 9/22/16
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
Difference between the last two consecutive final weights for TDS
resulted in 1.4mg, which is above the required 0.5mg limit.

Reported: 6/7/2017
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

Alabama Power

Corrected Copy

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW04066

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04069	Cobalt, Total	mg/L	-0.000109	0.0044	0.10	0.148	0.148	0.104	0.085 to 0.115	108	70 to 130	0.00649	20
AW04069	Lithium, Total	mg/L	0.0000249	0.022	0.200	0.251	0.259	0.206	0.17 to 0.23	126	70 to 130	3.14	20
AW04069	Beryllium, Total	mg/L	0.0000277	0.00132	0.10	0.110	0.108	0.109	0.085 to 0.115	110	70 to 130	2.15	20
AW04069	Molybdenum, Total	mg/L	0.0000241	0.0044	0.10	0.109	0.108	0.105	0.085 to 0.115	109	70 to 130	0.568	20
AW04069	Barium, Total	mg/L	0.0000177	0.0044	0.10	0.131	0.131	0.0870	0.085 to 0.115	94.6	70 to 130	0.440	20
AW04069	Lead, Total	mg/L	0.0000602	0.0022	0.10	0.101	0.101	0.101	0.085 to 0.115	101	70 to 130	0.234	20
AW04069	Selenium, Total	mg/L	0.0000444	0.0044	0.10	0.101	0.101	0.110	0.085 to 0.115	98.2	70 to 130	0.309	20
AW04069	Arsenic, Total	mg/L	0.0000116	0.0022	0.10	0.119	0.118	0.108	0.085 to 0.115	101	70 to 130	0.564	20
AW04069	Calcium, Total	mg/L	0.000343	0.22	5.0	206.1	203.6	5.18	4.25 to 5.75	42.0	70 to 130	1.22	20
AW04069	Antimony, Total	mg/L	0.0000742	0.00132	0.10	0.0952	0.0942	0.0870	0.085 to 0.115	95.2	70 to 130	1.01	20
AW04069	Thallium, Total	mg/L	0.0000558	0.00044	0.10	0.103	0.103	0.0999	0.085 to 0.115	102	70 to 130	0.282	20
AW04070	Mercury, Total by CVAA	mg/L	0	0.0005	0.004	0.00376	0.00382	0.0038	0.0034 to 0.0046	94.0	70 to 130	1.58	20
AW04069	Boron, Total	mg/L	0.00882	0.044	1.000	1.22	1.27	1.00	0.85 to 1.15	100	70 to 130	4.02	20
AW04069	Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.104	0.103	0.0961	0.085 to 0.115	104	70 to 130	1.36	20
AW04069	Chromium, Total	mg/L	0.0000668	0.0044	0.10	0.105	0.104	0.101	0.085 to 0.115	105	70 to 130	0.770	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

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CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L.
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Difference between the last two consecutive final weights for TDS
resulted in 1.4mg, which is above the required 0.5mg limit.

Reported: 6/7/2017
Version: 2.0

Alabama Power General Test Laboratory
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Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW04066

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04066	Fluoride, Total	mg/L	0.00	0.3	2.0	2.19	0.00	2.03	1.8 to 2.2	109	80 to 120	200	20
AW04066	Chloride, Total	mg/L	0.00	0.25	10.0	9.83	0.00	9.67	9 to 11	98.3	80 to 120	0	20
AW04066	Sulfate, Total	mg/L	0.00	1.0	20.0	18.8	0.00	18.5	18 to 22	94.0	80 to 120	0	20
AW04069	Solids, Dissolved	mg/L	-19	25			1540	52.0	40 to 60			0.325	5

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CC:

Reported: 6/7/2017
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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AW04067

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0220	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	3/3/2016	EPA 200.7		1.015	0.02	0.1		0.454	mg/L
* Calcium, Total	HRG	3/4/2016	EPA 200.7		10.15	1.0	5.0		47.7	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0169	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/25/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.01	0.05		0.806	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000697	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/23/2016	SM 2540C		1		50		408	mg/L
* Chloride, Total	SES	2/20/2016	EPA 300.0		1	0.04	0.25		11.8	mg/L
* Fluoride, Total	SES	2/20/2016	EPA 300.0		1	0.01	0.3	J	0.09	mg/L
* Sulfate, Total	SES	2/22/2016	EPA 300.0		4	1.2	4		187	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, 2017

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. Result for Cd has been corrected to Not Detected. SGC 3/17/17
Difference between the last two consecutive final weights for TDS resulted in 1.5mg, which is above the required 0.5mg limit.

Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AW04067

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04069	Cobalt, Total	mg/L	-0.000109	0.0044	0.10	0.148	0.148	0.104	0.085 to 0.115	108	70 to 130	0.00649	20
AW04069	Lithium, Total	mg/L	0.0000249	0.022	0.200	0.251	0.259	0.206	0.17 to 0.23	126	70 to 130	3.14	20
AW04069	Boron, Total	mg/L	0.00882	0.044	1.000	1.22	1.27	1.00	0.85 to 1.15	100	70 to 130	4.02	20
AW04069	Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.104	0.103	0.0961	0.085 to 0.115	104	70 to 130	1.36	20
AW04069	Chromium, Total	mg/L	0.0000668	0.0044	0.10	0.105	0.104	0.101	0.085 to 0.115	105	70 to 130	0.770	20
AW04069	Beryllium, Total	mg/L	0.0000277	0.00132	0.10	0.110	0.108	0.109	0.085 to 0.115	110	70 to 130	2.15	20
AW04069	Molybdenum, Total	mg/L	0.0000241	0.0044	0.10	0.109	0.108	0.105	0.085 to 0.115	109	70 to 130	0.568	20
AW04069	Antimony, Total	mg/L	0.0000742	0.00132	0.10	0.0952	0.0942	0.0870	0.085 to 0.115	95.2	70 to 130	1.01	20
AW04069	Thallium, Total	mg/L	0.0000558	0.00044	0.10	0.103	0.103	0.0999	0.085 to 0.115	102	70 to 130	0.282	20
AW04070	Mercury, Total by CVAA	mg/L	0	0.0005	0.004	0.00376	0.00382	0.0038	0.0034 to 0.0046	94.0	70 to 130	1.58	20
AW04069	Arsenic, Total	mg/L	0.0000116	0.0022	0.10	0.119	0.118	0.108	0.085 to 0.115	101	70 to 130	0.564	20
AW04069	Calcium, Total	mg/L	0.000343	0.22	5.0	206.1	203.6	5.18	4.25 to 5.75	42.0	70 to 130	1.22	20
AW04069	Barium, Total	mg/L	0.0000177	0.0044	0.10	0.131	0.131	0.0870	0.085 to 0.115	94.6	70 to 130	0.440	20
AW04069	Lead, Total	mg/L	0.0000602	0.0022	0.10	0.101	0.101	0.101	0.085 to 0.115	101	70 to 130	0.234	20
AW04069	Selenium, Total	mg/L	0.0000444	0.0044	0.10	0.101	0.101	0.110	0.085 to 0.115	98.2	70 to 130	0.309	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

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The RL has now been corrected. SGC 1/19/17
Cadmium MDL was increased from 0.0001 to 0.0002. Result for Cd has been corrected to Not Detected. SGC 3/17/17
Difference between the last two consecutive final weights for TDS resulted in 1.5mg, which is above the required 0.5mg limit.

Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AW04067

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04066	Fluoride, Total	mg/L	0.00	0.3	2.0	2.19	0.00	2.03	1.8 to 2.2	109	80 to 120	200	20
AW04066	Chloride, Total	mg/L	0.00	0.25	10.0	9.83	0.00	9.67	9 to 11	98.3	80 to 120	0	20
AW04066	Sulfate, Total	mg/L	0.00	1.0	20.0	18.8	0.00	18.5	18 to 22	94.0	80 to 120	0	20
AW04069	Solids, Dissolved	mg/L	-19	25			1540	52.0	40 to 60			0.325	5

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Cadmium MDL was increased from 0.0001 to 0.0002. Result for Cd has been corrected to Not Detected. SGC 3/17/17
Difference between the last two consecutive final weights for TDS resulted in 1.5mg, which is above the required 0.5mg limit.

CC:

Reported: 6/7/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-15 dup

Laboratory ID Number: AW04068

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0232	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	3/3/2016	EPA 200.7		1.015	0.02	0.1		0.454	mg/L
* Calcium, Total	HRG	3/4/2016	EPA 200.7		10.15	1.0	5.0		47.8	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0165	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/25/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.01	0.05		0.809	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000663	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/23/2016	SM 2540C		1		50		384	mg/L
* Chloride, Total	SES	2/20/2016	EPA 300.0		1	0.04	0.25		11.8	mg/L
* Fluoride, Total	SES	2/20/2016	EPA 300.0		1	0.01	0.3	J	0.10	mg/L
* Sulfate, Total	SES	2/22/2016	EPA 300.0		4	1.2	4		186	mg/L

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Expiration: June 30, 2017

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
Difference between the last two consecutive final weights for TDS
resulted in 1.8mg, which is above the required 0.5mg limit.

Reported: 6/7/2017
Version: 2.0

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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-15 dup

Laboratory ID Number: AW04068

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04069	Cobalt, Total	mg/L	-0.000109	0.0044	0.10	0.148	0.148	0.104	0.085 to 0.115	108	70 to 130	0.00649	20
AW04069	Lithium, Total	mg/L	0.0000249	0.022	0.200	0.251	0.259	0.206	0.17 to 0.23	126	70 to 130	3.14	20
AW04069	Arsenic, Total	mg/L	0.0000116	0.0022	0.10	0.119	0.118	0.108	0.085 to 0.115	101	70 to 130	0.564	20
AW04069	Calcium, Total	mg/L	0.000343	0.22	5.0	206.1	203.6	5.18	4.25 to 5.75	42.0	70 to 130	1.22	20
AW04069	Antimony, Total	mg/L	0.0000742	0.00132	0.10	0.0952	0.0942	0.0870	0.085 to 0.115	95.2	70 to 130	1.01	20
AW04069	Thallium, Total	mg/L	0.0000558	0.00044	0.10	0.103	0.103	0.0999	0.085 to 0.115	102	70 to 130	0.282	20
AW04070	Mercury, Total by CVAA	mg/L	0	0.0005	0.004	0.00376	0.00382	0.0038	0.0034 to 0.0046	94.0	70 to 130	1.58	20
AW04069	Barium, Total	mg/L	0.0000177	0.0044	0.10	0.131	0.131	0.0870	0.085 to 0.115	94.6	70 to 130	0.440	20
AW04069	Lead, Total	mg/L	0.0000602	0.0022	0.10	0.101	0.101	0.101	0.085 to 0.115	101	70 to 130	0.234	20
AW04069	Selenium, Total	mg/L	0.0000444	0.0044	0.10	0.101	0.101	0.110	0.085 to 0.115	98.2	70 to 130	0.309	20
AW04069	Boron, Total	mg/L	0.00882	0.044	1.000	1.22	1.27	1.00	0.85 to 1.15	100	70 to 130	4.02	20
AW04069	Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.104	0.103	0.0961	0.085 to 0.115	104	70 to 130	1.36	20
AW04069	Chromium, Total	mg/L	0.0000668	0.0044	0.10	0.105	0.104	0.101	0.085 to 0.115	105	70 to 130	0.770	20
AW04069	Beryllium, Total	mg/L	0.0000277	0.00132	0.10	0.110	0.108	0.109	0.085 to 0.115	110	70 to 130	2.15	20
AW04069	Molybdenum, Total	mg/L	0.0000241	0.0044	0.10	0.109	0.108	0.105	0.085 to 0.115	109	70 to 130	0.568	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

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
Difference between the last two consecutive final weights for TDS
resulted in 1.8mg, which is above the required 0.5mg limit.

Reported: 6/7/2017
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

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Lab & Field SERVICES

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To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-15 dup

Laboratory ID Number: AW04068

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04066	Fluoride, Total	mg/L	0.00	0.3	2.0	2.19	0.00	2.03	1.8 to 2.2	109	80 to 120	200	20
AW04066	Chloride, Total	mg/L	0.00	0.25	10.0	9.83	0.00	9.67	9 to 11	98.3	80 to 120	0	20
AW04066	Sulfate, Total	mg/L	0.00	1.0	20.0	18.8	0.00	18.5	18 to 22	94.0	80 to 120	0	20
AW04069	Solids, Dissolved	mg/L	-19	25			1540	52.0	40 to 60			0.325	5

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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
Difference between the last two consecutive final weights for TDS
resulted in 1.8mg, which is above the required 0.5mg limit.

CC:

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Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AW04069

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005		0.0181	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0364	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	3/3/2016	EPA 200.7		1.015	0.02	0.1		0.219	mg/L
* Calcium, Total	HRG	3/4/2016	EPA 200.7		20.3	2.0	10		204	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0395	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/25/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	J	0.00277	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000601	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/23/2016	SM 2540C		1		125		1540	mg/L
* Chloride, Total	SES	2/20/2016	EPA 300.0		1	0.04	0.25		16.0	mg/L
* Fluoride, Total	SES	2/20/2016	EPA 300.0		1	0.01	0.3	J	0.05	mg/L
* Sulfate, Total	SES	2/22/2016	EPA 300.0		10	3.0	10		785	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

Comments: Recovery for Calcium is out of range.
Spike amount is less than 30% of sample amount. SGC 9/22/16
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
Difference between the last two consecutive final weights for TDS
resulted in 2.3mg, which is above the required 0.5mg limit.

Reported: 6/7/2017
Version: 2.0

Alabama Power General Test Laboratory
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Batch QC Summary

Alabama Power

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Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AW04069

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04069	Lithium, Total	mg/L	0.0000249	0.022	0.200	0.251	0.259	0.206	0.17 to 0.23	126	70 to 130	3.14	20
AW04069	Cobalt, Total	mg/L	-0.000109	0.0044	0.10	0.148	0.148	0.104	0.085 to 0.115	108	70 to 130	0.00649	20
AW04069	Boron, Total	mg/L	0.00882	0.044	1.000	1.22	1.27	1.00	0.85 to 1.15	100	70 to 130	4.02	20
AW04069	Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.104	0.103	0.0961	0.085 to 0.115	104	70 to 130	1.36	20
AW04069	Chromium, Total	mg/L	0.0000668	0.0044	0.10	0.105	0.104	0.101	0.085 to 0.115	105	70 to 130	0.770	20
AW04069	Beryllium, Total	mg/L	0.0000277	0.00132	0.10	0.110	0.108	0.109	0.085 to 0.115	110	70 to 130	2.15	20
AW04069	Molybdenum, Total	mg/L	0.0000241	0.0044	0.10	0.109	0.108	0.105	0.085 to 0.115	109	70 to 130	0.568	20
AW04069	Antimony, Total	mg/L	0.0000742	0.00132	0.10	0.0952	0.0942	0.0870	0.085 to 0.115	95.2	70 to 130	1.01	20
AW04069	Thallium, Total	mg/L	0.0000558	0.00044	0.10	0.103	0.103	0.0999	0.085 to 0.115	102	70 to 130	0.282	20
AW04070	Mercury, Total by CVAA	mg/L	0	0.0005	0.004	0.00376	0.00382	0.0038	0.0034 to 0.0046	94.0	70 to 130	1.58	20
AW04069	Arsenic, Total	mg/L	0.0000116	0.0022	0.10	0.119	0.118	0.108	0.085 to 0.115	101	70 to 130	0.564	20
AW04069	Calcium, Total	mg/L	0.000343	0.22	5.0	206.1	203.6	5.18	4.25 to 5.75	42.0	70 to 130	1.22	20
AW04069	Barium, Total	mg/L	0.0000177	0.0044	0.10	0.131	0.131	0.0870	0.085 to 0.115	94.6	70 to 130	0.440	20
AW04069	Lead, Total	mg/L	0.0000602	0.0022	0.10	0.101	0.101	0.101	0.085 to 0.115	101	70 to 130	0.234	20
AW04069	Selenium, Total	mg/L	0.0000444	0.0044	0.10	0.101	0.101	0.110	0.085 to 0.115	98.2	70 to 130	0.309	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

Comments: Recovery for Calcium is out of range.
Spike amount is less than 30% of sample amount. SGC 9/22/16
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
Difference between the last two consecutive final weights for TDS
resulted in 2.3mg, which is above the required 0.5mg limit.

Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AW04069

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04069	Solids, Dissolved	mg/L	-19	25			1540	52.0	40 to 60			0.325	5
AW04078	Fluoride, Total	mg/L	0.00	0.3	2.0	2.02	0.020	2.02	1.8 to 2.2	100	80 to 120	0.00	20
AW04078	Chloride, Total	mg/L	0.00	0.25	10.0	32.7	22.9	9.75	9 to 11	98.0	80 to 120	0.00	20
AW04078	Sulfate, Total	mg/L	0.00	1.0	20.0	47.3	28.8	18.9	18 to 22	93.0	80 to 120	0.348	20

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CC:

Reported: 6/7/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AW04070

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005		0.0142	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0311	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	3/3/2016	EPA 200.7		1.015	0.02	0.1		0.146	mg/L
* Calcium, Total	HRG	3/3/2016	EPA 200.7		10.15	1.0	5.0		75.0	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	J	0.00989	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/25/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000388	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/23/2016	SM 2540C		1		50		516	mg/L
* Chloride, Total	SES	2/20/2016	EPA 300.0		1	0.04	0.25		14.7	mg/L
* Fluoride, Total	SES	2/20/2016	EPA 300.0		1	0.01	0.3	J	0.09	mg/L
* Sulfate, Total	SES	2/22/2016	EPA 300.0		5	1.5	5		304	mg/L

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Calera, AL 35040
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AW04070

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04078	Selenium, Total	mg/L	0.0000444	0.0044	0.10	0.104	0.103	0.110	0.085 to 0.115	104	70 to 130	1.31	20
AW04070	Mercury, Total by CVAA	mg/L	0	0.0005	0.004	0.00376	0.00382	0.0038	0.0034 to 0.0046	94.0	70 to 130	1.58	20
AW04078	Barium, Total	mg/L	0.0000177	0.0044	0.10	0.181	0.175	0.0870	0.085 to 0.115	91.5	70 to 130	2.92	20
AW04078	Boron, Total	mg/L	0.0108	0.044	1.000	1.16	1.14	1.01	0.85 to 1.15	107	70 to 130	1.74	20
AW04078	Arsenic, Total	mg/L	0.0000116	0.0022	0.10	0.104	0.101	0.108	0.085 to 0.115	104	70 to 130	2.47	20
AW04078	Cobalt, Total	mg/L	-0.000109	0.0044	0.10	0.116	0.114	0.104	0.085 to 0.115	109	70 to 130	1.81	20
AW04078	Antimony, Total	mg/L	0.0000742	0.00132	0.10	0.0928	0.0906	0.0870	0.085 to 0.115	92.8	70 to 130	2.34	20
AW04078	Lead, Total	mg/L	0.0000602	0.0022	0.10	0.101	0.0986	0.101	0.085 to 0.115	101	70 to 130	1.98	20
AW04078	Thallium, Total	mg/L	0.0000558	0.00044	0.10	0.103	0.101	0.0999	0.085 to 0.115	103	70 to 130	2.41	20
AW04078	Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.104	0.101	0.0961	0.085 to 0.115	104	70 to 130	2.12	20
AW04078	Lithium, Total	mg/L	0.0000278	0.022	0.200	0.224	0.225	0.208	0.17 to 0.23	112	70 to 130	0.445	20
AW04078	Beryllium, Total	mg/L	0.0000277	0.00132	0.10	0.112	0.107	0.109	0.085 to 0.115	112	70 to 130	4.65	20
AW04078	Calcium, Total	mg/L	0.000968	0.22	5.000	15.0	15.1	5.22	4.25 to 5.75	96.0	70 to 130	0.664	20
AW04078	Chromium, Total	mg/L	0.0000668	0.0044	0.10	0.105	0.102	0.101	0.085 to 0.115	105	70 to 130	2.30	20
AW04078	Molybdenum, Total	mg/L	0.0000241	0.0044	0.10	0.107	0.105	0.105	0.085 to 0.115	107	70 to 130	1.57	20

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Expiration: June 30, 2017

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

Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AW04070

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04078	Fluoride, Total	mg/L	0.00	0.3	2.0	2.02	0.020	2.02	1.8 to 2.2	100	80 to 120	0.00	20
AW04078	Solids, Dissolved	mg/L	2	25			150	56.0	40 to 60			2.04	5
AW04078	Chloride, Total	mg/L	0.00	0.25	10.0	32.7	22.9	9.75	9 to 11	98.0	80 to 120	0.00	20
AW04078	Sulfate, Total	mg/L	0.00	1.0	20.0	47.3	28.8	18.9	18 to 22	93.0	80 to 120	0.348	20

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Expiration: June 30, 2017

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

CC:

Reported: 6/7/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AW04071

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005		0.00668	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0896	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	3/3/2016	EPA 200.7		1.015	0.02	0.1	J	0.0288	mg/L
* Calcium, Total	HRG	3/3/2016	EPA 200.7		10.15	1.0	5.0		106	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	J	0.00507	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/25/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000380	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/23/2016	SM 2540C		1		50		358	mg/L
* Chloride, Total	SES	2/20/2016	EPA 300.0		1	0.04	0.25		25.2	mg/L
* Fluoride, Total	SES	2/20/2016	EPA 300.0		1	0.01	0.3	J	0.08	mg/L
* Sulfate, Total	SES	2/20/2016	EPA 300.0		1	0.3	1	U	Not Detected	mg/L

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Reported: 6/7/2017
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AW04071

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04078	Selenium, Total	mg/L	0.0000444	0.0044	0.10	0.104	0.103	0.110	0.085 to 0.115	104	70 to 130	1.31	20
AW04078	Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.104	0.101	0.0961	0.085 to 0.115	104	70 to 130	2.12	20
AW04078	Lithium, Total	mg/L	0.0000278	0.022	0.200	0.224	0.225	0.208	0.17 to 0.23	112	70 to 130	0.445	20
AW04078	Barium, Total	mg/L	0.0000177	0.0044	0.10	0.181	0.175	0.0870	0.085 to 0.115	91.5	70 to 130	2.92	20
AW04078	Boron, Total	mg/L	0.0108	0.044	1.000	1.16	1.14	1.01	0.85 to 1.15	107	70 to 130	1.74	20
AW04078	Arsenic, Total	mg/L	0.0000116	0.0022	0.10	0.104	0.101	0.108	0.085 to 0.115	104	70 to 130	2.47	20
AW04078	Cobalt, Total	mg/L	-0.000109	0.0044	0.10	0.116	0.114	0.104	0.085 to 0.115	109	70 to 130	1.81	20
AW04078	Mercury, Total by CVAA	mg/L	0	0.0005	0.004	0.00382	0.00376	0.00382	0.0034 to 0.0046	95.5	70 to 130	1.58	20
AW04078	Antimony, Total	mg/L	0.0000742	0.00132	0.10	0.0928	0.0906	0.0870	0.085 to 0.115	92.8	70 to 130	2.34	20
AW04078	Lead, Total	mg/L	0.0000602	0.0022	0.10	0.101	0.0986	0.101	0.085 to 0.115	101	70 to 130	1.98	20
AW04078	Thallium, Total	mg/L	0.0000558	0.00044	0.10	0.103	0.101	0.0999	0.085 to 0.115	103	70 to 130	2.41	20
AW04078	Beryllium, Total	mg/L	0.0000277	0.00132	0.10	0.112	0.107	0.109	0.085 to 0.115	112	70 to 130	4.65	20
AW04078	Calcium, Total	mg/L	0.000968	0.22	5.000	15.0	15.1	5.22	4.25 to 5.75	96.0	70 to 130	0.664	20
AW04078	Chromium, Total	mg/L	0.0000668	0.0044	0.10	0.105	0.102	0.101	0.085 to 0.115	105	70 to 130	2.30	20
AW04078	Molybdenum, Total	mg/L	0.0000241	0.0044	0.10	0.107	0.105	0.105	0.085 to 0.115	107	70 to 130	1.57	20

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AW04071

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04078	Fluoride, Total	mg/L	0.00	0.3	2.0	2.02	0.020	2.02	1.8 to 2.2	100	80 to 120	0.00	20
AW04078	Solids, Dissolved	mg/L	2	25			150	56.0	40 to 60			2.04	5
AW04078	Chloride, Total	mg/L	0.00	0.25	10.0	32.7	22.9	9.75	9 to 11	98.0	80 to 120	0.00	20
AW04078	Sulfate, Total	mg/L	0.00	1.0	20.0	47.3	28.8	18.9	18 to 22	93.0	80 to 120	0.348	20

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

CC:

Reported: 6/7/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AW04072

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005		0.0788	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0368	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	3/3/2016	EPA 200.7		1.015	0.02	0.1		1.47	mg/L
* Calcium, Total	HRG	3/3/2016	EPA 200.7		10.15	1.0	5.0		57.0	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0160	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/25/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.01	0.05		0.626	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000687	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/23/2016	SM 2540C		1		50		310	mg/L
* Chloride, Total	SES	2/20/2016	EPA 300.0		1	0.04	0.25		12.5	mg/L
* Fluoride, Total	SES	2/20/2016	EPA 300.0		1	0.01	0.3	J	0.20	mg/L
* Sulfate, Total	SES	2/20/2016	EPA 300.0		1	0.3	1		87.4	mg/L

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Expiration: June 30, 2017

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AW04072

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04078	Selenium, Total	mg/L	0.0000444	0.0044	0.10	0.104	0.103	0.110	0.085 to 0.115	104	70 to 130	1.31	20
AW04078	Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.104	0.101	0.0961	0.085 to 0.115	104	70 to 130	2.12	20
AW04078	Lithium, Total	mg/L	0.0000278	0.022	0.200	0.224	0.225	0.208	0.17 to 0.23	112	70 to 130	0.445	20
AW04078	Arsenic, Total	mg/L	0.0000116	0.0022	0.10	0.104	0.101	0.108	0.085 to 0.115	104	70 to 130	2.47	20
AW04078	Cobalt, Total	mg/L	-0.000109	0.0044	0.10	0.116	0.114	0.104	0.085 to 0.115	109	70 to 130	1.81	20
AW04078	Mercury, Total by CVAA	mg/L	0	0.0005	0.004	0.00382	0.00376	0.00382	0.0034 to 0.0046	95.5	70 to 130	1.58	20
AW04078	Barium, Total	mg/L	0.0000177	0.0044	0.10	0.181	0.175	0.0870	0.085 to 0.115	91.5	70 to 130	2.92	20
AW04078	Boron, Total	mg/L	0.0108	0.044	1.000	1.16	1.14	1.01	0.85 to 1.15	107	70 to 130	1.74	20
AW04078	Antimony, Total	mg/L	0.0000742	0.00132	0.10	0.0928	0.0906	0.0870	0.085 to 0.115	92.8	70 to 130	2.34	20
AW04078	Lead, Total	mg/L	0.0000602	0.0022	0.10	0.101	0.0986	0.101	0.085 to 0.115	101	70 to 130	1.98	20
AW04078	Thallium, Total	mg/L	0.0000558	0.00044	0.10	0.103	0.101	0.0999	0.085 to 0.115	103	70 to 130	2.41	20
AW04078	Beryllium, Total	mg/L	0.0000277	0.00132	0.10	0.112	0.107	0.109	0.085 to 0.115	112	70 to 130	4.65	20
AW04078	Calcium, Total	mg/L	0.000968	0.22	5.000	15.0	15.1	5.22	4.25 to 5.75	96.0	70 to 130	0.664	20
AW04078	Chromium, Total	mg/L	0.0000668	0.0044	0.10	0.105	0.102	0.101	0.085 to 0.115	105	70 to 130	2.30	20
AW04078	Molybdenum, Total	mg/L	0.0000241	0.0044	0.10	0.107	0.105	0.105	0.085 to 0.115	107	70 to 130	1.57	20

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AW04072

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04078	Fluoride, Total	mg/L	0.00	0.3	2.0	2.02	0.020	2.02	1.8 to 2.2	100	80 to 120	0.00	20
AW04078	Solids, Dissolved	mg/L	2	25			150	56.0	40 to 60			2.04	5
AW04078	Chloride, Total	mg/L	0.00	0.25	10.0	32.7	22.9	9.75	9 to 11	98.0	80 to 120	0.00	20
AW04078	Sulfate, Total	mg/L	0.00	1.0	20.0	47.3	28.8	18.9	18 to 22	93.0	80 to 120	0.348	20

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Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AW04073

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005		0.133	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.120	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	3/3/2016	EPA 200.7		1.015	0.02	0.1		1.94	mg/L
* Calcium, Total	HRG	3/3/2016	EPA 200.7		10.15	1.0	5.0		89.6	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0227	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/25/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.01	0.05		0.670	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000404	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/23/2016	SM 2540C		1		50		464	mg/L
* Chloride, Total	SES	2/20/2016	EPA 300.0		1	0.04	0.25		22.3	mg/L
* Fluoride, Total	SES	2/20/2016	EPA 300.0		1	0.01	0.3	J	0.15	mg/L
* Sulfate, Total	SES	2/20/2016	EPA 300.0		1	0.3	1		60.2	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AW04073

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04078	Selenium, Total	mg/L	0.0000444	0.0044	0.10	0.104	0.103	0.110	0.085 to 0.115	104	70 to 130	1.31	20
AW04078	Antimony, Total	mg/L	0.0000742	0.00132	0.10	0.0928	0.0906	0.0870	0.085 to 0.115	92.8	70 to 130	2.34	20
AW04078	Lead, Total	mg/L	0.0000602	0.0022	0.10	0.101	0.0986	0.101	0.085 to 0.115	101	70 to 130	1.98	20
AW04078	Thallium, Total	mg/L	0.0000558	0.00044	0.10	0.103	0.101	0.0999	0.085 to 0.115	103	70 to 130	2.41	20
AW04078	Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.104	0.101	0.0961	0.085 to 0.115	104	70 to 130	2.12	20
AW04078	Lithium, Total	mg/L	0.0000278	0.022	0.200	0.224	0.225	0.208	0.17 to 0.23	112	70 to 130	0.445	20
AW04078	Beryllium, Total	mg/L	0.0000277	0.00132	0.10	0.112	0.107	0.109	0.085 to 0.115	112	70 to 130	4.65	20
AW04078	Calcium, Total	mg/L	0.000968	0.22	5.000	15.0	15.1	5.22	4.25 to 5.75	96.0	70 to 130	0.664	20
AW04078	Chromium, Total	mg/L	0.0000668	0.0044	0.10	0.105	0.102	0.101	0.085 to 0.115	105	70 to 130	2.30	20
AW04078	Molybdenum, Total	mg/L	0.0000241	0.0044	0.10	0.107	0.105	0.105	0.085 to 0.115	107	70 to 130	1.57	20
AW04078	Barium, Total	mg/L	0.0000177	0.0044	0.10	0.181	0.175	0.0870	0.085 to 0.115	91.5	70 to 130	2.92	20
AW04078	Boron, Total	mg/L	0.0108	0.044	1.000	1.16	1.14	1.01	0.85 to 1.15	107	70 to 130	1.74	20
AW04078	Arsenic, Total	mg/L	0.0000116	0.0022	0.10	0.104	0.101	0.108	0.085 to 0.115	104	70 to 130	2.47	20
AW04078	Cobalt, Total	mg/L	-0.000109	0.0044	0.10	0.116	0.114	0.104	0.085 to 0.115	109	70 to 130	1.81	20
AW04078	Mercury, Total by CVAA	mg/L	0	0.0005	0.004	0.00382	0.00376	0.00382	0.0034 to 0.0046	95.5	70 to 130	1.58	20

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AW04073

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04078	Fluoride, Total	mg/L	0.00	0.3	2.0	2.02	0.020	2.02	1.8 to 2.2	100	80 to 120	0.00	20
AW04078	Solids, Dissolved	mg/L	2	25			150	56.0	40 to 60			2.04	5
AW04078	Chloride, Total	mg/L	0.00	0.25	10.0	32.7	22.9	9.75	9 to 11	98.0	80 to 120	0.00	20
AW04078	Sulfate, Total	mg/L	0.00	1.0	20.0	47.3	28.8	18.9	18 to 22	93.0	80 to 120	0.348	20

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CC:

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Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-18 dup

Laboratory ID Number: AW04074

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005		0.132	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.117	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	3/3/2016	EPA 200.7		1.015	0.02	0.1		1.95	mg/L
* Calcium, Total	HRG	3/3/2016	EPA 200.7		10.15	1.0	5.0		89.1	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0228	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/25/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.01	0.05		0.671	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000384	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/23/2016	SM 2540C		1		50		458	mg/L
* Chloride, Total	SES	2/20/2016	EPA 300.0		1	0.04	0.25		22.3	mg/L
* Fluoride, Total	SES	2/20/2016	EPA 300.0		1	0.01	0.3	J	0.16	mg/L
* Sulfate, Total	SES	2/20/2016	EPA 300.0		1	0.3	1		59.9	mg/L

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Expiration: June 30, 2017

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Reported: 6/7/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-18 dup

Laboratory ID Number: AW04074

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04078	Selenium, Total	mg/L	0.0000444	0.0044	0.10	0.104	0.103	0.110	0.085 to 0.115	104	70 to 130	1.31	20
AW04078	Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.104	0.101	0.0961	0.085 to 0.115	104	70 to 130	2.12	20
AW04078	Lithium, Total	mg/L	0.0000278	0.022	0.200	0.224	0.225	0.208	0.17 to 0.23	112	70 to 130	0.445	20
AW04078	Arsenic, Total	mg/L	0.0000116	0.0022	0.10	0.104	0.101	0.108	0.085 to 0.115	104	70 to 130	2.47	20
AW04078	Cobalt, Total	mg/L	-0.000109	0.0044	0.10	0.116	0.114	0.104	0.085 to 0.115	109	70 to 130	1.81	20
AW04078	Mercury, Total by CVAA	mg/L	0	0.0005	0.004	0.00382	0.00376	0.00382	0.0034 to 0.0046	95.5	70 to 130	1.58	20
AW04078	Barium, Total	mg/L	0.0000177	0.0044	0.10	0.181	0.175	0.0870	0.085 to 0.115	91.5	70 to 130	2.92	20
AW04078	Boron, Total	mg/L	0.0108	0.044	1.000	1.16	1.14	1.01	0.85 to 1.15	107	70 to 130	1.74	20
AW04078	Antimony, Total	mg/L	0.0000742	0.00132	0.10	0.0928	0.0906	0.0870	0.085 to 0.115	92.8	70 to 130	2.34	20
AW04078	Lead, Total	mg/L	0.0000602	0.0022	0.10	0.101	0.0986	0.101	0.085 to 0.115	101	70 to 130	1.98	20
AW04078	Thallium, Total	mg/L	0.0000558	0.00044	0.10	0.103	0.101	0.0999	0.085 to 0.115	103	70 to 130	2.41	20
AW04078	Beryllium, Total	mg/L	0.0000277	0.00132	0.10	0.112	0.107	0.109	0.085 to 0.115	112	70 to 130	4.65	20
AW04078	Calcium, Total	mg/L	0.000968	0.22	5.000	15.0	15.1	5.22	4.25 to 5.75	96.0	70 to 130	0.664	20
AW04078	Chromium, Total	mg/L	0.0000668	0.0044	0.10	0.105	0.102	0.101	0.085 to 0.115	105	70 to 130	2.30	20
AW04078	Molybdenum, Total	mg/L	0.0000241	0.0044	0.10	0.107	0.105	0.105	0.085 to 0.115	107	70 to 130	1.57	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, 2017

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

Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-18 dup

Laboratory ID Number: AW04074

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04078	Solids, Dissolved	mg/L	2	25			150	56.0	40 to 60			2.04	5
AW04078	Fluoride, Total	mg/L	0.00	0.3	2.0	2.02	0.020	2.02	1.8 to 2.2	100	80 to 120	0.00	20
AW04078	Chloride, Total	mg/L	0.00	0.25	10.0	32.7	22.9	9.75	9 to 11	98.0	80 to 120	0.00	20
AW04078	Sulfate, Total	mg/L	0.00	1.0	20.0	47.3	28.8	18.9	18 to 22	93.0	80 to 120	0.348	20

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CC:

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW04075

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	3/3/2016	EPA 200.7		1.015	0.02	0.1	J	0.0393	mg/L
* Calcium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	J	0.00668	mg/L
* Mercury, Total by CVAA	MCW	2/25/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000450	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/23/2016	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	2/20/2016	EPA 300.0		1	0.04	0.25	J	0.20	mg/L
* Fluoride, Total	SES	2/20/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	2/20/2016	EPA 300.0		1	0.3	1	U	Not Detected	mg/L

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Reported: 6/7/2017
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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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW04075

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04078	Selenium, Total	mg/L	0.0000444	0.0044	0.10	0.104	0.103	0.110	0.085 to 0.115	104	70 to 130	1.31	20
AW04078	Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.104	0.101	0.0961	0.085 to 0.115	104	70 to 130	2.12	20
AW04078	Lithium, Total	mg/L	0.0000278	0.022	0.200	0.224	0.225	0.208	0.17 to 0.23	112	70 to 130	0.445	20
AW04078	Barium, Total	mg/L	0.0000177	0.0044	0.10	0.181	0.175	0.0870	0.085 to 0.115	91.5	70 to 130	2.92	20
AW04078	Boron, Total	mg/L	0.0108	0.044	1.000	1.16	1.14	1.01	0.85 to 1.15	107	70 to 130	1.74	20
AW04078	Arsenic, Total	mg/L	0.0000116	0.0022	0.10	0.104	0.101	0.108	0.085 to 0.115	104	70 to 130	2.47	20
AW04078	Cobalt, Total	mg/L	-0.000109	0.0044	0.10	0.116	0.114	0.104	0.085 to 0.115	109	70 to 130	1.81	20
AW04078	Mercury, Total by CVAA	mg/L	0	0.0005	0.004	0.00382	0.00376	0.00382	0.0034 to 0.0046	95.5	70 to 130	1.58	20
AW04078	Beryllium, Total	mg/L	0.0000277	0.00132	0.10	0.112	0.107	0.109	0.085 to 0.115	112	70 to 130	4.65	20
AW04078	Calcium, Total	mg/L	0.000968	0.22	5.000	15.0	15.1	5.22	4.25 to 5.75	96.0	70 to 130	0.664	20
AW04078	Chromium, Total	mg/L	0.0000668	0.0044	0.10	0.105	0.102	0.101	0.085 to 0.115	105	70 to 130	2.30	20
AW04078	Molybdenum, Total	mg/L	0.0000241	0.0044	0.10	0.107	0.105	0.105	0.085 to 0.115	107	70 to 130	1.57	20
AW04078	Antimony, Total	mg/L	0.0000742	0.00132	0.10	0.0928	0.0906	0.0870	0.085 to 0.115	92.8	70 to 130	2.34	20
AW04078	Lead, Total	mg/L	0.0000602	0.0022	0.10	0.101	0.0986	0.101	0.085 to 0.115	101	70 to 130	1.98	20
AW04078	Thallium, Total	mg/L	0.0000558	0.00044	0.10	0.103	0.101	0.0999	0.085 to 0.115	103	70 to 130	2.41	20

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Expiration: June 30, 2017

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Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW04075

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04078	Fluoride, Total	mg/L	0.00	0.3	2.0	2.02	0.020	2.02	1.8 to 2.2	100	80 to 120	0.00	20
AW04078	Solids, Dissolved	mg/L	2	25			150	56.0	40 to 60			2.04	5
AW04078	Chloride, Total	mg/L	0.00	0.25	10.0	32.7	22.9	9.75	9 to 11	98.0	80 to 120	0.00	20
AW04078	Sulfate, Total	mg/L	0.00	1.0	20.0	47.3	28.8	18.9	18 to 22	93.0	80 to 120	0.348	20

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CC:

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AW04076

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0285	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	3/3/2016	EPA 200.7		1.015	0.02	0.1	J	0.0271	mg/L
* Calcium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.1	0.5		38.7	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/25/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000364	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/23/2016	SM 2540C		1		25		142	mg/L
* Chloride, Total	SES	2/20/2016	EPA 300.0		1	0.04	0.25		1.54	mg/L
* Fluoride, Total	SES	2/20/2016	EPA 300.0		1	0.01	0.3	J	0.08	mg/L
* Sulfate, Total	SES	2/20/2016	EPA 300.0		1	0.3	1		14.7	mg/L

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AW04076

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04078	Selenium, Total	mg/L	0.0000444	0.0044	0.10	0.104	0.103	0.110	0.085 to 0.115	104	70 to 130	1.31	20
AW04078	Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.104	0.101	0.0961	0.085 to 0.115	104	70 to 130	2.12	20
AW04078	Lithium, Total	mg/L	0.0000278	0.022	0.200	0.224	0.225	0.208	0.17 to 0.23	112	70 to 130	0.445	20
AW04078	Arsenic, Total	mg/L	0.0000116	0.0022	0.10	0.104	0.101	0.108	0.085 to 0.115	104	70 to 130	2.47	20
AW04078	Cobalt, Total	mg/L	-0.000109	0.0044	0.10	0.116	0.114	0.104	0.085 to 0.115	109	70 to 130	1.81	20
AW04078	Mercury, Total by CVAA	mg/L	0	0.0005	0.004	0.00382	0.00376	0.00382	0.0034 to 0.0046	95.5	70 to 130	1.58	20
AW04078	Barium, Total	mg/L	0.0000177	0.0044	0.10	0.181	0.175	0.0870	0.085 to 0.115	91.5	70 to 130	2.92	20
AW04078	Boron, Total	mg/L	0.0108	0.044	1.000	1.16	1.14	1.01	0.85 to 1.15	107	70 to 130	1.74	20
AW04078	Antimony, Total	mg/L	0.0000742	0.00132	0.10	0.0928	0.0906	0.0870	0.085 to 0.115	92.8	70 to 130	2.34	20
AW04078	Lead, Total	mg/L	0.0000602	0.0022	0.10	0.101	0.0986	0.101	0.085 to 0.115	101	70 to 130	1.98	20
AW04078	Thallium, Total	mg/L	0.0000558	0.00044	0.10	0.103	0.101	0.0999	0.085 to 0.115	103	70 to 130	2.41	20
AW04078	Beryllium, Total	mg/L	0.0000277	0.00132	0.10	0.112	0.107	0.109	0.085 to 0.115	112	70 to 130	4.65	20
AW04078	Calcium, Total	mg/L	0.000968	0.22	5.000	15.0	15.1	5.22	4.25 to 5.75	96.0	70 to 130	0.664	20
AW04078	Chromium, Total	mg/L	0.0000668	0.0044	0.10	0.105	0.102	0.101	0.085 to 0.115	105	70 to 130	2.30	20
AW04078	Molybdenum, Total	mg/L	0.0000241	0.0044	0.10	0.107	0.105	0.105	0.085 to 0.115	107	70 to 130	1.57	20

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Batch QC Summary

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AW04076

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04078	Solids, Dissolved	mg/L	2	25			150	56.0	40 to 60			2.04	5
AW04078	Fluoride, Total	mg/L	0.00	0.3	2.0	2.02	0.020	2.02	1.8 to 2.2	100	80 to 120	0.00	20
AW04078	Chloride, Total	mg/L	0.00	0.25	10.0	32.7	22.9	9.75	9 to 11	98.0	80 to 120	0.00	20
AW04078	Sulfate, Total	mg/L	0.00	1.0	20.0	47.3	28.8	18.9	18 to 22	93.0	80 to 120	0.348	20

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CC:

Reported: 6/7/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AW04077

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0305	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	3/3/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.1	0.5		6.54	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	J	0.00219	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/25/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000390	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/23/2016	SM 2540C		1		25		53.0	mg/L
* Chloride, Total	SES	2/20/2016	EPA 300.0		1	0.04	0.25		3.30	mg/L
* Fluoride, Total	SES	2/20/2016	EPA 300.0		1	0.01	0.3	J	0.02	mg/L
* Sulfate, Total	SES	2/20/2016	EPA 300.0		1	0.3	1		10.4	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2017

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

Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AW04077

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04078	Selenium, Total	mg/L	0.0000444	0.0044	0.10	0.104	0.103	0.110	0.085 to 0.115	104	70 to 130	1.31	20
AW04078	Beryllium, Total	mg/L	0.0000277	0.00132	0.10	0.112	0.107	0.109	0.085 to 0.115	112	70 to 130	4.65	20
AW04078	Calcium, Total	mg/L	0.000968	0.22	5.000	15.0	15.1	5.22	4.25 to 5.75	96.0	70 to 130	0.664	20
AW04078	Chromium, Total	mg/L	0.0000668	0.0044	0.10	0.105	0.102	0.101	0.085 to 0.115	105	70 to 130	2.30	20
AW04078	Molybdenum, Total	mg/L	0.0000241	0.0044	0.10	0.107	0.105	0.105	0.085 to 0.115	107	70 to 130	1.57	20
AW04078	Barium, Total	mg/L	0.0000177	0.0044	0.10	0.181	0.175	0.0870	0.085 to 0.115	91.5	70 to 130	2.92	20
AW04078	Boron, Total	mg/L	0.0108	0.044	1.000	1.16	1.14	1.01	0.85 to 1.15	107	70 to 130	1.74	20
AW04078	Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.104	0.101	0.0961	0.085 to 0.115	104	70 to 130	2.12	20
AW04078	Lithium, Total	mg/L	0.0000278	0.022	0.200	0.224	0.225	0.208	0.17 to 0.23	112	70 to 130	0.445	20
AW04078	Arsenic, Total	mg/L	0.0000116	0.0022	0.10	0.104	0.101	0.108	0.085 to 0.115	104	70 to 130	2.47	20
AW04078	Cobalt, Total	mg/L	-0.000109	0.0044	0.10	0.116	0.114	0.104	0.085 to 0.115	109	70 to 130	1.81	20
AW04078	Mercury, Total by CVAA	mg/L	0	0.0005	0.004	0.00382	0.00376	0.00382	0.0034 to 0.0046	95.5	70 to 130	1.58	20
AW04078	Antimony, Total	mg/L	0.0000742	0.00132	0.10	0.0928	0.0906	0.0870	0.085 to 0.115	92.8	70 to 130	2.34	20
AW04078	Lead, Total	mg/L	0.0000602	0.0022	0.10	0.101	0.0986	0.101	0.085 to 0.115	101	70 to 130	1.98	20
AW04078	Thallium, Total	mg/L	0.0000558	0.00044	0.10	0.103	0.101	0.0999	0.085 to 0.115	103	70 to 130	2.41	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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AW04077

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04078	Solids, Dissolved	mg/L	2	25			150	56.0	40 to 60			2.04	5
AW04078	Fluoride, Total	mg/L	0.00	0.3	2.0	2.02	0.020	2.02	1.8 to 2.2	100	80 to 120	0.00	20
AW04078	Chloride, Total	mg/L	0.00	0.25	10.0	32.7	22.9	9.75	9 to 11	98.0	80 to 120	0.00	20
AW04078	Sulfate, Total	mg/L	0.00	1.0	20.0	47.3	28.8	18.9	18 to 22	93.0	80 to 120	0.348	20

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CC:

Reported: 6/7/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AW04078

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	9/22/2016	GA		1				Attached	pCi/L
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01		0.0895	mg/L
* Beryllium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	3/3/2016	EPA 200.7		1.015	0.02	0.1	J	0.0922	mg/L
* Calcium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.1	0.5		10.2	mg/L
* Cadmium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	J	0.00683	mg/L
* Chromium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/25/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	3/3/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	2/29/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	2/29/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000232	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/23/2016	SM 2540C		1		25		144	mg/L
* Chloride, Total	SES	2/20/2016	EPA 300.0		1	0.04	0.25		22.9	mg/L
* Fluoride, Total	SES	2/20/2016	EPA 300.0		1	0.01	0.3	J	0.02	mg/L
* Sulfate, Total	SES	2/20/2016	EPA 300.0		1	0.3	1		28.7	mg/L

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Cadmium MDL was increased from 0.0001 to 0.0002. The result for Cd has now been corrected to Not Detected. SGC 3/17/17

Reported: 6/7/2017
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AW04078

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04078	Selenium, Total	mg/L	0.0000444	0.0044	0.10	0.104	0.103	0.110	0.085 to 0.115	104	70 to 130	1.31	20
AW04078	Cadmium, Total	mg/L	0.0000130	0.00044	0.10	0.104	0.101	0.0961	0.085 to 0.115	104	70 to 130	2.12	20
AW04078	Lithium, Total	mg/L	0.0000278	0.022	0.200	0.224	0.225	0.208	0.17 to 0.23	112	70 to 130	0.445	20
AW04078	Antimony, Total	mg/L	0.0000742	0.00132	0.10	0.0928	0.0906	0.0870	0.085 to 0.115	92.8	70 to 130	2.34	20
AW04078	Lead, Total	mg/L	0.0000602	0.0022	0.10	0.101	0.0986	0.101	0.085 to 0.115	101	70 to 130	1.98	20
AW04078	Thallium, Total	mg/L	0.0000558	0.00044	0.10	0.103	0.101	0.0999	0.085 to 0.115	103	70 to 130	2.41	20
AW04078	Barium, Total	mg/L	0.0000177	0.0044	0.10	0.181	0.175	0.0870	0.085 to 0.115	91.5	70 to 130	2.92	20
AW04078	Boron, Total	mg/L	0.0108	0.044	1.000	1.16	1.14	1.01	0.85 to 1.15	107	70 to 130	1.74	20
AW04078	Arsenic, Total	mg/L	0.0000116	0.0022	0.10	0.104	0.101	0.108	0.085 to 0.115	104	70 to 130	2.47	20
AW04078	Cobalt, Total	mg/L	-0.000109	0.0044	0.10	0.116	0.114	0.104	0.085 to 0.115	109	70 to 130	1.81	20
AW04078	Mercury, Total by CVAA	mg/L	0	0.0005	0.004	0.00382	0.00376	0.00382	0.0034 to 0.0046	95.5	70 to 130	1.58	20
AW04078	Beryllium, Total	mg/L	0.0000277	0.00132	0.10	0.112	0.107	0.109	0.085 to 0.115	112	70 to 130	4.65	20
AW04078	Calcium, Total	mg/L	0.000968	0.22	5.000	15.0	15.1	5.22	4.25 to 5.75	96.0	70 to 130	0.664	20
AW04078	Chromium, Total	mg/L	0.0000668	0.0044	0.10	0.105	0.102	0.101	0.085 to 0.115	105	70 to 130	2.30	20
AW04078	Molybdenum, Total	mg/L	0.0000241	0.0044	0.10	0.107	0.105	0.105	0.085 to 0.115	107	70 to 130	1.57	20

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Cadmium MDL was increased from 0.0001 to 0.0002. The result for Cd has now been corrected to Not Detected. SGC 3/17/17

Reported: 6/7/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Feb-16
Customer ID:
Delivery Date: 18-Feb-16

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AW04078

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW04078	Fluoride, Total	mg/L	0.00	0.3	2.0	2.02	0.020	2.02	1.8 to 2.2	100	80 to 120	0.00	20
AW04078	Solids, Dissolved	mg/L	2	25			150	56.0	40 to 60			2.04	5
AW04078	Chloride, Total	mg/L	0.00	0.25	10.0	32.7	22.9	9.75	9 to 11	98.0	80 to 120	0.00	20
AW04078	Sulfate, Total	mg/L	0.00	1.0	20.0	47.3	28.8	18.9	18 to 22	93.0	80 to 120	0.348	20

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The RL has now been corrected. SGC 1/19/17
Cadmium MDL was increased from 0.0001 to 0.0002. The result for Cd has now been corrected to Not Detected. SGC 3/17/17

CC:

Reported: 6/7/2017
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

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	Routine	Results To	Dustin Brooks
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Nick Pitts	Location	Greene Ash Pond

Analysis Requested	Metals, Anions, TDS (2) 500mL Bottles; Radiological (2) 2L Bottles
Comments	FB-1 collected at MW-14.

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler	Lab Preserve	Lab Id
MW-14	02/16/2016	12:30	4	Groundwater		4950-25065-10-	3.5 mL	AW03825
FB-1	02/16/2016	12:45	4	Field Blank		4950-25065-10-	3.5 mL	AW03826
MW-13	02/16/2016	14:05	4	Groundwater		4950-25065-10-	3.5 mL	AW03827
MW-12	02/16/2016	15:20	4	Groundwater		4950-25065-10-	3.5 mL	AW03828
MW-21	02/16/2016	16:35	4	Groundwater		4950-25068-10-	3.5 mL	AW03829

Relinquished By	Received By	Date/Time
		02/16/2016 17:50
		02/17/2016 10:41

SmarTroll ID	4696-23441-1-1	Cooler Temp	1.0 degrees Celsius
Turbidity ID	4677-23343-4-2	Thermometer ID	1506-3968-4-4
		pH Strip ID	4437-22295-10-1

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

✔ Field Complete
✔ Lab Complete
Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Jason Rouss	Location	Greene Ash Pond

Analysis Requested	Metals, Anions, TDS (2) 500mL Bottles; Radiological (2) 2L Bottles
Comments	

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler	Lab Preserve	Lab Id
MW-9	02/16/2016	15:30	4	Groundwater		4950-25069-10-	3.5 mL	AW03823
MW-9 DUF	02/16/2016	15:45	4	Sample Duplicate		4950-25069-10-	3.5 mL	AW03824

Relinquished By	Received By	Date/Time
		02/16/2016 17:54
		02/17/2016 10:38

SmarTroll ID	4696-23444-3-3	Cooler Temp	0.5 degrees Celsius
Turbidity ID	4677-23342-4-1	Thermometer ID	1506-3968-4-4
		pH Strip ID	4437-22295-10-1

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

✔ Field Complete
✔ Lab Complete
Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Clarence Specht	Location	Greene Ash Pond

Analysis Requested	Metals, Anions, TDS (2) 500mL Bottles; Radiological (2) 2L Bottles
Comments	AW03821 was deleted; this was a Radiological QC sample that the lab will not receive results for. SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler	Lab Preserve	Lab Id
MW-10	02/16/2016	14:35	4	Groundwater		4950-25068-10-	3.5 mL	AW03820
MW-8	02/16/2016	16:20	4	Groundwater		4950-25068-10-	3.5 mL	AW03822

Relinquished By	Received By	Date/Time
		02/16/2016 17:33
		02/17/2016 10:36

SmarTroll ID	4696-23443-3-2	Cooler Temp	0.2 degrees Celsius
Turbidity ID	3901-20009-2-1	Thermometer ID	1506-3968-4-4
		pH Strip ID	4437-22295-10-1

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

✔ Field Complete
✔ Lab Complete
Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Clarence Specht	Location	Greene Ash Pond

Analysis Requested	Metals, Anions, TDS (2) 500mL Bottles; Radiological (2) 2L Bottles
Comments	FB-2

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler	Lab Preserve	Lab Id
MW-17	02/17/2016	10:50	4	Groundwater		4950-25061-10-	3.0 mL	AW04065
FB-2	02/17/2016	10:55	4	Field Blank		4950-25061-10-	3.0 mL	AW04066
MW-15	02/17/2016	12:20	4	Groundwater		4950-25061-10-	3.0 mL	AW04067
MW-15-Du	02/17/2016	12:35	4	Sample Duplicate		4950-25061-10-	3.0 mL	AW04068
MW-1	02/17/2016	14:55	4	Groundwater		4950-25062-10-	3.0 mL	AW04069
MW-2	02/17/2016	16:10	4	Groundwater		4950-25062-10-	3.0 mL	AW04070
MW-3	02/17/2016	17:25	4	Groundwater		4950-25062-10-	3.0 mL	AW04071

Relinquished By	Received By	Date/Time
		02/18/2016 08:33
		02/18/2016 11:30

SmarTroll ID	4696-23443-3-2	Cooler Temp	0.5 & 1.2 degrees Celsius
Turbidity ID	3901-20009-2-1	Thermometer ID	1506-3968-4-4
		pH Strip ID	4437-22295-10-1

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

✔ Field Complete
✔ Lab Complete
Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Nick Pitts	Location	Greene Ash Pond

Analysis Requested	Metals, Anions, TDS (2) 500mL Bottles; Radiological (2) 2L Bottles
Comments	EB-1 is equipment blank

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler	Lab Preserve	Lab Id
MW-16	02/17/2016	10:50	4	Groundwater		4950-25064-10-	3.0 mL	AW04072
MW-18	02/17/2016	12:05	4	Groundwater		4950-25064-10-	3.0 mL	AW04073
MW-18 Du	02/17/2016	12:05	4	Sample Duplicate		4950-25064-10-	3.0 mL	AW04074
EB-1	02/17/2016	12:55	4	Groundwater		4950-25064-10-	3.0 mL	AW04075
MW-23	02/17/2016	14:40	4	Groundwater		4950-25063-10-	3.0 mL	AW04076
MW-24	02/17/2016	15:55	4	Groundwater		4950-25063-10-	3.0 mL	AW04077
MW-25	02/17/2016	17:10	4	Groundwater		4950-25063-10-	3.0 mL	AW04078

Relinquished By	Received By	Date/Time
		02/18/2016 11:25

SmarTroll ID	4696-23441-1-1	Cooler Temp	1.0 & 0.2 degrees Celsius
Turbidity ID	4677-23343-4-2	Thermometer ID	1506-3968-4-4
		pH Strip ID	4437-22295-10-1

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

✔ Field Complete
✔ Lab Complete
Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Jason Rouss	Location	Greene Ash Pond

Analysis Requested	Metals, Anions, TDS (2) 500mL Bottles; Radiological (2) 2L Bottles
Comments	FB3 collected at MW-5; AW04062 deleted-Radiological QC analysis only. SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler	Lab Preserve	Lab Id
MW-6	02/17/2016	16:55	4	Groundwater		4950-25066-10-	3.0 mL	AW04059
MW-7	02/17/2016	15:30	4	Groundwater		4950-25066-10-	3.0 mL	AW04060
MW-11	02/17/2016	10:25	6	Groundwater		4950-25067-10-	3.0 mL	AW04061
MW-5	02/17/2016	14:00	4	Groundwater		4950-25067-10-	3.0 mL	AW04063
FB3	02/17/2016	14:25	4	Field Blank		4950-25067-10-	3.0 mL	AW04064

Relinquished By	Received By	Date/Time
		02/18/2016 08:45
		02/18/2016 11:29

SmarTroll ID	4696-23444-3-3	Cooler Temp	0.6 & 0.4 degrees Celsius
Turbidity ID	4677-23342-4-1	Thermometer ID	1506-3968-4-4
		pH Strip ID	4437-22295-10-1

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Report To Sarah Copeland
APC GSC Building 8

Sample #	Location	Sample Description	Customer Sample ID	Date Collected	Test Method
102171001	Greene Ash Pond	MW-10 Groundwater	AW03820, Water	2/16/2016 2:35:00 PM	Ga Tech
102171003	Greene Ash Pond	MW-8 Groundwater	AW03822, Water	2/16/2016 4:29:00 PM	Ga Tech
102171004	Greene Ash Pond	MW-9 Groundwater	AW03823, Water	2/16/2016 3:30:00 PM	Ga Tech
102171005	Greene Ash Pond	MW-9 Dup	AW03824, Water	2/16/2016 3:45:00 PM	Ga Tech
102171006	Greene Ash Pond	MW-14 Groundwater	AW03825, Water	2/16/2016 12:30:00 PM	Ga Tech
102171007	Greene Ash Pond	FB-1 Field Blank	AW03826, Water	2/16/2016 12:45:00 PM	Ga Tech
102171008	Greene Ash Pond	MW-13 Groundwater	AW03827, Water	2/16/2016 2:05:00 PM	Ga Tech
102171009	Greene Ash Pond	MW-12 Groundwater	AW03828, Water	2/16/2016 3:20:00 PM	Ga Tech
102171010	Greene Ash Pond	MW-21 Groundwater	AW03829, Water	2/16/2016 4:35:00 PM	Ga Tech
102171011	Greene Ash Pond	MW-6 Groundwater	AW04059, Water	2/17/2016 4:55:00 PM	Ga Tech
102171012	Greene Ash Pond	MW-7 Groundwater	AW04060, Water	2/17/2016 3:30:00 PM	Ga Tech
102171013	Greene Ash Pond	MW-11 Groundwater	AW04061, Water	2/17/2016 10:25:00 AM	Ga Tech
102171015	Greene Ash Pond	MW-5 Groundwater	AW04063, Water	2/17/2016 2:00:00 PM	Ga Tech
102171016	Greene Ash Pond	FB-3 Field Blank	AW04064, Water	2/17/2016 2:25:00 PM	Ga Tech
102171017	Greene Ash Pond	MW-17 Groundwater	AW04065, Water	2/17/2016 10:50:00 AM	Ga Tech
102171018	Greene Ash Pond	FB-2 Field Blank	AW04066, Water	2/17/2016 10:55:00 AM	Ga Tech
102171019	Greene Ash Pond	MW-15 Groundwater	AW04067, Water	2/17/2016 12:20:00 PM	Ga Tech
102171020	Greene Ash Pond	MW-15 Dup	AW04068, Water	2/17/2016 12:35:00 PM	Ga Tech
102171021	Greene Ash Pond	MW-1 Groundwater	AW04069, Water	2/17/2016 2:55:00 PM	Ga Tech
102171022	Greene Ash Pond	MW-2 Groundwater	AW04070, Water	2/17/2016 4:10:00 PM	Ga Tech
102171023	Greene Ash Pond	MW-3 Groundwater	AW04071, Water	2/17/2016 5:25:00 PM	Ga Tech
102171024	Greene Ash Pond	MW-16 Groundwater	AW04072, Water	2/17/2016 10:50:00 AM	Ga Tech

Certification

Data approved by Gary Smith
Georgia Power Company

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Report To Sarah Copeland
APC GSC Building 8

Sample #	Location	Sample Description	Customer Sample ID	Date Collected	Test Method
102171025	Greene Ash Pond	MW-18 Groundwater	AW04073, Water	2/17/2016 12:05:00 PM	Ga Tech
102171026	Greene Ash Pond	MW-18 Dup	AW04074, Water	2/17/2016 12:05:00 PM	Ga Tech
102171027	Greene Ash Pond	EB-1 Equipment	AW04075, Water	2/17/2016 12:55:00 PM	Ga Tech
102171028	Greene Ash Pond	MW-23 Groundwater	AW04076, Water	2/17/2016 2:40:00 PM	Ga Tech
102171029	Greene Ash Pond	MW-24 Groundwater	AW04077, Water	2/17/2016 3:55:00 PM	Ga Tech
102171030	Greene Ash Pond	MW-25 Groundwater	AW04078, Water	2/17/2016 5:10:00 PM	Ga Tech

Sample Comments

102171001 This report replaces in full the report for 102171 dated 5-10-16.

Certification

Data approved by Gary Smith
Georgia Power Company

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171001
Collection Date	2/16/2016 2:35:00 PM
Sampling Media	Water
Station	AW03820
Sample ID	MW-10 Groundwater Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.79E-01
Ra-228	Ga Tech	pCi/L			5.79E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171003
Collection Date	2/16/2016 4:29:00 PM
Sampling Media	Water
Station	AW03822
Sample ID	MW-8 Groundwater Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.73E-01
Ra-228	Ga Tech	pCi/L			7.19E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171004
Collection Date	2/16/2016 3:30:00 PM
Sampling Media	Water
Station	AW03823
Sample ID	MW-9 Groundwater Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.69E-01
Ra-228	Ga Tech	pCi/L			7.02E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171005
Collection Date	2/16/2016 3:45:00 PM
Sampling Media	Water
Station	AW03824
Sample ID	MW-9 Dup Groundwater Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.19E-01
Ra-228	Ga Tech	pCi/L			4.06E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171006
Collection Date	2/16/2016 12:30:00 PM
Sampling Media	Water
Station	AW03825
Sample ID	MW-14 Groundwater Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.59E-01
Ra-228	Ga Tech	pCi/L			5.87E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171007
Collection Date	2/16/2016 12:45:00 PM
Sampling Media	Water
Station	AW03826
Sample ID	FB-1 Field Blank Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.36E-01
Ra-228	Ga Tech	pCi/L			5.73E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171008
Collection Date	2/16/2016 2:05:00 PM
Sampling Media	Water
Station	AW03827
Sample ID	MW-13 Groundwater Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.80E-01
Ra-228	Ga Tech	pCi/L			7.35E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171009
Collection Date	2/16/2016 3:20:00 PM
Sampling Media	Water
Station	AW03828
Sample ID	MW-12 Groundwater Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			6.00E-01
Ra-228	Ga Tech	pCi/L			7.35E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171010
Collection Date	2/16/2016 4:35:00 PM
Sampling Media	Water
Station	AW03829
Sample ID	MW-21 Groundwater Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.30E-01
Ra-228	Ga Tech	pCi/L			5.12E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171011
Collection Date	2/17/2016 4:55:00 PM
Sampling Media	Water
Station	AW04059
Sample ID	MW-6 Groundwater Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.97E-01
Ra-228	Ga Tech	pCi/L			6.34E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171012
Collection Date	2/17/2016 3:30:00 PM
Sampling Media	Water
Station	AW04060
Sample ID	MW-7 Groundwater Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.78E-01
Ra-228	Ga Tech	pCi/L			7.42E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171013
Collection Date	2/17/2016 10:25:00 AM
Sampling Media	Water
Station	AW04061
Sample ID	MW-11 Groundwater Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.22E-01
Ra-228	Ga Tech	pCi/L			6.29E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171015
Collection Date	2/17/2016 2:00:00 PM
Sampling Media	Water
Station	AW04063
Sample ID	MW-5 Groundwater Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.70E-01
Ra-228	Ga Tech	pCi/L			8.24E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171016
Collection Date	2/17/2016 2:25:00 PM
Sampling Media	Water
Station	AW04064
Sample ID	FB-3 Field Blank Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.68E-01
Ra-228	Ga Tech	pCi/L			5.74E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171017
Collection Date	2/17/2016 10:50:00 AM
Sampling Media	Water
Station	AW04065
Sample ID	MW-17 Groundwater Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			3.96E-01
Ra-228	Ga Tech	pCi/L			7.53E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171018
Collection Date	2/17/2016 10:55:00 AM
Sampling Media	Water
Station	AW04066
Sample ID	FB-2 Field Blank Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.03E-01
Ra-228	Ga Tech	pCi/L			9.94E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171019
Collection Date	2/17/2016 12:20:00 PM
Sampling Media	Water
Station	AW04067
Sample ID	MW-15 Groundwater Greene 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			6.15E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171020
Collection Date	2/17/2016 12:35:00 PM
Sampling Media	Water
Station	AW04068
Sample ID	MW-15 Dup Groundwater Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			3.91E-01
Ra-228	Ga Tech	pCi/L			5.50E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171021
Collection Date	2/17/2016 2:55:00 PM
Sampling Media	Water
Station	AW04069
Sample ID	MW-1 Groundwater Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.30E-01
Ra-228	Ga Tech	pCi/L			7.71E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171022
Collection Date	2/17/2016 4:10:00 PM
Sampling Media	Water
Station	AW04070
Sample ID	MW-2 Groundwater Greene 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			4.12E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171023
Collection Date	2/17/2016 5:25:00 PM
Sampling Media	Water
Station	AW04071
Sample ID	MW-3 Groundwater Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.25E-01
Ra-228	Ga Tech	pCi/L			7.75E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171024
Collection Date	2/17/2016 10:50:00 AM
Sampling Media	Water
Station	AW04072
Sample ID	MW-16 Groundwater Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.98E-01
Ra-228	Ga Tech	pCi/L			9.69E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171025
Collection Date	2/17/2016 12:05:00 PM
Sampling Media	Water
Station	AW04073
Sample ID	MW-18 Groundwater Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.73E-01
Ra-228	Ga Tech	pCi/L			8.31E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171026
Collection Date	2/17/2016 12:05:00 PM
Sampling Media	Water
Station	AW04074
Sample ID	MW-18 Dup Groundwater Greene 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			5.27E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171027
Collection Date	2/17/2016 12:55:00 PM
Sampling Media	Water
Station	AW04075
Sample ID	EB-1 Equipment Blank Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.00E-01
Ra-228	Ga Tech	pCi/L			6.00E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171028
Collection Date	2/17/2016 2:40:00 PM
Sampling Media	Water
Station	AW04076
Sample ID	MW-23 Groundwater Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			3.85E-01
Ra-228	Ga Tech	pCi/L			6.51E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171029
Collection Date	2/17/2016 3:55:00 PM
Sampling Media	Water
Station	AW04077
Sample ID	MW-24 Groundwater Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			3.88E-01
Ra-228	Ga Tech	pCi/L			6.50E-01

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Report To Sarah Copeland
APC GSC Building 8

Location	APC Lab
Sample Number	102171030
Collection Date	2/17/2016 5:10:00 PM
Sampling Media	Water
Station	AW04078
Sample ID	MW-25 Groundwater Greene Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.50E-01
Ra-228	Ga Tech	pCi/L			8.02E-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

LAB USE ONLY — Work Order No. 102171 — Reviewed By: _____

[12] Page 1 of 3

[X] [13] Standard Turnaround Time

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

Company: [1] Alabama Power Company
Report To Saran Copeland
Address: [2] sgcopela@southernco.com

Phone/Fax: [3] 205-1e1e4-1e121
Contact: [4] Saran Copeland
Project Location: [5] Greene Ash Pond
Account Number: [6] _____
Special Instructions: [7] _____

Sample Shipment Date: [8] _____
Sampled By: [9] C.S / J.R. / N.P.
Print Name

Signature

Sample Received Date: [10] 3/7/16 @ 1000
Sample Received By: [11] _____

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

PRESERVATIVE [21]: N

ANALYSIS REQUESTED [22]

Sample Type Key: [23] G-Grab C-Composite O-Other

Matrix Key: [24] O-Oil SW-Surface Water S-Solid GW-Ground Water SL-Sludge WW-Waste Water W-Water DW-Drinking Water L-Liquid OW-Other Water

Preservative Key: [25] H-Hydrochloric Acid N-Nitric Acid S-Sulfuric Acid SH-Sodium Hydroxide P-Phosphoric Acid ST-Sodium Thiosulfate E-Ice U-Unpreserved O-Other (Specify) _____

LAB USE ONLY [14] LAB ID	Sample Number [15]	Collection [16] Date	Collection [16] Time	Sample Description [17]	[18] Sample Type	[19] Matrix	[20] No. of Containers	Ra-226	Ra-228	LAB USE ONLY [26] Comments
102171001	AW03820	2/16/16	1435	MW-10 Groundwater		GW	2	X	X	
2	AW03821	2/16/16	1510	RD Radiological Dup		GW	2	X	X	
3	AW03822	2/16/16	1620	MW-8 Groundwater		GW	2	X	X	
4	AW03823	2/16/16	1530	MW-9 Groundwater		GW	2	X	X	
5	AW03824	2/16/16	1545	MW-9 DUP Groundwater		GW	2	X	X	
6	AW03825	2/16/16	1230	MW-14 Groundwater		GW	2	X	X	
7	AW03826	2/16/16	1245	FB-1 Field Blank		GW	2	X	X	
8	AW03827	2/16/16	1405	MW-13 Groundwater		GW	2	X	X	
9	AW03828	2/16/16	1520	MW-12 Groundwater		GW	2	X	X	
10	AW03829	2/16/16	1635	MW-21 Groundwater		GW	2	X	X	

FOR CHAIN OF CUSTODY USE ONLY [27]

Relinquished by: [28] _____ Date/Time 3/7/16 1330
Received by: [28] _____ Date/Time
Relinquished by: _____ Date/Time
Received by: _____ Date/Time

LAB USE ONLY: Sample Receipt Information [30]

20.0°C (GBE1-IR-3P), no ice, coolers in good condition, received PHL2 Hand.

3477566

WHITE, CANARY & PINK—Laboratory GOLDENROD—Originator

(See Back For Instructions)

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

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY — Work Order No. 102171 — Reviewed By: _____

[12] Page 2 of 3

[X] [13] Standard Turnaround Time

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

Company: [1] Alabama Power Co
Report To Sarah Copeland
Address: [2] sgcopela@southernco.com

Phone/Fax: [3] _____
Contact: [4] _____
Project Location: [5] Greene Ash Pond
Account Number: [6] _____
Special Instructions: [7] _____

Sample Shipment Date: [8] _____
Sampled By: [9] _____ *Print Name*
_____ *Signature*
Sample Received Date: [10] 3/1/16 @ 10:00
Sample Received By: [11] _____
Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise

PRESERVATIVE [27]: N

ANALYSIS REQUESTED [22]

Sample Type Key: [23] G-Grab C-Composite D-Other

Matrix Key: [24] O-Oil SW-Surface Water S-Solid GW-Groundwater SL-Sludge WW-Waste Water W-Water DW-Drinking Water LQ-Liquid SW-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 O-Unpreserved O-Other (Specify) _____

LAB USE ONLY [14] LAB ID	Sample Number [15]	Collection [16] Date	Collection [16] Time	Sample Description [17]	[18] Sample Type	[19] Matrix	[20] No. of Containers	Ra-226	Ra-228	LAB USE ONLY [26] Comments
102171011	AW040590	2/17/16	1055	MW-6 Groundwater		GW	2	X	X	
12	AW040600	2/17/16	1530	MW-7 Groundwater		GW	2	X	X	
13	AW040601	2/17/16	1025	MW-11 Groundwater		GW	2	X	X	
14	AW040602	2/17/16	~~1400~~ 1025	RD Radiological DUP		GW	2	X	X	
15	AW040603	2/17/16	1400	MW-5 Groundwater		GW	2	X	X	
16	AW040604	2/17/16	1425	FB-3 Field Blank		GW	2	X	X	
17	AW040605	2/17/16	1050	MW-17 Groundwater		GW	2	X	X	
18	AW040606	2/17/16	1055	FB-2 Field Blank		GW	2	X	X	
19	AW040607	2/17/16	1220	MW-15 Groundwater		GW	2	X	X	
20	AW040608	2/17/16	1235	MW-15 DUP Groundwater		GW	2	X	X	

FOR CHAIN OF CUSTODY USE ONLY [29]

Relinquished by: [28] _____ Date/Time 3/1/16 1330
Received by: [28] _____ Date/Time
Relinquished by: _____ Date/Time
Received by: _____ Date/Time

LAB USE ONLY: Sample Receipt Information [30]

20.0°C (GPEL-IR-3P), no ice, cooler in good condition, no seal
PM2, Hand.

3471568

WHITE, CANARY & PINK—Laboratory GOLDENROD—Originator

(See Back For Instructions)

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

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY
Work Order No. 102171
Reviewed By:

[12] Page 3 of 3

[X] [13] Standard Turnaround Time

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

Company: [1] Alabama Power Co
Report To Sarah Copeland
Address: [2] sgcopela@southernco.com

Phone/Fax: [3]
Contact: [4]
Project Location: [5] Greene Ash Pond
Account Number: [6]
Special Instructions: [7]

Sample Shipment Date: [8]
Sampled By: [9] _____ Print Name
_____ Signature
Sample Received Date: [10] 3/7/16 @ 10:00
Sample Received By: [11] [signature]

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

PRESERVATIVE [21]: N

ANALYSIS REQUESTED [22]

Sample Type Key [23]: G-Grab, C-Composite, D-Other

Matrix Key: [24] O-Oil, S-Solid, SL-Sludge, W-Wipe, LQ-Liquid, SW-Surface Water, GW-Ground Water, WW-Waste Water, DW-Drinking Water, OW-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 [14] LAB ID	Sample Number [15]	Collection [16] Date	Collection [16] Time	Sample Description [17]	Sample Type [18]	Matrix [19]	No. of Containers [20]	Ra-226	Ra-228						LAB USE ONLY [26] Comments
102171021	AW04069	2/17/16	1455	MW-1 Groundwater		GW	2	X	X						
22	AW04070	2/17/16	1610	MW-2 Groundwater		GW	2	X	X						
23	AW04071	2/17/16	1725	MW-3 Groundwater		GW	2	X	X						
24	AW04072	2/17/16	1050	MW-16 Groundwater		GW	2	X	X						
25	AW04073	2/17/16	1205	MW-18 Groundwater		GW	2	X	X						
26	AW04074	2/17/16	1205	MW-18DUP Groundwater		GW	2	X	X						
27	AW04075	2/17/16	1255	EB-1 Equipment Blank		GW	2	X	X						
28	AW04076	2/17/16	1440	MW-23 Groundwater		GW	2	X	X						
29	AW04077	2/17/16	1555	MW-24 Groundwater		GW	2	X	X						
30	AW04078	2/17/16	1710	MW-25 Groundwater		GW	2	X	X						

FOR CHAIN OF CUSTODY USE ONLY [27]

Relinquished by: [28] [signature]	Date/Time 3/7/16 1330	
Received by: [29]	Date/Time	
Relinquished by:	Date/Time	
Received by:	Date/Time	

LAB USE ONLY: Sample Receipt Information [30]

20.0°(GPEL-IR-3P), no ice, cooler in good condition, no seal
PH<2, Hand.

3471566

WHITE, CANARY & PINK—Laboratory GOLDENROD—Originator

(See Back For Instructions)

Sample Receipt Checklist

GEORGIA POWER
A SOUTHERN COMPANY

Client: APC Lab
Workorder No.: 102171
Carrier: HAND

# of Samples: 30
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	20
COC is present	True	
COC is filled out in ink and is legible	True	
COC is filled out with pertinent information	False	Missing collector information on second and third COC, samples were logged in based on sample collector information on first COC.
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 AW03821 collection time and sample description different from COC to sample container label. Sample was logged in based on the information provided on sample container label. Sample AW03822 collection time different from COC to sample container label, sample was logged in based on the information provided on sample container label. Sample AW04062 sample description different from COC to sample container label, sample was logged in based on sample container label.
Samples are received within holding times	True	
Containers are not broken or leaking	True	
Sample collection date/times are present	False	Sample AW04066 missing collection time on one sample container label, sample was logged in based on the information provided on COC.
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:

Completed By: Jassim, Ayssar

Date: 05/24/2016

ENVIRONMENTAL LABORATORY

QUALITY CONTROL DATA

Workorder: 102143, 102152, 102156, 102171

QC Batch: 16851 Analysis Method: Ga Tech
QC Batch Method: Ga Tech
Associated Lab Samples: 102143004, 102152001, 102152002, 102156001, 102156002, 102156003, 102156004, 102171001, 102171003, 102171004, 102171005, 102171006, 102171007, 102171008, 102171009, 102171010, 102171011, 102171012, 102171013

METHOD BLANK:

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Radium-226	pCi/l	<3.89E-01	1.0	
Radium-228	pCi/l	<8.24E-01	1.0	

Laboratory Control Sample:

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Radium-226	pCi/l	4.782	5.607	117	70-130	
Radium-228	pCi/l	4.907	5.579	114	70-130	

Laboratory Control Sample Duplicate:

Parameter	Units	RPD	Max RPD	Qualifiers
Radium-226	pCi/l	17.1	20	
Radium-228	pCi/l	2.6	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	

QUALITY CONTROL DATA

Workorder: 102171, 102220

QC Batch: 16857 Analysis Method: Ga Tech
QC Batch Method: Ga Tech
Associated Lab Samples: 102171014 - 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

Lab & Field SERVICES

Sample Group : WMWGREAP_1058

Project/Site : Greene County Ash Pond
Demopolis, AL 36732

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

Alabama Power

Lab & Field SERVICES

Anions

Greene County Ash Pond

WMWGREAP_1058

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

Sample ID	Chloride Batch ID	Fluoride Batch ID	Sulfate Batch ID	Project ID
AW28452	581841	581842	581843	WMWGREAP_1058
AW28453	581841	581842	581843	WMWGREAP_1058
AW28454	581983	581985	581987	WMWGREAP_1058
AW28455	581983	581985	581987	WMWGREAP_1058
AW28456	581983	581985	581987	WMWGREAP_1058
AW28457	581983	581985	581987	WMWGREAP_1058
AW28458	581983	581985	581987	WMWGREAP_1058
AW28459	581983	581985	581987	WMWGREAP_1058
AW28460	581983	581985	581987	WMWGREAP_1058
AW28461	581983	581985	581987	WMWGREAP_1058
AW28462	581983	581985	581987	WMWGREAP_1058

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 581843 presented a negative concentration above the MDL of 0.3, at -0.762 mg/L. One batch sample (AW28452) presented a positive sulfate concentration above the RL but below 10x the absolute value of the blank, and is qualified as quantitatively estimated with the potential for low bias on the reported result.

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Calera, AL 35040
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FAX (205) 257-1654

2. The blank for anion sulfate in batch 581987 presented a negative concentration above the MDL of 0.3, at -0.765 mg/L. Three associated batch samples (AW28456, AW28457 and AW28462) presented negative sulfate concentrations greater than absolute MDL and below 10x the absolute blank value, and are considered as quantitatively estimated non-detect results, with indication of low bias on the reported RL values. One associated batch sample (AW28460) presented a positive sulfate result above MDL but below RL, and less than 10x the absolute blank value, and is qualified as a quantitatively estimated result with indication of potential low bias, and two associated batch samples (AW28455 and AW28458) presented sulfate concentrations above RL but below 10x the absolute blank value, and are qualified as quantitatively estimated results with indication of potential low bias on the reported results.

- All laboratory fortified blanks (LFB) were within acceptance criteria for the anions requested, with the following exception:
    1. The opening LFB for fluoride in batch 581842 was below the lower recovery limit of 90%, at 88%. Due to low LFB recovery, the reported results for associated batch fluoride samples AW28452 and AW28453 are qualified as quantitatively estimated non-detect values with indication of potential low bias on the reported RL 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 associated batch samples were analyzed without 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.

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

Lab & Field SERVICES

Metals ICP

Greene County Ash Pond

WMWGREAP_1058

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

Sample ID	Batch ID	Project ID
AW28452	20161206C_20161207A	WMWGREAP_1058
AW28453	20161213CCR2	WMWGREAP_1058
AW28454	20161213CCR2	WMWGREAP_1058
AW28455	20161213CCR2	WMWGREAP_1058
AW28456	20161213CCR2	WMWGREAP_1058
AW28457	20161213CCR2	WMWGREAP_1058
AW28458	20161213CCR2	WMWGREAP_1058
AW28459	20161213CCR2	WMWGREAP_1058
AW28460	20161213CCR2	WMWGREAP_1058
AW28461	20161213CCR3_20161228A	WMWGREAP_1058
AW28462	20161213CCR3_20161228A	WMWGREAP_1058

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.

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

- 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 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

Alabama Power

Lab & Field SERVICES

Metals ICPMS

Greene County Ash Pond

WMWGREAP_1058

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

Sample ID	Batch ID	Project ID
AW28452	582194	WMWGREAP_1058
AW28453	582194	WMWGREAP_1058
AW28454	582195	WMWGREAP_1058
AW28455	582195	WMWGREAP_1058
AW28456	582195	WMWGREAP_1058
AW28457	582195	WMWGREAP_1058
AW28458	582195	WMWGREAP_1058
AW28459	582195	WMWGREAP_1058
AW28460	582195	WMWGREAP_1058
AW28461	582195	WMWGREAP_1058
AW28462	582195	WMWGREAP_1058

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.

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

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.

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

Lab & Field SERVICES

Mercury

Greene County Ash Pond

WMWGREAP_1058

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

Sample ID	Batch ID	Project ID
AW28452	582540	WMWGREAP_1058
AW28453	582540	WMWGREAP_1058
AW28454	582540	WMWGREAP_1058
AW28455	582540	WMWGREAP_1058
AW28456	582540	WMWGREAP_1058
AW28457	582540	WMWGREAP_1058
AW28458	582540	WMWGREAP_1058
AW28459	582540	WMWGREAP_1058
AW28460	582540	WMWGREAP_1058
AW28461	582541	WMWGREAP_1058
AW28462	582541	WMWGREAP_1058

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.

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution.
8. The raw data results are shown with dilution factors included.

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

Case Narrative

Alabama Power

Lab & Field SERVICES

TDS

Greene County Ash Pond

WMWGREAP_1058

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

Sample ID	Batch ID	Project ID
AW28452	582103	WMWGREAP_1058
AW28453	582103	WMWGREAP_1058
AW28454	582103	WMWGREAP_1058
AW28455	582103	WMWGREAP_1058
AW28456	582103	WMWGREAP_1058
AW28457	582103	WMWGREAP_1058
AW28458	582103	WMWGREAP_1058
AW28459	582103	WMWGREAP_1058
AW28460	582103	WMWGREAP_1058
AW28461	582103	WMWGREAP_1058
AW28462	582104	WMWGREAP_1058

4. All of the above samples were analyzed by Standard Method 2540C.
5. There are no results reported for the samples listed above due to QC failure and hold time exceedance.
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. The criterion was not met. Results were not reportable for samples AW28452 – AW28462 and were resampled.
- All samples were between 2.5 mg and 200 mg residue with the exception of AW28457 and AW28462.

Alabama Power 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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 14-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AW28452

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010		0.0129	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	12/6/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	12/6/2016	EPA 200.7		1	0.1	0.5		9.17	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	12/6/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25		4.08	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1		1.15	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/20/2017
Version: 2.0

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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 14-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AW28452

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28453	Thallium, Total	mg/L	0.0000131	0.00044	0.10	0.101	0.103	0.0949	0.085 to 0.115	101	70 to 130	1.79	20
AW28453	Beryllium, Total	mg/L	0.0000110	0.00132	0.10	0.0918	0.0937	0.0904	0.085 to 0.115	91.8	70 to 130	2.11	20
AW28453	Barium, Total	mg/L	-0.000000374	0.0044	0.10	0.118	0.116	0.0919	0.085 to 0.115	97.6	70 to 130	2.27	20
AW28453	Cadmium, Total	mg/L	0.0000103	0.00044	0.10	0.0937	0.0942	0.0947	0.085 to 0.115	93.7	70 to 130	0.523	20
AW28452	Lithium, Total	mg/L	-0.0000258	0.022	0.20	0.216	0.217	0.212	0.17 to 0.23	108	70 to 130	0.462	20
AW28453	Lead, Total	mg/L	0.0000112	0.0022	0.10	0.101	0.103	0.0964	0.085 to 0.115	101	70 to 130	1.38	20
AW28452	Boron, Total	mg/L	0.0186	0.044	1.00	1.01	1.01	1.02	0.85 to 1.15	101	70 to 130	0.00	20
AW28452	Calcium, Total	mg/L	-0.0383	0.22	5.00	13.8	13.9	5.04	4.25 to 5.75	92.5	70 to 130	0.722	20
AW28453	Cobalt, Total	mg/L	0.00000596	0.0044	0.10	0.0953	0.0951	0.0896	0.085 to 0.115	91.3	70 to 130	0.253	20
AW28453	Antimony, Total	mg/L	0.000123	0.00132	0.10	0.0920	0.0924	0.0921	0.085 to 0.115	92.0	70 to 130	0.500	20
AW28453	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0937	0.0941	0.0941	0.085 to 0.115	93.7	70 to 130	0.445	20
AW28453	Selenium, Total	mg/L	0.0000775	0.0044	0.10	0.0940	0.0936	0.0969	0.085 to 0.115	94.0	70 to 130	0.380	20
AW28453	Chromium, Total	mg/L	0.00000785	0.0044	0.10	0.0962	0.0972	0.0929	0.085 to 0.115	96.2	70 to 130	1.02	20
AW28453	Molybdenum, Total	mg/L	0.0000138	0.0044	0.10	0.0960	0.0960	0.0953	0.085 to 0.115	96.0	70 to 130	0.0121	20
AW28460	Mercury, Total by CVAA	mg/L	0.0000498	0.0005	0.004	0.00405	0.00415	0.00409	0.0034 to 0.0046	101	70 to 130	2.44	20

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 14-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AW28452

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28453	Fluoride, Total	mg/L	0.000	0.3	2.00	1.86	-0.047		1.8 to 2.2	93.0	80 to 120	0	20
AW28453	Sulfate, Total	mg/L	-0.762	1.0	20.00	32.6	12.5	20.1	18 to 22	101	80 to 120	0.803	20
AW28453	Chloride, Total	mg/L	0.000	0.25	10.00	14.0	4.41	9.90	9 to 11	95.8	80 to 120	0.226	20

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 14-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AW28453

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010		0.0206	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	12/15/2016	EPA 200.7		1	0.02	0.1	J	0.0355	mg/L
* Calcium, Total	HRG	12/15/2016	EPA 200.7		1	0.1	0.5		2.47	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	J	0.00399	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	12/15/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25		4.42	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1		12.4	mg/L

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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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 14-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AW28453

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28453	Cadmium, Total	mg/L	0.0000103	0.00044	0.10	0.0937	0.0942	0.0947	0.085 to 0.115	93.7	70 to 130	0.523	20
AW28453	Thallium, Total	mg/L	0.0000131	0.00044	0.10	0.101	0.103	0.0949	0.085 to 0.115	101	70 to 130	1.79	20
AW28453	Cobalt, Total	mg/L	0.00000596	0.0044	0.10	0.0953	0.0951	0.0896	0.085 to 0.115	91.3	70 to 130	0.253	20
AW28453	Barium, Total	mg/L	-0.000000374	0.0044	0.10	0.118	0.116	0.0919	0.085 to 0.115	97.6	70 to 130	2.27	20
AW28453	Lead, Total	mg/L	0.0000112	0.0022	0.10	0.101	0.103	0.0964	0.085 to 0.115	101	70 to 130	1.38	20
AW28453	Chromium, Total	mg/L	0.00000785	0.0044	0.10	0.0962	0.0972	0.0929	0.085 to 0.115	96.2	70 to 130	1.02	20
AW28453	Molybdenum, Total	mg/L	0.0000138	0.0044	0.10	0.0960	0.0960	0.0953	0.085 to 0.115	96.0	70 to 130	0.0121	20
AW28460	Lithium, Total	mg/L	-0.0000864	0.022	0.20	0.178	0.188	0.207	0.17 to 0.23	89.0	70 to 130	5.31	20
AW28460	Mercury, Total by CVAA	mg/L	0.0000498	0.0005	0.004	0.00405	0.00415	0.00409	0.0034 to 0.0046	101	70 to 130	2.44	20
AW28453	Beryllium, Total	mg/L	0.0000110	0.00132	0.10	0.0918	0.0937	0.0904	0.085 to 0.115	91.8	70 to 130	2.11	20
AW28460	Calcium, Total	mg/L	-0.0361	0.22	5.00	4.45	4.61	5.22	4.25 to 5.75	76.2	70 to 130	3.61	20
AW28453	Antimony, Total	mg/L	0.000123	0.00132	0.10	0.0920	0.0924	0.0921	0.085 to 0.115	92.0	70 to 130	0.500	20
AW28453	Arsenic, Total	mg/L	0.0000141	0.0022	0.10	0.0937	0.0941	0.0941	0.085 to 0.115	93.7	70 to 130	0.445	20
AW28453	Selenium, Total	mg/L	0.0000775	0.0044	0.10	0.0940	0.0936	0.0969	0.085 to 0.115	94.0	70 to 130	0.380	20
AW28460	Boron, Total	mg/L	-0.00770	0.044	1.00	0.970	0.987	0.999	0.85 to 1.15	97.0	70 to 130	1.69	20

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 14-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AW28453

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28453	Sulfate, Total	mg/L	-0.762	1.0	20.00	32.6	12.5	20.1	18 to 22	101	80 to 120	0.803	20
AW28453	Fluoride, Total	mg/L	0.000	0.3	2.00	1.86	-0.047		1.8 to 2.2	93.0	80 to 120	0	20
AW28453	Chloride, Total	mg/L	0.000	0.25	10.00	14.0	4.41	9.90	9 to 11	95.8	80 to 120	0.226	20

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 14-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-33 Dup

Laboratory ID Number: AW28454

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010		0.0219	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	12/15/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	12/15/2016	EPA 200.7		1	0.1	0.5		2.22	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	J	0.00424	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	12/15/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25		4.42	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1		12.4	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 14-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-33 Dup

Laboratory ID Number: AW28454

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28463	Cobalt, Total	mg/L	0.00000757	0.0044	0.10	0.0908	0.0903	0.0932	0.085 to 0.115	90.8	70 to 130	0.544	20
AW28460	Calcium, Total	mg/L	-0.0361	0.22	5.00	4.45	4.61	5.22	4.25 to 5.75	76.2	70 to 130	3.61	20
AW28463	Cadmium, Total	mg/L	0.00000965	0.00044	0.10	0.0949	0.0952	0.0971	0.085 to 0.115	94.9	70 to 130	0.352	20
AW28463	Lead, Total	mg/L	0.0000109	0.0022	0.10	0.103	0.104	0.102	0.085 to 0.115	103	70 to 130	0.278	20
AW28460	Lithium, Total	mg/L	-0.0000864	0.022	0.20	0.178	0.188	0.207	0.17 to 0.23	89.0	70 to 130	5.31	20
AW28460	Mercury, Total by CVAA	mg/L	0.0000498	0.0005	0.004	0.00405	0.00415	0.00409	0.0034 to 0.0046	101	70 to 130	2.44	20
AW28463	Antimony, Total	mg/L	0.0000992	0.00132	0.10	0.0909	0.0918	0.0942	0.085 to 0.115	90.9	70 to 130	0.946	20
AW28463	Beryllium, Total	mg/L	0.00000922	0.00132	0.10	0.0971	0.0962	0.0995	0.085 to 0.115	97.1	70 to 130	0.974	20
AW28463	Thallium, Total	mg/L	0.0000138	0.00044	0.10	0.104	0.103	0.0994	0.085 to 0.115	104	70 to 130	0.469	20
AW28463	Barium, Total	mg/L	0.00000724	0.0044	0.10	0.109	0.108	0.0967	0.085 to 0.115	96.0	70 to 130	0.792	20
AW28463	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0973	0.0987	0.0989	0.085 to 0.115	97.3	70 to 130	1.44	20
AW28463	Molybdenum, Total	mg/L	0.0000152	0.0044	0.10	0.0970	0.0972	0.0984	0.085 to 0.115	97.0	70 to 130	0.189	20
AW28463	Selenium, Total	mg/L	0.0000416	0.0044	0.10	0.0947	0.0942	0.0972	0.085 to 0.115	94.7	70 to 130	0.482	20
AW28460	Boron, Total	mg/L	-0.00770	0.044	1.00	0.970	0.987	0.999	0.85 to 1.15	97.0	70 to 130	1.69	20
AW28463	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0930	0.0948	0.0968	0.085 to 0.115	93.0	70 to 130	1.90	20

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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:

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 14-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-33 Dup

Laboratory ID Number: AW28454

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28463	Chloride, Total	mg/L	0.000	0.25	10.00	12.5	2.76	9.88	9 to 11	97.5	80 to 120	0.363	20
AW28463	Fluoride, Total	mg/L	0.000	0.3	2.00	1.65	-0.041	1.80	1.8 to 2.2	82.5	80 to 120	0	20
AW28463	Sulfate, Total	mg/L	-0.765	1.0	20.00	22.1	2.17	19.2	18 to 22	99.7	80 to 120	0.462	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

CC:

Reported: 7/20/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 14-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AW28455

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010		0.0215	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	12/15/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	12/15/2016	EPA 200.7		1	0.1	0.5		26.5	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	12/15/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25		5.28	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1		2.31	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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Comments:

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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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 14-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AW28455

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28463	Cobalt, Total	mg/L	0.00000757	0.0044	0.10	0.0908	0.0903	0.0932	0.085 to 0.115	90.8	70 to 130	0.544	20
AW28460	Calcium, Total	mg/L	-0.0361	0.22	5.00	4.45	4.61	5.22	4.25 to 5.75	76.2	70 to 130	3.61	20
AW28460	Lithium, Total	mg/L	-0.0000864	0.022	0.20	0.178	0.188	0.207	0.17 to 0.23	89.0	70 to 130	5.31	20
AW28460	Mercury, Total by CVAA	mg/L	0.0000498	0.0005	0.004	0.00405	0.00415	0.00409	0.0034 to 0.0046	101	70 to 130	2.44	20
AW28463	Cadmium, Total	mg/L	0.00000965	0.00044	0.10	0.0949	0.0952	0.0971	0.085 to 0.115	94.9	70 to 130	0.352	20
AW28463	Lead, Total	mg/L	0.0000109	0.0022	0.10	0.103	0.104	0.102	0.085 to 0.115	103	70 to 130	0.278	20
AW28460	Boron, Total	mg/L	-0.00770	0.044	1.00	0.970	0.987	0.999	0.85 to 1.15	97.0	70 to 130	1.69	20
AW28463	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0930	0.0948	0.0968	0.085 to 0.115	93.0	70 to 130	1.90	20
AW28463	Antimony, Total	mg/L	0.0000992	0.00132	0.10	0.0909	0.0918	0.0942	0.085 to 0.115	90.9	70 to 130	0.946	20
AW28463	Beryllium, Total	mg/L	0.00000922	0.00132	0.10	0.0971	0.0962	0.0995	0.085 to 0.115	97.1	70 to 130	0.974	20
AW28463	Thallium, Total	mg/L	0.0000138	0.00044	0.10	0.104	0.103	0.0994	0.085 to 0.115	104	70 to 130	0.469	20
AW28463	Barium, Total	mg/L	0.00000724	0.0044	0.10	0.109	0.108	0.0967	0.085 to 0.115	96.0	70 to 130	0.792	20
AW28463	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0973	0.0987	0.0989	0.085 to 0.115	97.3	70 to 130	1.44	20
AW28463	Molybdenum, Total	mg/L	0.0000152	0.0044	0.10	0.0970	0.0972	0.0984	0.085 to 0.115	97.0	70 to 130	0.189	20
AW28463	Selenium, Total	mg/L	0.0000416	0.0044	0.10	0.0947	0.0942	0.0972	0.085 to 0.115	94.7	70 to 130	0.482	20

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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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 14-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AW28455

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28463	Chloride, Total	mg/L	0.000	0.25	10.00	12.5	2.76	9.88	9 to 11	97.5	80 to 120	0.363	20
AW28463	Fluoride, Total	mg/L	0.000	0.3	2.00	1.65	-0.041	1.80	1.8 to 2.2	82.5	80 to 120	0	20
AW28463	Sulfate, Total	mg/L	-0.765	1.0	20.00	22.1	2.17	19.2	18 to 22	99.7	80 to 120	0.462	20

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AW28456

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010		0.0359	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	12/15/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	12/15/2016	EPA 200.7		1	0.1	0.5		1.34	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	12/15/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25		2.10	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1	U	Not Detected	mg/L

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AW28456

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28463	Cobalt, Total	mg/L	0.00000757	0.0044	0.10	0.0908	0.0903	0.0932	0.085 to 0.115	90.8	70 to 130	0.544	20
AW28460	Calcium, Total	mg/L	-0.0361	0.22	5.00	4.45	4.61	5.22	4.25 to 5.75	76.2	70 to 130	3.61	20
AW28460	Lithium, Total	mg/L	-0.0000864	0.022	0.20	0.178	0.188	0.207	0.17 to 0.23	89.0	70 to 130	5.31	20
AW28460	Mercury, Total by CVAA	mg/L	0.0000498	0.0005	0.004	0.00405	0.00415	0.00409	0.0034 to 0.0046	101	70 to 130	2.44	20
AW28463	Cadmium, Total	mg/L	0.00000965	0.00044	0.10	0.0949	0.0952	0.0971	0.085 to 0.115	94.9	70 to 130	0.352	20
AW28463	Lead, Total	mg/L	0.0000109	0.0022	0.10	0.103	0.104	0.102	0.085 to 0.115	103	70 to 130	0.278	20
AW28463	Barium, Total	mg/L	0.00000724	0.0044	0.10	0.109	0.108	0.0967	0.085 to 0.115	96.0	70 to 130	0.792	20
AW28463	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0973	0.0987	0.0989	0.085 to 0.115	97.3	70 to 130	1.44	20
AW28463	Molybdenum, Total	mg/L	0.0000152	0.0044	0.10	0.0970	0.0972	0.0984	0.085 to 0.115	97.0	70 to 130	0.189	20
AW28463	Selenium, Total	mg/L	0.0000416	0.0044	0.10	0.0947	0.0942	0.0972	0.085 to 0.115	94.7	70 to 130	0.482	20
AW28463	Antimony, Total	mg/L	0.0000992	0.00132	0.10	0.0909	0.0918	0.0942	0.085 to 0.115	90.9	70 to 130	0.946	20
AW28463	Beryllium, Total	mg/L	0.00000922	0.00132	0.10	0.0971	0.0962	0.0995	0.085 to 0.115	97.1	70 to 130	0.974	20
AW28463	Thallium, Total	mg/L	0.0000138	0.00044	0.10	0.104	0.103	0.0994	0.085 to 0.115	104	70 to 130	0.469	20
AW28460	Boron, Total	mg/L	-0.00770	0.044	1.00	0.970	0.987	0.999	0.85 to 1.15	97.0	70 to 130	1.69	20
AW28463	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0930	0.0948	0.0968	0.085 to 0.115	93.0	70 to 130	1.90	20

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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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AW28456

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28463	Chloride, Total	mg/L	0.000	0.25	10.00	12.5	2.76	9.88	9 to 11	97.5	80 to 120	0.363	20
AW28463	Fluoride, Total	mg/L	0.000	0.3	2.00	1.65	-0.041	1.80	1.8 to 2.2	82.5	80 to 120	0	20
AW28463	Sulfate, Total	mg/L	-0.765	1.0	20.00	22.1	2.17	19.2	18 to 22	99.7	80 to 120	0.462	20

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 15-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW28457

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	12/15/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	12/15/2016	EPA 200.7		1	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	12/15/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1	U	Not Detected	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 15-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW28457

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28460	Calcium, Total	mg/L	-0.0361	0.22	5.00	4.45	4.61	5.22	4.25 to 5.75	76.2	70 to 130	3.61	20
AW28463	Cobalt, Total	mg/L	0.00000757	0.0044	0.10	0.0908	0.0903	0.0932	0.085 to 0.115	90.8	70 to 130	0.544	20
AW28463	Cadmium, Total	mg/L	0.00000965	0.00044	0.10	0.0949	0.0952	0.0971	0.085 to 0.115	94.9	70 to 130	0.352	20
AW28463	Lead, Total	mg/L	0.0000109	0.0022	0.10	0.103	0.104	0.102	0.085 to 0.115	103	70 to 130	0.278	20
AW28463	Barium, Total	mg/L	0.00000724	0.0044	0.10	0.109	0.108	0.0967	0.085 to 0.115	96.0	70 to 130	0.792	20
AW28463	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0973	0.0987	0.0989	0.085 to 0.115	97.3	70 to 130	1.44	20
AW28463	Molybdenum, Total	mg/L	0.0000152	0.0044	0.10	0.0970	0.0972	0.0984	0.085 to 0.115	97.0	70 to 130	0.189	20
AW28463	Selenium, Total	mg/L	0.0000416	0.0044	0.10	0.0947	0.0942	0.0972	0.085 to 0.115	94.7	70 to 130	0.482	20
AW28460	Lithium, Total	mg/L	-0.0000864	0.022	0.20	0.178	0.188	0.207	0.17 to 0.23	89.0	70 to 130	5.31	20
AW28460	Mercury, Total by CVAA	mg/L	0.0000498	0.0005	0.004	0.00405	0.00415	0.00409	0.0034 to 0.0046	101	70 to 130	2.44	20
AW28463	Antimony, Total	mg/L	0.0000992	0.00132	0.10	0.0909	0.0918	0.0942	0.085 to 0.115	90.9	70 to 130	0.946	20
AW28463	Beryllium, Total	mg/L	0.00000922	0.00132	0.10	0.0971	0.0962	0.0995	0.085 to 0.115	97.1	70 to 130	0.974	20
AW28463	Thallium, Total	mg/L	0.0000138	0.00044	0.10	0.104	0.103	0.0994	0.085 to 0.115	104	70 to 130	0.469	20
AW28460	Boron, Total	mg/L	-0.00770	0.044	1.00	0.970	0.987	0.999	0.85 to 1.15	97.0	70 to 130	1.69	20
AW28463	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0930	0.0948	0.0968	0.085 to 0.115	93.0	70 to 130	1.90	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 15-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW28457

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28463	Chloride, Total	mg/L	0.000	0.25	10.00	12.5	2.76	9.88	9 to 11	97.5	80 to 120	0.363	20
AW28463	Fluoride, Total	mg/L	0.000	0.3	2.00	1.65	-0.041	1.80	1.8 to 2.2	82.5	80 to 120	0	20
AW28463	Sulfate, Total	mg/L	-0.765	1.0	20.00	22.1	2.17	19.2	18 to 22	99.7	80 to 120	0.462	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

CC:

Reported: 7/20/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AW28458

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	J	0.00440	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010		0.0479	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	12/15/2016	EPA 200.7		1	0.02	0.1	J	0.0229	mg/L
* Calcium, Total	HRG	12/15/2016	EPA 200.7		1	0.1	0.5		1.36	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	J	0.00938	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	12/15/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	J	0.00308	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25		6.65	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1		1.19	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/20/2017
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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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AW28458

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28463	Cobalt, Total	mg/L	0.00000757	0.0044	0.10	0.0908	0.0903	0.0932	0.085 to 0.115	90.8	70 to 130	0.544	20
AW28460	Calcium, Total	mg/L	-0.0361	0.22	5.00	4.45	4.61	5.22	4.25 to 5.75	76.2	70 to 130	3.61	20
AW28463	Barium, Total	mg/L	0.00000724	0.0044	0.10	0.109	0.108	0.0967	0.085 to 0.115	96.0	70 to 130	0.792	20
AW28463	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0973	0.0987	0.0989	0.085 to 0.115	97.3	70 to 130	1.44	20
AW28463	Molybdenum, Total	mg/L	0.0000152	0.0044	0.10	0.0970	0.0972	0.0984	0.085 to 0.115	97.0	70 to 130	0.189	20
AW28463	Selenium, Total	mg/L	0.0000416	0.0044	0.10	0.0947	0.0942	0.0972	0.085 to 0.115	94.7	70 to 130	0.482	20
AW28463	Cadmium, Total	mg/L	0.00000965	0.00044	0.10	0.0949	0.0952	0.0971	0.085 to 0.115	94.9	70 to 130	0.352	20
AW28463	Lead, Total	mg/L	0.0000109	0.0022	0.10	0.103	0.104	0.102	0.085 to 0.115	103	70 to 130	0.278	20
AW28460	Lithium, Total	mg/L	-0.0000864	0.022	0.20	0.178	0.188	0.207	0.17 to 0.23	89.0	70 to 130	5.31	20
AW28460	Mercury, Total by CVAA	mg/L	0.0000498	0.0005	0.004	0.00405	0.00415	0.00409	0.0034 to 0.0046	101	70 to 130	2.44	20
AW28463	Antimony, Total	mg/L	0.0000992	0.00132	0.10	0.0909	0.0918	0.0942	0.085 to 0.115	90.9	70 to 130	0.946	20
AW28463	Beryllium, Total	mg/L	0.00000922	0.00132	0.10	0.0971	0.0962	0.0995	0.085 to 0.115	97.1	70 to 130	0.974	20
AW28463	Thallium, Total	mg/L	0.0000138	0.00044	0.10	0.104	0.103	0.0994	0.085 to 0.115	104	70 to 130	0.469	20
AW28460	Boron, Total	mg/L	-0.00770	0.044	1.00	0.970	0.987	0.999	0.85 to 1.15	97.0	70 to 130	1.69	20
AW28463	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0930	0.0948	0.0968	0.085 to 0.115	93.0	70 to 130	1.90	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AW28458

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28463	Chloride, Total	mg/L	0.000	0.25	10.00	12.5	2.76	9.88	9 to 11	97.5	80 to 120	0.363	20
AW28463	Fluoride, Total	mg/L	0.000	0.3	2.00	1.65	-0.041	1.80	1.8 to 2.2	82.5	80 to 120	0	20
AW28463	Sulfate, Total	mg/L	-0.765	1.0	20.00	22.1	2.17	19.2	18 to 22	99.7	80 to 120	0.462	20

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AW28459

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010		0.332	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	12/15/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	12/15/2016	EPA 200.7		1	0.1	0.5		2.28	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	J	0.000821	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	J	0.00296	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	12/15/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25		1.53	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1		8.75	mg/L

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Issued By: State of Florida, Department of Health
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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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AW28459

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28463	Cobalt, Total	mg/L	0.00000757	0.0044	0.10	0.0908	0.0903	0.0932	0.085 to 0.115	90.8	70 to 130	0.544	20
AW28460	Calcium, Total	mg/L	-0.0361	0.22	5.00	4.45	4.61	5.22	4.25 to 5.75	76.2	70 to 130	3.61	20
AW28460	Lithium, Total	mg/L	-0.0000864	0.022	0.20	0.178	0.188	0.207	0.17 to 0.23	89.0	70 to 130	5.31	20
AW28460	Mercury, Total by CVAA	mg/L	0.0000498	0.0005	0.004	0.00405	0.00415	0.00409	0.0034 to 0.0046	101	70 to 130	2.44	20
AW28460	Boron, Total	mg/L	-0.00770	0.044	1.00	0.970	0.987	0.999	0.85 to 1.15	97.0	70 to 130	1.69	20
AW28463	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0930	0.0948	0.0968	0.085 to 0.115	93.0	70 to 130	1.90	20
AW28463	Barium, Total	mg/L	0.00000724	0.0044	0.10	0.109	0.108	0.0967	0.085 to 0.115	96.0	70 to 130	0.792	20
AW28463	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0973	0.0987	0.0989	0.085 to 0.115	97.3	70 to 130	1.44	20
AW28463	Molybdenum, Total	mg/L	0.0000152	0.0044	0.10	0.0970	0.0972	0.0984	0.085 to 0.115	97.0	70 to 130	0.189	20
AW28463	Selenium, Total	mg/L	0.0000416	0.0044	0.10	0.0947	0.0942	0.0972	0.085 to 0.115	94.7	70 to 130	0.482	20
AW28463	Antimony, Total	mg/L	0.0000992	0.00132	0.10	0.0909	0.0918	0.0942	0.085 to 0.115	90.9	70 to 130	0.946	20
AW28463	Beryllium, Total	mg/L	0.00000922	0.00132	0.10	0.0971	0.0962	0.0995	0.085 to 0.115	97.1	70 to 130	0.974	20
AW28463	Thallium, Total	mg/L	0.0000138	0.00044	0.10	0.104	0.103	0.0994	0.085 to 0.115	104	70 to 130	0.469	20
AW28463	Cadmium, Total	mg/L	0.00000965	0.00044	0.10	0.0949	0.0952	0.0971	0.085 to 0.115	94.9	70 to 130	0.352	20
AW28463	Lead, Total	mg/L	0.0000109	0.0022	0.10	0.103	0.104	0.102	0.085 to 0.115	103	70 to 130	0.278	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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Reported: 7/20/2017
Version: 2.0

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AW28459

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28463	Chloride, Total	mg/L	0.000	0.25	10.00	12.5	2.76	9.88	9 to 11	97.5	80 to 120	0.363	20
AW28463	Fluoride, Total	mg/L	0.000	0.3	2.00	1.65	-0.041	1.80	1.8 to 2.2	82.5	80 to 120	0	20
AW28463	Sulfate, Total	mg/L	-0.765	1.0	20.00	22.1	2.17	19.2	18 to 22	99.7	80 to 120	0.462	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

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Reported: 7/20/2017
Version: 2.0

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Calera, AL 35040
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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AW28460

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010		0.0628	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	12/15/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	12/15/2016	EPA 200.7		1	0.1	0.5		0.641	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	J	0.000216	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	12/15/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25		1.50	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1	J	0.448	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AW28460

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28460	Calcium, Total	mg/L	-0.0361	0.22	5.00	4.45	4.61	5.22	4.25 to 5.75	76.2	70 to 130	3.61	20
AW28463	Cobalt, Total	mg/L	0.00000757	0.0044	0.10	0.0908	0.0903	0.0932	0.085 to 0.115	90.8	70 to 130	0.544	20
AW28463	Cadmium, Total	mg/L	0.00000965	0.00044	0.10	0.0949	0.0952	0.0971	0.085 to 0.115	94.9	70 to 130	0.352	20
AW28463	Lead, Total	mg/L	0.0000109	0.0022	0.10	0.103	0.104	0.102	0.085 to 0.115	103	70 to 130	0.278	20
AW28463	Antimony, Total	mg/L	0.0000992	0.00132	0.10	0.0909	0.0918	0.0942	0.085 to 0.115	90.9	70 to 130	0.946	20
AW28463	Beryllium, Total	mg/L	0.00000922	0.00132	0.10	0.0971	0.0962	0.0995	0.085 to 0.115	97.1	70 to 130	0.974	20
AW28463	Thallium, Total	mg/L	0.0000138	0.00044	0.10	0.104	0.103	0.0994	0.085 to 0.115	104	70 to 130	0.469	20
AW28460	Lithium, Total	mg/L	-0.0000864	0.022	0.20	0.178	0.188	0.207	0.17 to 0.23	89.0	70 to 130	5.31	20
AW28460	Mercury, Total by CVAA	mg/L	0.0000498	0.0005	0.004	0.00405	0.00415	0.00409	0.0034 to 0.0046	101	70 to 130	2.44	20
AW28460	Boron, Total	mg/L	-0.00770	0.044	1.00	0.970	0.987	0.999	0.85 to 1.15	97.0	70 to 130	1.69	20
AW28463	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0930	0.0948	0.0968	0.085 to 0.115	93.0	70 to 130	1.90	20
AW28463	Barium, Total	mg/L	0.00000724	0.0044	0.10	0.109	0.108	0.0967	0.085 to 0.115	96.0	70 to 130	0.792	20
AW28463	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0973	0.0987	0.0989	0.085 to 0.115	97.3	70 to 130	1.44	20
AW28463	Molybdenum, Total	mg/L	0.0000152	0.0044	0.10	0.0970	0.0972	0.0984	0.085 to 0.115	97.0	70 to 130	0.189	20
AW28463	Selenium, Total	mg/L	0.0000416	0.0044	0.10	0.0947	0.0942	0.0972	0.085 to 0.115	94.7	70 to 130	0.482	20

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Laboratory certification ID: E571114
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Comments:

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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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AW28460

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28463	Chloride, Total	mg/L	0.000	0.25	10.00	12.5	2.76	9.88	9 to 11	97.5	80 to 120	0.363	20
AW28463	Fluoride, Total	mg/L	0.000	0.3	2.00	1.65	-0.041	1.80	1.8 to 2.2	82.5	80 to 120	0	20
AW28463	Sulfate, Total	mg/L	-0.765	1.0	20.00	22.1	2.17	19.2	18 to 22	99.7	80 to 120	0.462	20

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Laboratory certification ID: E571114
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Expiration: June 30, 2018

Comments:

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Reported: 7/20/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AW28461

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	J	0.00124	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010		0.0369	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	J	0.00109	mg/L
* Boron, Total	HRG	12/15/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	12/15/2016	EPA 200.7		1	0.1	0.5		6.28	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	J	0.00562	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	12/15/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25		2.94	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	J	0.016	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1		8.60	mg/L

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Expiration: June 30, 2018

Comments:

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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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AW28461

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28463	Cobalt, Total	mg/L	0.00000757	0.0044	0.10	0.0908	0.0903	0.0932	0.085 to 0.115	90.8	70 to 130	0.544	20
AW28563	Calcium, Total	mg/L	-0.0355	0.22	5.00	37.1	37.5	5.16	4.25 to 5.75	74.0	70 to 130	1.10	20
AW28463	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0930	0.0948	0.0968	0.085 to 0.115	93.0	70 to 130	1.90	20
AW28463	Cadmium, Total	mg/L	0.00000965	0.00044	0.10	0.0949	0.0952	0.0971	0.085 to 0.115	94.9	70 to 130	0.352	20
AW28463	Lead, Total	mg/L	0.0000109	0.0022	0.10	0.103	0.104	0.102	0.085 to 0.115	103	70 to 130	0.278	20
AW28563	Mercury, Total by CVAA	mg/L	0.0000491	0.0005	0.004	0.00408	0.00402	0.00398	0.0034 to 0.0046	102	70 to 130	1.48	20
AW28463	Antimony, Total	mg/L	0.0000992	0.00132	0.10	0.0909	0.0918	0.0942	0.085 to 0.115	90.9	70 to 130	0.946	20
AW28463	Beryllium, Total	mg/L	0.00000922	0.00132	0.10	0.0971	0.0962	0.0995	0.085 to 0.115	97.1	70 to 130	0.974	20
AW28463	Thallium, Total	mg/L	0.0000138	0.00044	0.10	0.104	0.103	0.0994	0.085 to 0.115	104	70 to 130	0.469	20
AW28563	Lithium, Total	mg/L	-0.0000653	0.022	0.20	0.207	0.223	0.208	0.17 to 0.23	103	70 to 130	7.41	20
AW28463	Barium, Total	mg/L	0.00000724	0.0044	0.10	0.109	0.108	0.0967	0.085 to 0.115	96.0	70 to 130	0.792	20
AW28463	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0973	0.0987	0.0989	0.085 to 0.115	97.3	70 to 130	1.44	20
AW28463	Molybdenum, Total	mg/L	0.0000152	0.0044	0.10	0.0970	0.0972	0.0984	0.085 to 0.115	97.0	70 to 130	0.189	20
AW28463	Selenium, Total	mg/L	0.0000416	0.0044	0.10	0.0947	0.0942	0.0972	0.085 to 0.115	94.7	70 to 130	0.482	20
AW28563	Boron, Total	mg/L	-0.00962	0.044	1.00	1.01	0.954	0.999	0.85 to 1.15	101	70 to 130	6.17	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AW28461

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28463	Chloride, Total	mg/L	0.000	0.25	10.00	12.5	2.76	9.88	9 to 11	97.5	80 to 120	0.363	20
AW28463	Fluoride, Total	mg/L	0.000	0.3	2.00	1.65	-0.041	1.80	1.8 to 2.2	82.5	80 to 120	0	20
AW28463	Sulfate, Total	mg/L	-0.765	1.0	20.00	22.1	2.17	19.2	18 to 22	99.7	80 to 120	0.462	20

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744 County Road 87, GSC#8
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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 15-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW28462

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Beryllium, Total	JHK	11/23/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	12/15/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	12/15/2016	EPA 200.7		1	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	JHK	11/23/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	11/30/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	12/15/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	JHK	11/23/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	11/23/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	JHK	11/23/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	11/17/2016	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	11/17/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	11/17/2016	EPA 300.0		1	0.3	1	U	Not Detected	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 15-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW28462

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28463	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0930	0.0948	0.0968	0.085 to 0.115	93.0	70 to 130	1.90	20
AW28463	Cobalt, Total	mg/L	0.00000757	0.0044	0.10	0.0908	0.0903	0.0932	0.085 to 0.115	90.8	70 to 130	0.544	20
AW28563	Calcium, Total	mg/L	-0.0355	0.22	5.00	37.1	37.5	5.16	4.25 to 5.75	74.0	70 to 130	1.10	20
AW28463	Cadmium, Total	mg/L	0.00000965	0.00044	0.10	0.0949	0.0952	0.0971	0.085 to 0.115	94.9	70 to 130	0.352	20
AW28463	Lead, Total	mg/L	0.0000109	0.0022	0.10	0.103	0.104	0.102	0.085 to 0.115	103	70 to 130	0.278	20
AW28563	Mercury, Total by CVAA	mg/L	0.0000491	0.0005	0.004	0.00408	0.00402	0.00398	0.0034 to 0.0046	102	70 to 130	1.48	20
AW28463	Antimony, Total	mg/L	0.0000992	0.00132	0.10	0.0909	0.0918	0.0942	0.085 to 0.115	90.9	70 to 130	0.946	20
AW28463	Beryllium, Total	mg/L	0.00000922	0.00132	0.10	0.0971	0.0962	0.0995	0.085 to 0.115	97.1	70 to 130	0.974	20
AW28463	Thallium, Total	mg/L	0.0000138	0.00044	0.10	0.104	0.103	0.0994	0.085 to 0.115	104	70 to 130	0.469	20
AW28563	Lithium, Total	mg/L	-0.0000653	0.022	0.20	0.207	0.223	0.208	0.17 to 0.23	103	70 to 130	7.41	20
AW28463	Barium, Total	mg/L	0.00000724	0.0044	0.10	0.109	0.108	0.0967	0.085 to 0.115	96.0	70 to 130	0.792	20
AW28463	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0973	0.0987	0.0989	0.085 to 0.115	97.3	70 to 130	1.44	20
AW28463	Molybdenum, Total	mg/L	0.0000152	0.0044	0.10	0.0970	0.0972	0.0984	0.085 to 0.115	97.0	70 to 130	0.189	20
AW28463	Selenium, Total	mg/L	0.0000416	0.0044	0.10	0.0947	0.0942	0.0972	0.085 to 0.115	94.7	70 to 130	0.482	20
AW28563	Boron, Total	mg/L	-0.00962	0.044	1.00	1.01	0.954	0.999	0.85 to 1.15	101	70 to 130	6.17	20

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 15-Nov-16
Customer ID:
Delivery Date: 16-Nov-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW28462

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW28463	Chloride, Total	mg/L	0.000	0.25	10.00	12.5	2.76	9.88	9 to 11	97.5	80 to 120	0.363	20
AW28463	Fluoride, Total	mg/L	0.000	0.3	2.00	1.65	-0.041	1.80	1.8 to 2.2	82.5	80 to 120	0	20
AW28463	Sulfate, Total	mg/L	-0.765	1.0	20.00	22.1	2.17	19.2	18 to 22	99.7	80 to 120	0.462	20

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report
Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

CC:

Reported: 7/20/2017
Version: 2.0

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

Alabama Power

Lab & Field SERVICES

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

Alabama Power Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

☑ Field Complete
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Greene Ash Pond

Analysis Requested	Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle
Comments	Radium Duplicate taken MW-30 There will be no TDS results reported for the samples below due to QC failure and hold time exceedance. All samples will be re-sampled. SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-32	11/14/2016	13:33	3	Groundwater		AW28452
MW-33	11/14/2016	14:21	3	Groundwater		AW28453
MW-33DUP	11/14/2016	14:21	3	Sample Duplicate		AW28454
MW-31	11/14/2016	15:22	3	Groundwater		AW28455
MW-30	11/15/2016	10:34	5	Groundwater		AW28456
FB-1	11/15/2016	10:46	3	Field Blank		AW28457
MW-29	11/15/2016	11:34	3	Groundwater		AW28458
MW-28	11/15/2016	12:17	3	Groundwater		AW28459
MW-27	11/15/2016	13:07	3	Groundwater		AW28460
MW-26	11/15/2016	14:02	3	Groundwater		AW28461
EB-1	11/15/2016	14:14	3	Equipment Blank		AW28462

Relinquished By	Received By	Date/Time
Anthony Goggins		11/16/2016 08:00

SmarTroll ID	5151-26193-1-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	5160-26211-1-1	Cooler Temp	1.0 degrees C
		Thermometer ID	5408-27568-2-2
		pH Strip ID	5521-28269-20-13

4.1

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 400-130977-1
TestAmerica SDG: Greene Ash Pond New Wells (4)
Client Project/Site: CCR Plant Greene

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

Attn: Sarah Copeland

Authorized for release by:
1/24/2017 10:03:43 AM

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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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Job ID: 400-130977-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-130977-1

RAD

Method(s) 9315: Radium-226 Prep Batch 160-28391; The Laboratory Control Sample (LCS) spike recovery (193%) associated with the following samples is outside the upper QC limit of (68-137%) indicating a potential positive bias for that analyte: AW28454 MW-33 DUP (400-130977-3), AW28455 MW-31 (400-130977-4), AW28456 MW-30 (400-130977-5), AW28456 MW-30 (400-130977-5[DU]), AW28457 FB-1 (400-130977-6), AW28458 MW-29 (400-130977-7), AW28459 MW-28 (400-130977-8), AW28460 MW-27 (400-130977-9), AW28461 MW-26 (400-130977-10), AW28462 EB-1 (400-130977-11), (LCS 160-283917/2-A) and (MB 160-283917/1-A). This analyte was not observed above the requested limit in the associated samples; therefore the sample data was not adversely affected by this excursion. The data have been qualified and reported.

Method(s) PrecSep_0: Radium-228 Prep Batch 160-283754: The following samples were prepared at a reduced aliquot due to limited volume: AW28452 MW-32 (400-130977-1) and AW28453 MW-33 (400-130977-2).

Method(s) PrecSep_0: Radium-228 Prep Batch 160-283930: The following samples were prepared at a reduced aliquot due to limited volume: AW28454 MW-33 DUP (400-130977-3), AW28455 MW-31 (400-130977-4), AW28456 MW-30 (400-130977-5), AW28456 MW-30 (400-130977-5[DU]), AW28457 FB-1 (400-130977-6), AW28458 MW-29 (400-130977-7), AW28459 MW-28 (400-130977-8), AW28460 MW-27 (400-130977-9), AW28461 MW-26 (400-130977-10) and AW28462 EB-1 (400-130977-11).

Method(s) PrecSep-21: Radium-226 Prep Batch 160-283746: The following samples were prepared at a reduced aliquot due to limited volume: AW28452 MW-32 (400-130977-1) and AW28453 MW-33 (400-130977-2).

Method(s) PrecSep-21: Radium-226 Prep Batch 160-283917: The following samples were prepared at a reduced aliquot due to limited volume: AW28454 MW-33 DUP (400-130977-3), AW28455 MW-31 (400-130977-4), AW28456 MW-30 (400-130977-5), AW28456 MW-30 (400-130977-5[DU]), AW28457 FB-1 (400-130977-6), AW28458 MW-29 (400-130977-7), AW28459 MW-28 (400-130977-8), AW28460 MW-27 (400-130977-9), AW28461 MW-26 (400-130977-10) and AW28462 EB-1 (400-130977-11).

Method Summary

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

TestAmerica Job ID: 400-130977-1
SDG: Greene Ash Pond New Wells (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 Greene

TestAmerica Job ID: 400-130977-1
SDG: Greene Ash Pond New Wells (4)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-130977-1	AW28452 MW-32	Water	11/14/16 13:33	12/05/16 11:02
400-130977-2	AW28453 MW-33	Water	11/14/16 14:21	12/05/16 11:02
400-130977-3	AW28454 MW-33 DUP	Water	11/14/16 14:21	12/05/16 11:02
400-130977-4	AW28455 MW-31	Water	11/14/16 15:22	12/05/16 11:02
400-130977-5	AW28456 MW-30	Water	11/15/16 10:34	12/05/16 11:02
400-130977-6	AW28457 FB-1	Water	11/15/16 10:46	12/05/16 11:02
400-130977-7	AW28458 MW-29	Water	11/15/16 11:34	12/05/16 11:02
400-130977-8	AW28459 MW-28	Water	11/15/16 12:17	12/05/16 11:02
400-130977-9	AW28460 MW-27	Water	11/15/16 13:07	12/05/16 11:02
400-130977-10	AW28461 MW-26	Water	11/15/16 14:02	12/05/16 11:02
400-130977-11	AW28462 EB-1	Water	11/15/16 14:14	12/05/16 11:02

Client Sample ID: AW28452 MW-32

Date Collected: 11/14/16 13:33
Date Received: 12/05/16 11:02

Lab Sample ID: 400-130977-1

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	0.0944	U	0.0989	0.0992	1.00	0.157	pCi/L	12/13/16 14:15	01/04/17 10:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.0*		*40 - 110*	*12/13/16 14:15*	*01/04/17 10:58*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.353	U	0.438	0.439	1.00	0.725	pCi/L	12/13/16 14:48	12/19/16 16:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.0*		*40 - 110*	*12/13/16 14:48*	*12/19/16 16:58*	*1*
Y Carrier	*97.2*		*40 - 110*	*12/13/16 14:48*	*12/19/16 16:58*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.447	U	0.449	0.450	5.00	0.725	pCi/L		01/18/17 17:41	1

Client Sample ID: AW28453 MW-33

Date Collected: 11/14/16 14:21
Date Received: 12/05/16 11:02

Lab Sample ID: 400-130977-2

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	0.0529	U	0.0876	0.0877	1.00	0.153	pCi/L	12/13/16 14:15	01/04/17 10:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.2*		*40 - 110*	*12/13/16 14:15*	*01/04/17 10:58*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.588**		0.326	0.330	1.00	0.487	pCi/L	12/13/16 14:48	12/19/16 16:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.2*		*40 - 110*	*12/13/16 14:48*	*12/19/16 16:58*	*1*
Y Carrier	*99.8*		*40 - 110*	*12/13/16 14:48*	*12/19/16 16:58*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.641**		0.337	0.342	5.00	0.487	pCi/L		01/18/17 17:41	1

Client Sample ID: AW28454 MW-33 DUP

Date Collected: 11/14/16 14:21
Date Received: 12/05/16 11:02

Lab Sample ID: 400-130977-3

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	0.254	U *	0.299	0.300	1.00	0.490	pCi/L	12/14/16 13:09	01/18/17 12:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.6*		*40 - 110*	*12/14/16 13:09*	*01/18/17 12:59*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.302	U	0.400	0.401	1.00	0.665	pCi/L	12/14/16 14:25	01/17/17 20:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.6*		*40 - 110*	*12/14/16 14:25*	*01/17/17 20:20*	*1*
Y Carrier	*90.5*		*40 - 110*	*12/14/16 14:25*	*01/17/17 20:20*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.555	U	0.499	0.501	5.00	0.665	pCi/L		01/18/17 17:41	1

Client Sample ID: AW28455 MW-31

Date Collected: 11/14/16 15:22
Date Received: 12/05/16 11:02

Lab Sample ID: 400-130977-4

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	**0.634**	*	0.361	0.366	1.00	0.462	pCi/L	12/14/16 13:09	01/18/17 12:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.1*		*40 - 110*	*12/14/16 13:09*	*01/18/17 12:59*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.349	U	0.377	0.379	1.00	0.618	pCi/L	12/14/16 14:25	01/17/17 20:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.1*		*40 - 110*	*12/14/16 14:25*	*01/17/17 20:20*	*1*
Y Carrier	*93.8*		*40 - 110*	*12/14/16 14:25*	*01/17/17 20:20*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.984**		0.522	0.526	5.00	0.618	pCi/L		01/18/17 17:41	1

Client Sample ID: AW28456 MW-30

Date Collected: 11/15/16 10:34
Date Received: 12/05/16 11:02

Lab Sample ID: 400-130977-5

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	0.362	U *	0.295	0.296	1.00	0.430	pCi/L	12/14/16 13:09	01/18/17 12:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.2*		*40 - 110*	*12/14/16 13:09*	*01/18/17 12:59*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.227	U	0.345	0.345	1.00	0.579	pCi/L	12/14/16 14:25	01/17/17 20:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.2*		*40 - 110*	*12/14/16 14:25*	*01/17/17 20:20*	*1*
Y Carrier	*92.0*		*40 - 110*	*12/14/16 14:25*	*01/17/17 20:20*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.589**		0.453	0.455	5.00	0.579	pCi/L		01/18/17 17:41	1

Client Sample ID: AW28457 FB-1

Date Collected: 11/15/16 10:46
Date Received: 12/05/16 11:02

Lab Sample ID: 400-130977-6

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	0.0215	U *	0.198	0.198	1.00	0.421	pCi/L	12/14/16 13:09	01/18/17 13:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.6*		*40 - 110*	*12/14/16 13:09*	*01/18/17 13:00*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.164	U	0.311	0.312	1.00	0.531	pCi/L	12/14/16 14:25	01/17/17 20:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.6*		*40 - 110*	*12/14/16 14:25*	*01/17/17 20:20*	*1*
Y Carrier	*92.7*		*40 - 110*	*12/14/16 14:25*	*01/17/17 20:20*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.185	U	0.369	0.369	5.00	0.531	pCi/L		01/18/17 17:41	1

Client Sample ID: AW28458 MW-29

Date Collected: 11/15/16 11:34
Date Received: 12/05/16 11:02

Lab Sample ID: 400-130977-7

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	0.425	*	0.290	0.292	1.00	0.387	pCi/L	12/14/16 13:09	01/18/17 13:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.9*		*40 - 110*	*12/14/16 13:09*	*01/18/17 13:00*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0908	U	0.277	0.278	1.00	0.485	pCi/L	12/14/16 14:25	01/17/17 20:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.9*		*40 - 110*	*12/14/16 14:25*	*01/17/17 20:21*	*1*
Y Carrier	*93.5*		*40 - 110*	*12/14/16 14:25*	*01/17/17 20:21*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.516		0.401	0.403	5.00	0.485	pCi/L		01/18/17 17:41	1

Client Sample ID: AW28459 MW-28

Date Collected: 11/15/16 12:17
Date Received: 12/05/16 11:02

Lab Sample ID: 400-130977-8

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	**0.403**	*	0.290	0.292	1.00	0.402	pCi/L	12/14/16 13:09	01/18/17 13:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.9*		*40 - 110*	*12/14/16 13:09*	*01/18/17 13:00*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.530	U	0.370	0.373	1.00	0.575	pCi/L	12/14/16 14:25	01/17/17 20:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.9*		*40 - 110*	*12/14/16 14:25*	*01/17/17 20:21*	*1*
Y Carrier	*87.9*		*40 - 110*	*12/14/16 14:25*	*01/17/17 20:21*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.933**		0.470	0.474	5.00	0.575	pCi/L		01/18/17 17:41	1

Client Sample ID: AW28460 MW-27

Date Collected: 11/15/16 13:07
Date Received: 12/05/16 11:02

Lab Sample ID: 400-130977-9

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	0.300	U *	0.312	0.314	1.00	0.498	pCi/L	12/14/16 13:09	01/18/17 13:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.6*		*40 - 110*	*12/14/16 13:09*	*01/18/17 13:00*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0658	U	0.374	0.374	1.00	0.660	pCi/L	12/14/16 14:25	01/17/17 20:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.6*		*40 - 110*	*12/14/16 14:25*	*01/17/17 20:21*	*1*
Y Carrier	*79.6*		*40 - 110*	*12/14/16 14:25*	*01/17/17 20:21*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.366	U	0.488	0.488	5.00	0.660	pCi/L		01/18/17 17:41	1

Client Sample ID: AW28461 MW-26

Date Collected: 11/15/16 14:02
Date Received: 12/05/16 11:02

Lab Sample ID: 400-130977-10

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	0.259	U *	0.277	0.278	1.00	0.443	pCi/L	12/14/16 13:09	01/18/17 13:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.8*		*40 - 110*	*12/14/16 13:09*	*01/18/17 13:00*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.00325	U	0.289	0.289	1.00	0.524	pCi/L	12/14/16 14:25	01/17/17 20:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.8*		*40 - 110*	*12/14/16 14:25*	*01/17/17 20:21*	*1*
Y Carrier	*88.6*		*40 - 110*	*12/14/16 14:25*	*01/17/17 20:21*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.262	U	0.401	0.401	5.00	0.524	pCi/L		01/18/17 17:41	1

Client Sample ID: AW28462 EB-1

Date Collected: 11/15/16 14:14
Date Received: 12/05/16 11:02

Lab Sample ID: 400-130977-11

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	0.382	U *	0.293	0.295	1.00	0.418	pCi/L	12/14/16 13:09	01/18/17 13:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.2*		*40 - 110*	*12/14/16 13:09*	*01/18/17 13:01*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0490	U	0.240	0.240	1.00	0.447	pCi/L	12/14/16 14:25	01/17/17 20:21	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.2*		*40 - 110*	*12/14/16 14:25*	*01/17/17 20:21*	*1*
Y Carrier	*98.7*		*40 - 110*	*12/14/16 14:25*	*01/17/17 20:21*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.333	U	0.378	0.380	5.00	0.447	pCi/L		01/18/17 17:41	1

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.
*	LCS or LCSD is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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 Greene

TestAmerica Job ID: 400-130977-1
SDG: Greene Ash Pond New Wells (4)

Client Sample ID: AW28452 MW-32

Lab Sample ID: 400-130977-1
Date Collected: 11/14/16 13:33
Matrix: Water
Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283746	12/13/16 14:15	AS	TAL SL
Total/NA	Analysis	9315		1	286427	01/04/17 10:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			283754	12/13/16 14:48	AS	TAL SL
Total/NA	Analysis	9320		1	284475	12/19/16 16:58	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288219	01/18/17 17:41	RTM	TAL SL

Client Sample ID: AW28453 MW-33

Lab Sample ID: 400-130977-2
Date Collected: 11/14/16 14:21
Matrix: Water
Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283746	12/13/16 14:15	AS	TAL SL
Total/NA	Analysis	9315		1	286427	01/04/17 10:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			283754	12/13/16 14:48	AS	TAL SL
Total/NA	Analysis	9320		1	284475	12/19/16 16:58	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288219	01/18/17 17:41	RTM	TAL SL

Client Sample ID: AW28454 MW-33 DUP

Lab Sample ID: 400-130977-3
Date Collected: 11/14/16 14:21
Matrix: Water
Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283917	12/14/16 13:09	AS	TAL SL
Total/NA	Analysis	9315		1	288207	01/18/17 12:59	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283930	12/14/16 14:25	AS	TAL SL
Total/NA	Analysis	9320		1	287967	01/17/17 20:20	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288219	01/18/17 17:41	RTM	TAL SL

Client Sample ID: AW28455 MW-31

Lab Sample ID: 400-130977-4
Date Collected: 11/14/16 15:22
Matrix: Water
Date Received: 12/05/16 11:02

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283917	12/14/16 13:09	AS	TAL SL
Total/NA	Analysis	9315		1	288207	01/18/17 12:59	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283930	12/14/16 14:25	AS	TAL SL
Total/NA	Analysis	9320		1	287967	01/17/17 20:20	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288219	01/18/17 17:41	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-130977-1
SDG: Greene Ash Pond New Wells (4)

Client Sample ID: AW28456 MW-30

Date Collected: 11/15/16 10:34
Date Received: 12/05/16 11:02

Lab Sample ID: 400-130977-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283917	12/14/16 13:09	AS	TAL SL
Total/NA	Analysis	9315		1	288207	01/18/17 12:59	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283930	12/14/16 14:25	AS	TAL SL
Total/NA	Analysis	9320		1	287967	01/17/17 20:20	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288219	01/18/17 17:41	RTM	TAL SL

Client Sample ID: AW28457 FB-1

Date Collected: 11/15/16 10:46
Date Received: 12/05/16 11:02

Lab Sample ID: 400-130977-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283917	12/14/16 13:09	AS	TAL SL
Total/NA	Analysis	9315		1	288207	01/18/17 13:00	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283930	12/14/16 14:25	AS	TAL SL
Total/NA	Analysis	9320		1	287967	01/17/17 20:20	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288219	01/18/17 17:41	RTM	TAL SL

Client Sample ID: AW28458 MW-29

Date Collected: 11/15/16 11:34
Date Received: 12/05/16 11:02

Lab Sample ID: 400-130977-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283917	12/14/16 13:09	AS	TAL SL
Total/NA	Analysis	9315		1	288207	01/18/17 13:00	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283930	12/14/16 14:25	AS	TAL SL
Total/NA	Analysis	9320		1	287967	01/17/17 20:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288219	01/18/17 17:41	RTM	TAL SL

Client Sample ID: AW28459 MW-28

Date Collected: 11/15/16 12:17
Date Received: 12/05/16 11:02

Lab Sample ID: 400-130977-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283917	12/14/16 13:09	AS	TAL SL
Total/NA	Analysis	9315		1	288207	01/18/17 13:00	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283930	12/14/16 14:25	AS	TAL SL
Total/NA	Analysis	9320		1	287967	01/17/17 20:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288219	01/18/17 17:41	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-130977-1
SDG: Greene Ash Pond New Wells (4)

Client Sample ID: AW28460 MW-27

Date Collected: 11/15/16 13:07
Date Received: 12/05/16 11:02

Lab Sample ID: 400-130977-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283917	12/14/16 13:09	AS	TAL SL
Total/NA	Analysis	9315		1	288207	01/18/17 13:00	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283930	12/14/16 14:25	AS	TAL SL
Total/NA	Analysis	9320		1	287967	01/17/17 20:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288219	01/18/17 17:41	RTM	TAL SL

Client Sample ID: AW28461 MW-26

Date Collected: 11/15/16 14:02
Date Received: 12/05/16 11:02

Lab Sample ID: 400-130977-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283917	12/14/16 13:09	AS	TAL SL
Total/NA	Analysis	9315		1	288207	01/18/17 13:00	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283930	12/14/16 14:25	AS	TAL SL
Total/NA	Analysis	9320		1	287967	01/17/17 20:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288219	01/18/17 17:41	RTM	TAL SL

Client Sample ID: AW28462 EB-1

Date Collected: 11/15/16 14:14
Date Received: 12/05/16 11:02

Lab Sample ID: 400-130977-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			283917	12/14/16 13:09	AS	TAL SL
Total/NA	Analysis	9315		1	288207	01/18/17 13:01	ALD	TAL SL
Total/NA	Prep	PrecSep_0			283930	12/14/16 14:25	AS	TAL SL
Total/NA	Analysis	9320		1	287967	01/17/17 20:21	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	288219	01/18/17 17:41	RTM	TAL SL

Laboratory References:

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

Rad

Prep Batch: 283746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130977-1	AW28452 MW-32	Total/NA	Water	PrecSep-21	
400-130977-2	AW28453 MW-33	Total/NA	Water	PrecSep-21	
MB 160-283746/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-283746/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-130978-B-11-B DU	Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 283754

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130977-1	AW28452 MW-32	Total/NA	Water	PrecSep_0	
400-130977-2	AW28453 MW-33	Total/NA	Water	PrecSep_0	
MB 160-283754/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-283754/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-130978-B-11-A DU	Duplicate	Total/NA	Water	PrecSep_0	

Prep Batch: 283917

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130977-3	AW28454 MW-33 DUP	Total/NA	Water	PrecSep-21	
400-130977-4	AW28455 MW-31	Total/NA	Water	PrecSep-21	
400-130977-5	AW28456 MW-30	Total/NA	Water	PrecSep-21	
400-130977-6	AW28457 FB-1	Total/NA	Water	PrecSep-21	
400-130977-7	AW28458 MW-29	Total/NA	Water	PrecSep-21	
400-130977-8	AW28459 MW-28	Total/NA	Water	PrecSep-21	
400-130977-9	AW28460 MW-27	Total/NA	Water	PrecSep-21	
400-130977-10	AW28461 MW-26	Total/NA	Water	PrecSep-21	
400-130977-11	AW28462 EB-1	Total/NA	Water	PrecSep-21	
MB 160-283917/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-283917/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-130977-5 DU	AW28456 MW-30	Total/NA	Water	PrecSep-21	

Prep Batch: 283930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130977-3	AW28454 MW-33 DUP	Total/NA	Water	PrecSep_0	
400-130977-4	AW28455 MW-31	Total/NA	Water	PrecSep_0	
400-130977-5	AW28456 MW-30	Total/NA	Water	PrecSep_0	
400-130977-6	AW28457 FB-1	Total/NA	Water	PrecSep_0	
400-130977-7	AW28458 MW-29	Total/NA	Water	PrecSep_0	
400-130977-8	AW28459 MW-28	Total/NA	Water	PrecSep_0	
400-130977-9	AW28460 MW-27	Total/NA	Water	PrecSep_0	
400-130977-10	AW28461 MW-26	Total/NA	Water	PrecSep_0	
400-130977-11	AW28462 EB-1	Total/NA	Water	PrecSep_0	
MB 160-283930/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-283930/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-130977-5 DU	AW28456 MW-30	Total/NA	Water	PrecSep_0	

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-283746/1-A
Matrix: Water
Analysis Batch: 286427

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 283746

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.02426	U	0.0634	0.0634	1.00	0.148	pCi/L	12/13/16 14:15	01/04/17 10:58	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.9*		*40 - 110*	*12/13/16 14:15*	*01/04/17 10:58*	*1*

Lab Sample ID: LCS 160-283746/2-A
Matrix: Water
Analysis Batch: 286427

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 283746

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			14.8	19.83		2.01	1.00	0.158	pCi/L	134	68 - 137		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*82.9*		*40 - 110*

Lab Sample ID: 400-130978-B-11-B DU
Matrix: Water
Analysis Batch: 286427

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 283746

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.482			0.4608		0.164	1.00	0.160	pCi/L			0.06	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*87.7*		*40 - 110*

Lab Sample ID: MB 160-283917/1-A
Matrix: Water
Analysis Batch: 288207

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 283917

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1989	U	0.287	0.288	1.00	0.489	pCi/L	12/14/16 13:09	01/18/17 12:59	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*74.1*		*40 - 110*	*12/14/16 13:09*	*01/18/17 12:59*	*1*

Lab Sample ID: LCS 160-283917/2-A
Matrix: Water
Analysis Batch: 288207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 283917

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			14.8	28.53	*	3.13	1.00	0.401	pCi/L	193	68 - 137		

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

Lab Sample ID: LCS 160-283917/2-A
Matrix: Water
Analysis Batch: 288207

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 283917

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	87.2		40 - 110

Lab Sample ID: 400-130977-5 DU
Matrix: Water
Analysis Batch: 288207

Client Sample ID: AW28456 MW-30
Prep Type: Total/NA
Prep Batch: 283917

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.362	U *		0.2454	U *	0.259	1.00	0.406	pCi/L			0.21	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	80.1		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-283754/1-A
Matrix: Water
Analysis Batch: 284475

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 283754

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.08800	U	0.295	0.295	1.00	0.513	pCi/L	12/13/16 14:48	12/19/16 16:57	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	86.9		40 - 110	12/13/16 14:48	12/19/16 16:57	1
Y Carrier	97.9		40 - 110	12/13/16 14:48	12/19/16 16:57	1

Lab Sample ID: LCS 160-283754/2-A
Matrix: Water
Analysis Batch: 284475

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 283754

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			18.8	20.08		2.16	1.00	0.512	pCi/L	107	56 - 140		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	82.9		40 - 110
Y Carrier	98.3		40 - 110

Lab Sample ID: 400-130978-B-11-A DU
Matrix: Water
Analysis Batch: 284475

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 283754

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.708			0.5022	U	0.355	1.00	0.549	pCi/L			0.28	1

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

Lab Sample ID: 400-130978-B-11-A DU
Matrix: Water
Analysis Batch: 284475

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 283754

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	87.7		40 - 110
Y Carrier	93.1		40 - 110

Lab Sample ID: MB 160-283930/1-A
Matrix: Water
Analysis Batch: 287967

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 283930

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.01759	U	0.361	0.361	1.00	0.644	pCi/L	12/14/16 14:25	01/17/17 20:20	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	74.1		40 - 110	12/14/16 14:25	01/17/17 20:20	1
Y Carrier	88.2		40 - 110	12/14/16 14:25	01/17/17 20:20	1

Lab Sample ID: LCS 160-283930/2-A
Matrix: Water
Analysis Batch: 287967

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 283930

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			18.6	20.64		2.23	1.00	0.595	pCi/L	111	56 - 140		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	87.2		40 - 110
Y Carrier	86.4		40 - 110

Lab Sample ID: 400-130977-5 DU
Matrix: Water
Analysis Batch: 287967

Client Sample ID: AW28456 MW-30
Prep Type: Total/NA
Prep Batch: 283930

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.227	U		0.2316	U	0.351	1.00	0.589	pCi/L			0.01	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	80.1		40 - 110
Y Carrier	84.9		40 - 110

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

Lab Sample ID: 400-130977-5 DU
Matrix: Water
Analysis Batch: 288219

Client Sample ID: AW28456 MW-30
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	0.589			0.4770	U	0.436	5.00	0.589	pCi/L			0.13	

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Anthony Goggins	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 1
Company: Alabama Power General Test Laboratory				Job #: 400-130977

Address: 744 County Rd 87 GSC #8	Due Date Requested:
City: Calera	TAT Requested (days): Routine
State, Zip: AL, 35040	
Phone: 205-664-6121(Tel)	PO #:
Email: sgcopela@southernco.com	WO #:
Project Name: CCR	Project #: 40007143
Site: Greene Ash Pond New Wells (4)	SSOW#:

Analysis Requested

400-130977 COC

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; 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)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D		
AW28452	11/14/16		G	Water			X	1	MW-32
AW28453	11/14/16		G	Water			X	1	MW-33
AW28454	11/14/16		G	Water			X	1	MW-33 Dup (Sample Duplicate)
AW28455	11/14/16		G	Water			X	1	MW-31
AW28456	11/15/16		G	Water		Y	X	3	MW-30
AW28457	11/15/16		G	Water			X	1	FB-1 (Field Blank)
AW28458	11/15/16		G	Water			X	1	MW-29
AW28459	11/15/16		G	Water			X	1	MW-28
AW28460	11/15/16		G	Water			X	1	MW-27
AW28461	11/15/16		G	Water			X	1	MW-26
AW28462	11/15/16		G	Water			X	1	EB-1 (Equipment Blank)

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Sarah Copeland	Date/Time: 12/05/2016; 0940	Company APC	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time: 12/05/16 1102	Company TA

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

Cooler Temperature(s) °C and Other Remarks: 19.0°C 18.7°C 19.4°C 18.7 19.1°C

IR5

1/24/2017

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-130977-1
SDG Number: Greene Ash Pond New Wells (4)

Login Number: 130977
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.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	19.0°C, 18.7°C, 19.4°C, 18.7°C, 19.1°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.	False	No time on COC or sample containers
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

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

TestAmerica Job ID: 400-130977-1
SDG: Greene Ash Pond New Wells (4)

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-16 *
Louisiana	NELAP	6	30976	06-30-17
Louisiana (DW)	NELAP Secondary AB	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-16 *
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	MO00054	06-30-17
California	State Program	9	2886	03-31-18 *
Connecticut	State Program	1	PH-0241	03-31-17 *
Florida	NELAP	4	E87689	06-30-17
Illinois	NELAP	5	200023	11-30-17
Iowa	State Program	7	373	12-01-16 *
Kansas	NELAP	7	E-10236	10-31-17
Kentucky (DW)	State Program	4	90125	12-31-17
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-17
Louisiana (DW)	NELAP	6	LA170011	12-31-17
Maryland	State Program	3	310	09-30-17
Missouri	State Program	7	780	06-30-17
Nevada	State Program	9	MO000542017-1	07-31-17
New Jersey	NELAP	2	MO002	06-30-17
New York	NELAP	2	11616	03-31-17 *
North Dakota	State Program	8	R207	06-30-17

* Certification renewal pending - certification considered valid.

Certification Summary

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

TestAmerica Job ID: 400-130977-1
SDG: Greene Ash Pond New Wells (4)

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-17
Pennsylvania	NELAP	3	68-00540	02-28-17 *
South Carolina	State Program	4	85002001	06-30-17
Texas	NELAP	6	T104704193-16-10	07-31-17
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		P330-14-0016	01-09-17 *
Utah	NELAP	8	MO000542016-8	07-31-17
Virginia	NELAP	3	460230	06-14-17
Washington	State Program	10	C592	08-30-17
West Virginia DEP	State Program	3	381	08-31-17 *

* Certification renewal pending - certification considered valid.

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

Analytical Report

Alabama Power

Lab & Field SERVICES

Sample Group : WMWGREAP_1062

Project/Site : Greene County Ash Pond
Demopolis, AL 36732

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
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FAX (205) 257-1654

Case Narrative

Alabama Power

Lab & Field SERVICES

TDS

Greene County Ash Pond

WMWGREAP_1062

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

Sample ID	Batch ID	Project ID
AW29376	582681	WMWGREAP_1062
AW29377	582681	WMWGREAP_1062
AW29378	582681	WMWGREAP_1062
AW29379	582681	WMWGREAP_1062
AW29380	582681	WMWGREAP_1062
AW29381	582681	WMWGREAP_1062
AW29382	582681	WMWGREAP_1062
AW29383	582681	WMWGREAP_1062
AW29384	582681	WMWGREAP_1062
AW29385	582682	WMWGREAP_1062
AW29386	582682	WMWGREAP_1062

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 samples listed above are a re-sample event due to QC failure and hold time exceedance.

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 AW29379 and AW29386, which were <2.5mg.

Alabama Power General Test Laboratory
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 28-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AW29376

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	KRC	12/1/2016	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:

Reported: 7/20/2017
Version: 2.0

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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 28-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AW29376

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 28-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AW29376

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW29382	Solids, Dissolved	mg/L	-7.0	25			78.0	40.0	40 to 60			0.00	5

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 28-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-32 Dup

Laboratory ID Number: AW29377

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	KRC	12/1/2016	SM 2540C		1		25		39.3	mg/L

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Comments:

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 28-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-32 Dup

Laboratory ID Number: AW29377

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 28-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-32 Dup

Laboratory ID Number: AW29377

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW29382	Solids, Dissolved	mg/L	-7.0	25			78.0	40.0	40 to 60			0.00	5

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Comments:

CC:

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 28-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AW29378

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	KRC	12/1/2016	SM 2540C		1		25		68.7	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/20/2017
Version: 2.0

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 28-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AW29378

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	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:

Reported: 7/20/2017
Version: 2.0

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 28-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AW29378

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW29382	Solids, Dissolved	mg/L	-7.0	25			78.0	40.0	40 to 60			0.00	5

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

CC:

Reported: 7/20/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 28-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW29379

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	KRC	12/1/2016	SM 2540C		1		25	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

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 28-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW29379

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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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:

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 28-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW29379

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW29382	Solids, Dissolved	mg/L	-7.0	25			78.0	40.0	40 to 60			0.00	5

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Expiration: June 30, 2018

Comments:

CC:

Reported: 7/20/2017
Version: 2.0

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 28-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AW29380

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	KRC	12/1/2016	SM 2540C		1		25		84.0	mg/L

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Expiration: June 30, 2018

Comments:

Reported: 7/20/2017
Version: 2.0

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 28-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AW29380

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Comments:

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 28-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AW29380

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW29382	Solids, Dissolved	mg/L	-7.0	25			78.0	40.0	40 to 60			0.00	5

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Comments:

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Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 29-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AW29381

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	KRC	12/1/2016	SM 2540C		1		25		42.0	mg/L

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Expiration: June 30, 2018

Comments:

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Version: 2.0

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Batch QC Summary

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Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 29-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AW29381

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Comments:

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 29-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AW29381

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW29382	Solids, Dissolved	mg/L	-7.0	25			78.0	40.0	40 to 60			0.00	5

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Comments:

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 29-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AW29382

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	KRC	12/1/2016	SM 2540C		1		25		78.0	mg/L

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Expiration: June 30, 2018

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 29-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AW29382

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Expiration: June 30, 2018

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 29-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AW29382

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW29382	Solids, Dissolved	mg/L	-7.0	25			78.0	40.0	40 to 60			0.00	5

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 29-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AW29383

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	KRC	12/1/2016	SM 2540C		1		25	U	Not Detected	mg/L

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Batch QC Summary

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Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 29-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AW29383

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Expiration: June 30, 2018

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 29-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AW29383

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW29382	Solids, Dissolved	mg/L	-7.0	25			78.0	40.0	40 to 60			0.00	5

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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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 29-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AW29384

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	KRC	12/1/2016	SM 2540C		1		25	U	Not Detected	mg/L

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Expiration: June 30, 2018

Comments:

Reported: 7/20/2017
Version: 2.0

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Calera, AL 35040
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 29-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AW29384

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Batch QC Summary

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Lab & Field SERVICES

To: Dustin Brooks
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John Pugh

Customer Account: WMWGREAP
Sample Date: 29-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AW29384

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW29382	Solids, Dissolved	mg/L	-7.0	25			78.0	40.0	40 to 60			0.00	5

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 29-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AW29385

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	KRC	12/1/2016	SM 2540C		1		25		34.0	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 29-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AW29385

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 29-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AW29385

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW29385	Solids, Dissolved	mg/L	-7.0	25			35.3	40.0	40 to 60			1.92	5

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 29-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW29386

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	KRC	12/1/2016	SM 2540C		1		25	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.

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 29-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW29386

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	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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Batch QC Summary

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Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 29-Nov-16
Customer ID:
Delivery Date: 30-Nov-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW29386

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW29385	Solids, Dissolved	mg/L	-7.0	25			35.3	40.0	40 to 60			1.92	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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Definitions

Alabama Power

Lab & Field SERVICES

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: 11/30/2016 08:30

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Ben Rothschadl	Location	Greene Ash Pond

Analysis Requested: Bottle 1: TDS, (1) 500 mL bottle

Comments: There is no pH requirement for TDS.
Re-sample event for TDS due to QC failure and hold time exceedance. SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-32	11/28/2016	12:20	1	Groundwater		AW29376
MW-32 DUP	11/28/2016	12:20	1	Sample Duplicate		AW29377
MW-33	11/28/2016	13:23	1	Groundwater		AW29378
FB-1	11/28/2016	13:35	1	Field Blank		AW29379
MW-31	11/28/2016	14:35	1	Groundwater		AW29380
MW-26	11/29/2016	09:45	1	Groundwater		AW29381
MW-29	11/29/2016	10:51	1	Groundwater		AW29382
MW-30	11/29/2016	11:47	1	Groundwater		AW29383
MW-27	11/29/2016	12:44	1	Groundwater		AW29384
MW-28	11/29/2016	13:41	1	Groundwater		AW29385
EB-1	11/29/2016	14:10	1	Equipment Blank		AW29386

Relinquished By	Received By	Date/Time
Ben Rothschadl	Sarah Copeland Digitally signed by Sarah Copeland Date: 2016.11.30 07:48:50 -06'00'	11/29/2016 17:24

SmarTroll ID: 4696-23441-1-1
Turbidity ID: 3901-20010-2-2

All metals and radiological bottles have pH < 2 ☐

Cooler Temp: 0.7 degrees C
Thermometer ID: 5408-27568-2-2
pH Strip ID: NA

4.1

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

Analytical Report

Alabama Power

Lab & Field SERVICES

Sample Group : WMWGREAP_19

Project/Site : Greene County Ash Pond
Demopolis, AL 36732

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
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Case Narrative

Alabama Power

Lab & Field SERVICES

Anions

Greene County Ash Pond

WMWGREAP_19

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

Sample ID	Chloride Batch ID	Fluoride Batch ID	Sulfate Batch ID	Project ID
AW09671	564713	564716	564719	WMWGREAP_19
AW09672	564713	564716	564719	WMWGREAP_19
AW09673	564713	564716	564719	WMWGREAP_19
AW09674	564713	564716	564719	WMWGREAP_19
AW09675	564713	564716	564719	WMWGREAP_19
AW09676	564713	564716	564719	WMWGREAP_19
AW09677	564713	564716	564719	WMWGREAP_19
AW09678	564713	564716	564719	WMWGREAP_19
AW09679	564713	564716	564719	WMWGREAP_19
AW09680	564714	564717	564720	WMWGREAP_19
AW09681	564714	564717	564720	WMWGREAP_19
AW09682	564714	564717	564720	WMWGREAP_19
AW09683	564714	564717	564720	WMWGREAP_19
AW09684	564714	564717	564720	WMWGREAP_19
AW09685	564714	564717	564720	WMWGREAP_19
AW09686	564714	564717	564720	WMWGREAP_19
AW09687	564714	564717	564720	WMWGREAP_19
AW09688	564714	564717	564720	WMWGREAP_19
AW09689	564758	564760	564762	WMWGREAP_19
AW09690	564758	564760	564762	WMWGREAP_19
AW09691	564758	564760	564762	WMWGREAP_19
AW09692	564758	564760	564762	WMWGREAP_19
AW09693	564758	564760	564762	WMWGREAP_19
AW09694	564758	564760	564762	WMWGREAP_19
AW09695	564758	564760	564762	WMWGREAP_19
AW09697	564758	564760	564762	WMWGREAP_19
AW09698	564758	564760	564762	WMWGREAP_19
AW09699	564758	564760	564762	WMWGREAP_19

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Alabama Power

Lab & Field SERVICES

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:

- 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 AW09675 and AW09682 were re-analyzed at a 5x dilution for chloride and sulfate, samples AW09680, AW09684, AW09691, AW09692, AW09693, AW09697 and AW09698 were re-analyzed at a 5x dilution for sulfate, and sample AW09679 was re-analyzed at a 10x dilution for sulfate, due to the undiluted results exceeding the calibrated range of the detector. The dilution results for chloride and for sulfate for these respective samples should be used; reporting limit (RL) values are adjusted upward to reflect the dilution factor applied.

Sample ID		Analyte		Dilution Factor
AW09675		Chloride, Sulfate		5X
AW09679		Sulfate		10X
AW09680		Sulfate		5X
AW09682		Chloride, Sulfate		5X
AW09684		Sulfate		5X
AW09691		Sulfate		5X

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AW09692		Sulfate		5X
AW09693		Sulfate		5X
AW09697		Sulfate		5X
AW09698		Sulfate		5X

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

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Case Narrative

Alabama Power

Lab & Field SERVICES

Metals ICP

Greene County Ash Pond

WMWGREAP_19

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

Sample ID	Batch ID	Project ID
AW09671	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09672	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09673	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09674	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09675	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09676	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09677	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09678	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09679	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09680	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09681	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09682	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09683	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09684	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09685	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09686	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09687	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09688	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09689	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09690	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09691	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09692	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09693	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09694	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09695	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09697	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09698	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19
AW09699	20160506CCR/20160516/20160517/20160518C	WMWGREAP_19

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

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below half the limit of quantitation for all requested analytes.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analytes.
- All continued calibration blanks (CCB) were below half the limit of quantitation for the requested analytes.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met except for the following:

Analyte	Sample ID
Boron	AW09680
Boron	AW09690

Samples were re-prepared and analyzed in batches 20160517A through C. All laboratory control sample criteria were met with the re-preparation and analysis of sample batches.

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

Matrix Specific Quality Control Procedures:

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

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

Analyte	Sample ID
Boron	AW09680

  Sample AW09680 was reanalyzed in data packet 20160518C. All acceptance criteria for accuracy were met, indicating a lack of significant matrix effect on the sample.

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- 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 diluted due to sample concentrations from the undiluted analysis were over the high standard of the calibration curve.

Sample ID	Analyte	Dilution Factor
AW09671	Calcium	10.15
AW09675	Calcium	10.15
AW09676	Calcium	10.15
AW09678	Calcium	10.15
AW09679	Calcium	10.15
AW09680	Calcium	10.15
AW09680	Calcium	10.15
AW09680MSD	Calcium	10.15
AW09680MSD	Calcium	10.15
AW09681	Calcium	10.15
AW09682	Calcium	10.15
AW09688	Calcium	10.15
AW09691	Calcium	10.15
AW09692	Calcium	10.15
AW09693	Calcium	10.15
AW09694	Calcium	10.15
AW09695	Calcium	10.15
AW09698	Calcium	10.15

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

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Case Narrative

Alabama Power

Lab & Field SERVICES

Metals ICPMS

Greene County Ash Pond

WMWGREAP_19

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

Sample ID	Batch ID	Project ID
AW09671	563000	WMWGREAP_19
AW09672	563000	WMWGREAP_19
AW09673	563000	WMWGREAP_19
AW09674	563000	WMWGREAP_19
AW09675	563000	WMWGREAP_19
AW09676	563000	WMWGREAP_19
AW09677	563000	WMWGREAP_19
AW09678	563000	WMWGREAP_19
AW09679	563000	WMWGREAP_19
AW09680	563000	WMWGREAP_19
AW09681	563001	WMWGREAP_19
AW09682	563001	WMWGREAP_19
AW09683	563001	WMWGREAP_19
AW09684	563001	WMWGREAP_19
AW09685	563001	WMWGREAP_19
AW09686	563001	WMWGREAP_19
AW09687	563001	WMWGREAP_19
AW09688	563001	WMWGREAP_19
AW09689	563001	WMWGREAP_19
AW09690	563001	WMWGREAP_19
AW09691	563002	WMWGREAP_19
AW09692	563002	WMWGREAP_19
AW09693	563002	WMWGREAP_19
AW09694	563002	WMWGREAP_19
AW09695	563002	WMWGREAP_19
AW09697	563002	WMWGREAP_19
AW09698	563002	WMWGREAP_19
AW09699	563002	WMWGREAP_19

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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.

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Case Narrative

Alabama Power

Lab & Field SERVICES

Mercury

Greene County Ash Pond

WMWGREAP_19

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

Sample ID	Batch ID	Project ID
AW09671	563179	WMWGREAP_19
AW09672	563179	WMWGREAP_19
AW09673	563179	WMWGREAP_19
AW09674	563179	WMWGREAP_19
AW09675	563179	WMWGREAP_19
AW09676	563179	WMWGREAP_19
AW09677	563179	WMWGREAP_19
AW09678	563179	WMWGREAP_19
AW09679	563179	WMWGREAP_19
AW09680	563179	WMWGREAP_19
AW09681	563180	WMWGREAP_19
AW09682	563180	WMWGREAP_19
AW09683	563180	WMWGREAP_19
AW09684	563180	WMWGREAP_19
AW09685	563180	WMWGREAP_19
AW09686	563180	WMWGREAP_19
AW09687	563180	WMWGREAP_19
AW09688	563180	WMWGREAP_19
AW09689	563180	WMWGREAP_19
AW09690	563180	WMWGREAP_19
AW09691	563181	WMWGREAP_19
AW09692	563181	WMWGREAP_19
AW09693	563181	WMWGREAP_19
AW09694	563181	WMWGREAP_19
AW09695	563181	WMWGREAP_19
AW09697	563181	WMWGREAP_19
AW09698	563181	WMWGREAP_19
AW09699	563181	WMWGREAP_19

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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.

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Case Narrative

Alabama Power

Lab & Field SERVICES

TDS

Greene County Ash Pond

WMWGREAP_19

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

Sample ID	Batch ID	Project ID
AW09671	563015	WMWGREAP_19
AW09672	563015	WMWGREAP_19
AW09673	563015	WMWGREAP_19
AW09674	563015	WMWGREAP_19
AW09675	563015	WMWGREAP_19
AW09676	563015	WMWGREAP_19
AW09677	563015	WMWGREAP_19
AW09678	563015	WMWGREAP_19
AW09679	563015	WMWGREAP_19
AW09680	563018	WMWGREAP_19
AW09681	563018	WMWGREAP_19
AW09682	563018	WMWGREAP_19
AW09683	563018	WMWGREAP_19
AW09684	563018	WMWGREAP_19
AW09685	563018	WMWGREAP_19
AW09686	563018	WMWGREAP_19
AW09687	563018	WMWGREAP_19
AW09688	563018	WMWGREAP_19
AW09689	563018	WMWGREAP_19
AW09690	563018	WMWGREAP_19
AW09691	563018	WMWGREAP_19
AW09692	563018	WMWGREAP_19
AW09693	563018	WMWGREAP_19
AW09694	563018	WMWGREAP_19
AW09695	563018	WMWGREAP_19
AW09697	563018	WMWGREAP_19
AW09698	563018	WMWGREAP_19
AW09699	563018	WMWGREAP_19

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Case Narrative

Alabama Power

Lab & Field SERVICES

4. All of the above samples were analyzed by Standard Method 2540C.
5. All samples were analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.
7. The reporting limit for TDS was incorrectly listed as 2.5mg/L. It has 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 563015 and 20 samples in batch 563018.
- 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 AW09674, AW09683, AW09689, and AW09699 which were <2.5.

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AW09671

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0350	mg/L
* Beryllium, Total	ABB	4/19/2016	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	5/16/2016	EPA 200.7		10.15	1.0	5.0		42.7	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	J	0.00205	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25		155	mg/L
* Chloride, Total	SES	4/18/2016	EPA 300.0		1	0.04	0.25		1.51	mg/L
* Fluoride, Total	SES	4/18/2016	EPA 300.0		1	0.01	0.3	J	0.0770	mg/L
* Sulfate, Total	SES	4/18/2016	EPA 300.0		1	0.3	1		20.0	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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AW09671

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09680	Mercury, Total by CVAA	mg/L	0.000106	0.0005	0.004	0.00406	0.00393	0.00403	0.0034 to 0.0046	102	70 to 130	3.20	20
AW09680	Thallium, Total	mg/L	0.0000110	0.00044	0.10	0.0935	0.102	0.0926	0.085 to 0.115	93.5	70 to 130	8.40	20
AW09680	Lead, Total	mg/L	0.0000222	0.0022	0.100	0.0944	0.102	0.0947	0.085 to 0.115	94.4	70 to 130	7.74	20
AW09680	Lithium, Total	mg/L	0.000103	0.022	0.20	0.232	0.230	0.193	0.17 to 0.23	116	70 to 130	0.866	20
AW09680	Beryllium, Total	mg/L	0.00000888	0.00132	0.100	0.0989	0.107	0.0990	0.085 to 0.115	98.9	70 to 130	7.87	20
AW09680	Molybdenum, Total	mg/L	0.0000187	0.0044	0.100	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.00	20
AW09680	Selenium, Total	mg/L	0.0000700	0.0044	0.100	0.110	0.114	0.105	0.085 to 0.115	110	70 to 130	3.57	20
AW09680	Antimony, Total	mg/L	0.000201	0.00132	0.100	0.104	0.104	0.0979	0.085 to 0.115	104	70 to 130	0.00	20
AW09680	Barium, Total	mg/L	0.00000921	0.0044	0.100	0.136	0.136	0.100	0.085 to 0.115	103	70 to 130	0.00	20
AW09680	Boron, Total	mg/L	0.000963	0.044	1.00	0.127	0.125	0.974	0.85 to 1.15	0.15(	70 to 130	1.45	20
AW09680	Calcium, Total	mg/L	-0.0125	0.22	5.00	75.0	74.0	4.97	4.25 to 5.75	96.0	70 to 130	1.34	20
AW09680	Chromium, Total	mg/L	0.00000814	0.0044	0.100	0.103	0.104	0.102	0.085 to 0.115	103	70 to 130	0.966	20
AW09680	Cobalt, Total	mg/L	-0.00000165	0.0044	0.100	0.112	0.112	0.0996	0.085 to 0.115	101	70 to 130	0.00	20
AW09680	Arsenic, Total	mg/L	0.0000125	0.0022	0.100	0.125	0.127	0.101	0.085 to 0.115	110	70 to 130	1.59	20
AW09680	Cadmium, Total	mg/L	0.00000409	0.00044	0.100	0.0955	0.0962	0.0982	0.085 to 0.115	95.5	70 to 130	0.730	20

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AW09671

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09674	Chloride, Total	mg/L	0.00	0.25	10.0	10.3	0.00	9.89	9 to 11	103	80 to 120	0	20
AW09700	Solids, Dissolved	mg/L	15	25			185	40.0	40 to 60			1.93	5
AW09674	Sulfate, Total	mg/L	0.00	1.0	20.0	21.5	0.462	20.5	18 to 22	105	80 to 120	2.14	20
AW09674	Fluoride, Total	mg/L	0.00	0.3	2.0	2.13	0.00	2.14	1.8 to 2.2	106	80 to 120	0	20

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CC:

Reported: 7/20/2017
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AW09672

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0312	mg/L
* Beryllium, Total	ABB	4/19/2016	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	5/6/2016	EPA 200.7		1.015	0.1	0.5		6.15	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25		38.7	mg/L
* Chloride, Total	SES	4/18/2016	EPA 300.0		1	0.04	0.25		3.25	mg/L
* Fluoride, Total	SES	4/18/2016	EPA 300.0		1	0.01	0.3	J	0.0260	mg/L
* Sulfate, Total	SES	4/18/2016	EPA 300.0		1	0.3	1		11.3	mg/L

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Alabama Power General Test Laboratory
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AW09672

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09680	Mercury, Total by CVAA	mg/L	0.000106	0.0005	0.004	0.00406	0.00393	0.00403	0.0034 to 0.0046	102	70 to 130	3.20	20
AW09680	Thallium, Total	mg/L	0.0000110	0.00044	0.10	0.0935	0.102	0.0926	0.085 to 0.115	93.5	70 to 130	8.40	20
AW09680	Arsenic, Total	mg/L	0.0000125	0.0022	0.100	0.125	0.127	0.101	0.085 to 0.115	110	70 to 130	1.59	20
AW09680	Cadmium, Total	mg/L	0.00000409	0.00044	0.100	0.0955	0.0962	0.0982	0.085 to 0.115	95.5	70 to 130	0.730	20
AW09680	Lead, Total	mg/L	0.0000222	0.0022	0.100	0.0944	0.102	0.0947	0.085 to 0.115	94.4	70 to 130	7.74	20
AW09680	Lithium, Total	mg/L	0.000103	0.022	0.20	0.232	0.230	0.193	0.17 to 0.23	116	70 to 130	0.866	20
AW09680	Beryllium, Total	mg/L	0.00000888	0.00132	0.100	0.0989	0.107	0.0990	0.085 to 0.115	98.9	70 to 130	7.87	20
AW09680	Molybdenum, Total	mg/L	0.0000187	0.0044	0.100	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.00	20
AW09680	Selenium, Total	mg/L	0.0000700	0.0044	0.100	0.110	0.114	0.105	0.085 to 0.115	110	70 to 130	3.57	20
AW09680	Antimony, Total	mg/L	0.000201	0.00132	0.100	0.104	0.104	0.0979	0.085 to 0.115	104	70 to 130	0.00	20
AW09680	Barium, Total	mg/L	0.00000921	0.0044	0.100	0.136	0.136	0.100	0.085 to 0.115	103	70 to 130	0.00	20
AW09680	Boron, Total	mg/L	0.000963	0.044	1.00	0.127	0.125	0.974	0.85 to 1.15	0.15(	70 to 130	1.45	20
AW09680	Calcium, Total	mg/L	-0.0125	0.22	5.00	75.0	74.0	4.97	4.25 to 5.75	96.0	70 to 130	1.34	20
AW09680	Chromium, Total	mg/L	0.00000814	0.0044	0.100	0.103	0.104	0.102	0.085 to 0.115	103	70 to 130	0.966	20
AW09680	Cobalt, Total	mg/L	-0.00000165	0.0044	0.100	0.112	0.112	0.0996	0.085 to 0.115	101	70 to 130	0.00	20

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AW09672

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09700	Solids, Dissolved	mg/L	15	25			185	40.0	40 to 60			1.93	5
AW09674	Sulfate, Total	mg/L	0.00	1.0	20.0	21.5	0.462	20.5	18 to 22	105	80 to 120	2.14	20
AW09674	Fluoride, Total	mg/L	0.00	0.3	2.0	2.13	0.00	2.14	1.8 to 2.2	106	80 to 120	0	20
AW09674	Chloride, Total	mg/L	0.00	0.25	10.0	10.3	0.00	9.89	9 to 11	103	80 to 120	0	20

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CC:

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-24 Dup

Laboratory ID Number: AW09673

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0293	mg/L
* Beryllium, Total	ABB	4/19/2016	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	5/6/2016	EPA 200.7		1.015	0.1	0.5		6.02	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25		42.0	mg/L
* Chloride, Total	SES	4/18/2016	EPA 300.0		1	0.04	0.25		3.26	mg/L
* Fluoride, Total	SES	4/18/2016	EPA 300.0		1	0.01	0.3	J	0.0270	mg/L
* Sulfate, Total	SES	4/18/2016	EPA 300.0		1	0.3	1		11.2	mg/L

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Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-24 Dup

Laboratory ID Number: AW09673

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09680	Mercury, Total by CVAA	mg/L	0.000106	0.0005	0.004	0.00406	0.00393	0.00403	0.0034 to 0.0046	102	70 to 130	3.20	20
AW09680	Thallium, Total	mg/L	0.0000110	0.00044	0.10	0.0935	0.102	0.0926	0.085 to 0.115	93.5	70 to 130	8.40	20
AW09680	Lead, Total	mg/L	0.0000222	0.0022	0.100	0.0944	0.102	0.0947	0.085 to 0.115	94.4	70 to 130	7.74	20
AW09680	Lithium, Total	mg/L	0.000103	0.022	0.20	0.232	0.230	0.193	0.17 to 0.23	116	70 to 130	0.866	20
AW09680	Arsenic, Total	mg/L	0.0000125	0.0022	0.100	0.125	0.127	0.101	0.085 to 0.115	110	70 to 130	1.59	20
AW09680	Cadmium, Total	mg/L	0.00000409	0.00044	0.100	0.0955	0.0962	0.0982	0.085 to 0.115	95.5	70 to 130	0.730	20
AW09680	Antimony, Total	mg/L	0.000201	0.00132	0.100	0.104	0.104	0.0979	0.085 to 0.115	104	70 to 130	0.00	20
AW09680	Barium, Total	mg/L	0.00000921	0.0044	0.100	0.136	0.136	0.100	0.085 to 0.115	103	70 to 130	0.00	20
AW09680	Boron, Total	mg/L	0.000963	0.044	1.00	0.127	0.125	0.974	0.85 to 1.15	0.15(	70 to 130	1.45	20
AW09680	Calcium, Total	mg/L	-0.0125	0.22	5.00	75.0	74.0	4.97	4.25 to 5.75	96.0	70 to 130	1.34	20
AW09680	Chromium, Total	mg/L	0.00000814	0.0044	0.100	0.103	0.104	0.102	0.085 to 0.115	103	70 to 130	0.966	20
AW09680	Cobalt, Total	mg/L	-0.00000165	0.0044	0.100	0.112	0.112	0.0996	0.085 to 0.115	101	70 to 130	0.00	20
AW09680	Beryllium, Total	mg/L	0.00000888	0.00132	0.100	0.0989	0.107	0.0990	0.085 to 0.115	98.9	70 to 130	7.87	20
AW09680	Molybdenum, Total	mg/L	0.0000187	0.0044	0.100	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.00	20
AW09680	Selenium, Total	mg/L	0.0000700	0.0044	0.100	0.110	0.114	0.105	0.085 to 0.115	110	70 to 130	3.57	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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-24 Dup

Laboratory ID Number: AW09673

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09674	Chloride, Total	mg/L	0.00	0.25	10.0	10.3	0.00	9.89	9 to 11	103	80 to 120	0	20
AW09674	Fluoride, Total	mg/L	0.00	0.3	2.0	2.13	0.00	2.14	1.8 to 2.2	106	80 to 120	0	20
AW09700	Solids, Dissolved	mg/L	15	25			185	40.0	40 to 60			1.93	5
AW09674	Sulfate, Total	mg/L	0.00	1.0	20.0	21.5	0.462	20.5	18 to 22	105	80 to 120	2.14	20

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CC:

Reported: 7/20/2017
Version: 2.0

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW09674

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	ABB	4/19/2016	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	5/6/2016	EPA 200.7		1.015	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	4/19/2016	EPA 300.0		1	0.3	1	J	0.472	mg/L

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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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW09674

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09680	Arsenic, Total	mg/L	0.0000125	0.0022	0.100	0.125	0.127	0.101	0.085 to 0.115	110	70 to 130	1.59	20
AW09680	Cadmium, Total	mg/L	0.00000409	0.00044	0.100	0.0955	0.0962	0.0982	0.085 to 0.115	95.5	70 to 130	0.730	20
AW09680	Mercury, Total by CVAA	mg/L	0.000106	0.0005	0.004	0.00406	0.00393	0.00403	0.0034 to 0.0046	102	70 to 130	3.20	20
AW09680	Thallium, Total	mg/L	0.0000110	0.00044	0.10	0.0935	0.102	0.0926	0.085 to 0.115	93.5	70 to 130	8.40	20
AW09680	Beryllium, Total	mg/L	0.00000888	0.00132	0.100	0.0989	0.107	0.0990	0.085 to 0.115	98.9	70 to 130	7.87	20
AW09680	Molybdenum, Total	mg/L	0.0000187	0.0044	0.100	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.00	20
AW09680	Selenium, Total	mg/L	0.0000700	0.0044	0.100	0.110	0.114	0.105	0.085 to 0.115	110	70 to 130	3.57	20
AW09680	Lead, Total	mg/L	0.0000222	0.0022	0.100	0.0944	0.102	0.0947	0.085 to 0.115	94.4	70 to 130	7.74	20
AW09680	Lithium, Total	mg/L	0.000103	0.022	0.20	0.232	0.230	0.193	0.17 to 0.23	116	70 to 130	0.866	20
AW09680	Antimony, Total	mg/L	0.000201	0.00132	0.100	0.104	0.104	0.0979	0.085 to 0.115	104	70 to 130	0.00	20
AW09680	Barium, Total	mg/L	0.00000921	0.0044	0.100	0.136	0.136	0.100	0.085 to 0.115	103	70 to 130	0.00	20
AW09680	Boron, Total	mg/L	0.000963	0.044	1.00	0.127	0.125	0.974	0.85 to 1.15	0.15(	70 to 130	1.45	20
AW09680	Calcium, Total	mg/L	-0.0125	0.22	5.00	75.0	74.0	4.97	4.25 to 5.75	96.0	70 to 130	1.34	20
AW09680	Chromium, Total	mg/L	0.00000814	0.0044	0.100	0.103	0.104	0.102	0.085 to 0.115	103	70 to 130	0.966	20
AW09680	Cobalt, Total	mg/L	-0.00000165	0.0044	0.100	0.112	0.112	0.0996	0.085 to 0.115	101	70 to 130	0.00	20

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Expiration: June 30, 2018

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Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW09674

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09674	Chloride, Total	mg/L	0.00	0.25	10.0	10.3	0.00	9.89	9 to 11	103	80 to 120	0	20
AW09674	Sulfate, Total	mg/L	0.00	1.0	20.0	21.5	0.462	20.5	18 to 22	105	80 to 120	2.14	20
AW09700	Solids, Dissolved	mg/L	15	25			185	40.0	40 to 60			1.93	5
AW09674	Fluoride, Total	mg/L	0.00	0.3	2.0	2.13	0.00	2.14	1.8 to 2.2	106	80 to 120	0	20

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CC:

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AW09675

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0455	mg/L
* Beryllium, Total	ABB	4/19/2016	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		2.06	mg/L
* Calcium, Total	HRG	5/16/2016	EPA 200.7		10.15	1.0	5.0		115	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		50		610	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25		28.9	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	J	0.203	mg/L
* Sulfate, Total	SES	4/19/2016	EPA 300.0		5	1.5	5		130	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AW09675

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09680	Lead, Total	mg/L	0.0000222	0.0022	0.100	0.0944	0.102	0.0947	0.085 to 0.115	94.4	70 to 130	7.74	20
AW09680	Lithium, Total	mg/L	0.000103	0.022	0.20	0.232	0.230	0.193	0.17 to 0.23	116	70 to 130	0.866	20
AW09680	Arsenic, Total	mg/L	0.0000125	0.0022	0.100	0.125	0.127	0.101	0.085 to 0.115	110	70 to 130	1.59	20
AW09680	Cadmium, Total	mg/L	0.00000409	0.00044	0.100	0.0955	0.0962	0.0982	0.085 to 0.115	95.5	70 to 130	0.730	20
AW09680	Mercury, Total by CVAA	mg/L	0.000106	0.0005	0.004	0.00406	0.00393	0.00403	0.0034 to 0.0046	102	70 to 130	3.20	20
AW09680	Thallium, Total	mg/L	0.0000110	0.00044	0.10	0.0935	0.102	0.0926	0.085 to 0.115	93.5	70 to 130	8.40	20
AW09680	Beryllium, Total	mg/L	0.00000888	0.00132	0.100	0.0989	0.107	0.0990	0.085 to 0.115	98.9	70 to 130	7.87	20
AW09680	Molybdenum, Total	mg/L	0.0000187	0.0044	0.100	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.00	20
AW09680	Selenium, Total	mg/L	0.0000700	0.0044	0.100	0.110	0.114	0.105	0.085 to 0.115	110	70 to 130	3.57	20
AW09680	Antimony, Total	mg/L	0.000201	0.00132	0.100	0.104	0.104	0.0979	0.085 to 0.115	104	70 to 130	0.00	20
AW09680	Barium, Total	mg/L	0.00000921	0.0044	0.100	0.136	0.136	0.100	0.085 to 0.115	103	70 to 130	0.00	20
AW09680	Boron, Total	mg/L	0.000963	0.044	1.00	0.127	0.125	0.974	0.85 to 1.15	0.15(	70 to 130	1.45	20
AW09680	Calcium, Total	mg/L	-0.0125	0.22	5.00	75.0	74.0	4.97	4.25 to 5.75	96.0	70 to 130	1.34	20
AW09680	Chromium, Total	mg/L	0.00000814	0.0044	0.100	0.103	0.104	0.102	0.085 to 0.115	103	70 to 130	0.966	20
AW09680	Cobalt, Total	mg/L	-0.00000165	0.0044	0.100	0.112	0.112	0.0996	0.085 to 0.115	101	70 to 130	0.00	20

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Batch QC Summary

Alabama Power

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AW09675

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09674	Fluoride, Total	mg/L	0.00	0.3	2.0	2.13	0.00	2.14	1.8 to 2.2	106	80 to 120	0	20
AW09674	Chloride, Total	mg/L	0.00	0.25	10.0	10.3	0.00	9.89	9 to 11	103	80 to 120	0	20
AW09700	Solids, Dissolved	mg/L	15	25			185	40.0	40 to 60			1.93	5
AW09674	Sulfate, Total	mg/L	0.00	1.0	20.0	21.5	0.462	20.5	18 to 22	105	80 to 120	2.14	20

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

CC:

Reported: 7/20/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AW09676

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005		0.402	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.434	mg/L
* Beryllium, Total	ABB	4/19/2016	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		0.467	mg/L
* Calcium, Total	HRG	5/16/2016	EPA 200.7		10.15	1.0	5.0		56.1	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0205	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05		0.0862	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	J	0.00297	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25		316	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25		16.6	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	J	0.214	mg/L
* Sulfate, Total	SES	4/19/2016	EPA 300.0		1	0.3	1	J	0.483	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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AW09676

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09680	Arsenic, Total	mg/L	0.0000125	0.0022	0.100	0.125	0.127	0.101	0.085 to 0.115	110	70 to 130	1.59	20
AW09680	Cadmium, Total	mg/L	0.00000409	0.00044	0.100	0.0955	0.0962	0.0982	0.085 to 0.115	95.5	70 to 130	0.730	20
AW09680	Beryllium, Total	mg/L	0.00000888	0.00132	0.100	0.0989	0.107	0.0990	0.085 to 0.115	98.9	70 to 130	7.87	20
AW09680	Molybdenum, Total	mg/L	0.0000187	0.0044	0.100	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.00	20
AW09680	Selenium, Total	mg/L	0.0000700	0.0044	0.100	0.110	0.114	0.105	0.085 to 0.115	110	70 to 130	3.57	20
AW09680	Lead, Total	mg/L	0.0000222	0.0022	0.100	0.0944	0.102	0.0947	0.085 to 0.115	94.4	70 to 130	7.74	20
AW09680	Lithium, Total	mg/L	0.000103	0.022	0.20	0.232	0.230	0.193	0.17 to 0.23	116	70 to 130	0.866	20
AW09680	Antimony, Total	mg/L	0.000201	0.00132	0.100	0.104	0.104	0.0979	0.085 to 0.115	104	70 to 130	0.00	20
AW09680	Barium, Total	mg/L	0.00000921	0.0044	0.100	0.136	0.136	0.100	0.085 to 0.115	103	70 to 130	0.00	20
AW09680	Boron, Total	mg/L	0.000963	0.044	1.00	0.127	0.125	0.974	0.85 to 1.15	0.15(	70 to 130	1.45	20
AW09680	Calcium, Total	mg/L	-0.0125	0.22	5.00	75.0	74.0	4.97	4.25 to 5.75	96.0	70 to 130	1.34	20
AW09680	Chromium, Total	mg/L	0.00000814	0.0044	0.100	0.103	0.104	0.102	0.085 to 0.115	103	70 to 130	0.966	20
AW09680	Cobalt, Total	mg/L	-0.00000165	0.0044	0.100	0.112	0.112	0.0996	0.085 to 0.115	101	70 to 130	0.00	20
AW09680	Mercury, Total by CVAA	mg/L	0.000106	0.0005	0.004	0.00406	0.00393	0.00403	0.0034 to 0.0046	102	70 to 130	3.20	20
AW09680	Thallium, Total	mg/L	0.0000110	0.00044	0.10	0.0935	0.102	0.0926	0.085 to 0.115	93.5	70 to 130	8.40	20

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Reported: 7/20/2017
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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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AW09676

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09674	Fluoride, Total	mg/L	0.00	0.3	2.0	2.13	0.00	2.14	1.8 to 2.2	106	80 to 120	0	20
AW09674	Chloride, Total	mg/L	0.00	0.25	10.0	10.3	0.00	9.89	9 to 11	103	80 to 120	0	20
AW09674	Sulfate, Total	mg/L	0.00	1.0	20.0	21.5	0.462	20.5	18 to 22	105	80 to 120	2.14	20
AW09700	Solids, Dissolved	mg/L	15	25			185	40.0	40 to 60			1.93	5

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CC:

Reported: 7/20/2017
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AW09677

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0966	mg/L
* Beryllium, Total	ABB	4/19/2016	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	0.0935	mg/L
* Calcium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.1	0.5		10.0	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	J	0.00656	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25		140	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25		22.2	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	J	0.0210	mg/L
* Sulfate, Total	SES	4/19/2016	EPA 300.0		1	0.3	1		32.5	mg/L

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Alabama Power General Test Laboratory
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AW09677

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09680	Lead, Total	mg/L	0.0000222	0.0022	0.100	0.0944	0.102	0.0947	0.085 to 0.115	94.4	70 to 130	7.74	20
AW09680	Lithium, Total	mg/L	0.000103	0.022	0.20	0.232	0.230	0.193	0.17 to 0.23	116	70 to 130	0.866	20
AW09680	Beryllium, Total	mg/L	0.00000888	0.00132	0.100	0.0989	0.107	0.0990	0.085 to 0.115	98.9	70 to 130	7.87	20
AW09680	Molybdenum, Total	mg/L	0.0000187	0.0044	0.100	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.00	20
AW09680	Selenium, Total	mg/L	0.0000700	0.0044	0.100	0.110	0.114	0.105	0.085 to 0.115	110	70 to 130	3.57	20
AW09680	Arsenic, Total	mg/L	0.0000125	0.0022	0.100	0.125	0.127	0.101	0.085 to 0.115	110	70 to 130	1.59	20
AW09680	Cadmium, Total	mg/L	0.00000409	0.00044	0.100	0.0955	0.0962	0.0982	0.085 to 0.115	95.5	70 to 130	0.730	20
AW09680	Mercury, Total by CVAA	mg/L	0.000106	0.0005	0.004	0.00406	0.00393	0.00403	0.0034 to 0.0046	102	70 to 130	3.20	20
AW09680	Thallium, Total	mg/L	0.0000110	0.00044	0.10	0.0935	0.102	0.0926	0.085 to 0.115	93.5	70 to 130	8.40	20
AW09680	Antimony, Total	mg/L	0.000201	0.00132	0.100	0.104	0.104	0.0979	0.085 to 0.115	104	70 to 130	0.00	20
AW09680	Barium, Total	mg/L	0.00000921	0.0044	0.100	0.136	0.136	0.100	0.085 to 0.115	103	70 to 130	0.00	20
AW09680	Boron, Total	mg/L	0.000963	0.044	1.00	0.127	0.125	0.974	0.85 to 1.15	0.15(	70 to 130	1.45	20
AW09680	Calcium, Total	mg/L	-0.0125	0.22	5.00	75.0	74.0	4.97	4.25 to 5.75	96.0	70 to 130	1.34	20
AW09680	Chromium, Total	mg/L	0.00000814	0.0044	0.100	0.103	0.104	0.102	0.085 to 0.115	103	70 to 130	0.966	20
AW09680	Cobalt, Total	mg/L	-0.00000165	0.0044	0.100	0.112	0.112	0.0996	0.085 to 0.115	101	70 to 130	0.00	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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AW09677

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09700	Solids, Dissolved	mg/L	15	25			185	40.0	40 to 60			1.93	5
AW09674	Fluoride, Total	mg/L	0.00	0.3	2.0	2.13	0.00	2.14	1.8 to 2.2	106	80 to 120	0	20
AW09674	Chloride, Total	mg/L	0.00	0.25	10.0	10.3	0.00	9.89	9 to 11	103	80 to 120	0	20
AW09674	Sulfate, Total	mg/L	0.00	1.0	20.0	21.5	0.462	20.5	18 to 22	105	80 to 120	2.14	20

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CC:

Reported: 7/20/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AW09678

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005		0.00827	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0994	mg/L
* Beryllium, Total	ABB	4/19/2016	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	0.0293	mg/L
* Calcium, Total	HRG	5/16/2016	EPA 200.7		10.15	1.0	5.0		95.2	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	J	0.00470	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25		393	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25		24.6	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	J	0.0830	mg/L
* Sulfate, Total	SES	4/19/2016	EPA 300.0		1	0.3	1	J	0.490	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AW09678

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09680	Lead, Total	mg/L	0.0000222	0.0022	0.100	0.0944	0.102	0.0947	0.085 to 0.115	94.4	70 to 130	7.74	20
AW09680	Lithium, Total	mg/L	0.000103	0.022	0.20	0.232	0.230	0.193	0.17 to 0.23	116	70 to 130	0.866	20
AW09680	Arsenic, Total	mg/L	0.0000125	0.0022	0.100	0.125	0.127	0.101	0.085 to 0.115	110	70 to 130	1.59	20
AW09680	Cadmium, Total	mg/L	0.00000409	0.00044	0.100	0.0955	0.0962	0.0982	0.085 to 0.115	95.5	70 to 130	0.730	20
AW09680	Beryllium, Total	mg/L	0.00000888	0.00132	0.100	0.0989	0.107	0.0990	0.085 to 0.115	98.9	70 to 130	7.87	20
AW09680	Molybdenum, Total	mg/L	0.0000187	0.0044	0.100	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.00	20
AW09680	Selenium, Total	mg/L	0.0000700	0.0044	0.100	0.110	0.114	0.105	0.085 to 0.115	110	70 to 130	3.57	20
AW09680	Mercury, Total by CVAA	mg/L	0.000106	0.0005	0.004	0.00406	0.00393	0.00403	0.0034 to 0.0046	102	70 to 130	3.20	20
AW09680	Thallium, Total	mg/L	0.0000110	0.00044	0.10	0.0935	0.102	0.0926	0.085 to 0.115	93.5	70 to 130	8.40	20
AW09680	Antimony, Total	mg/L	0.000201	0.00132	0.100	0.104	0.104	0.0979	0.085 to 0.115	104	70 to 130	0.00	20
AW09680	Barium, Total	mg/L	0.00000921	0.0044	0.100	0.136	0.136	0.100	0.085 to 0.115	103	70 to 130	0.00	20
AW09680	Boron, Total	mg/L	0.000963	0.044	1.00	0.127	0.125	0.974	0.85 to 1.15	0.15(	70 to 130	1.45	20
AW09680	Calcium, Total	mg/L	-0.0125	0.22	5.00	75.0	74.0	4.97	4.25 to 5.75	96.0	70 to 130	1.34	20
AW09680	Chromium, Total	mg/L	0.00000814	0.0044	0.100	0.103	0.104	0.102	0.085 to 0.115	103	70 to 130	0.966	20
AW09680	Cobalt, Total	mg/L	-0.00000165	0.0044	0.100	0.112	0.112	0.0996	0.085 to 0.115	101	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

Reported: 7/20/2017
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: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AW09678

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09700	Solids, Dissolved	mg/L	15	25			185	40.0	40 to 60			1.93	5
AW09674	Fluoride, Total	mg/L	0.00	0.3	2.0	2.13	0.00	2.14	1.8 to 2.2	106	80 to 120	0	20
AW09674	Chloride, Total	mg/L	0.00	0.25	10.0	10.3	0.00	9.89	9 to 11	103	80 to 120	0	20
AW09674	Sulfate, Total	mg/L	0.00	1.0	20.0	21.5	0.462	20.5	18 to 22	105	80 to 120	2.14	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: 7/20/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AW09679

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005		0.0178	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0344	mg/L
* Beryllium, Total	ABB	4/19/2016	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		0.211	mg/L
* Calcium, Total	HRG	5/16/2016	EPA 200.7		10.15	1.0	5.0		152	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0452	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		50		1200	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25		21.5	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	J	0.0610	mg/L
* Sulfate, Total	SES	4/19/2016	EPA 300.0		10	3.0	10		715	mg/L

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Expiration: June 30, 2018

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Reported: 7/20/2017
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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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AW09679

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09680	Lead, Total	mg/L	0.0000222	0.0022	0.100	0.0944	0.102	0.0947	0.085 to 0.115	94.4	70 to 130	7.74	20
AW09680	Lithium, Total	mg/L	0.000103	0.022	0.20	0.232	0.230	0.193	0.17 to 0.23	116	70 to 130	0.866	20
AW09680	Arsenic, Total	mg/L	0.0000125	0.0022	0.100	0.125	0.127	0.101	0.085 to 0.115	110	70 to 130	1.59	20
AW09680	Cadmium, Total	mg/L	0.00000409	0.00044	0.100	0.0955	0.0962	0.0982	0.085 to 0.115	95.5	70 to 130	0.730	20
AW09680	Beryllium, Total	mg/L	0.00000888	0.00132	0.100	0.0989	0.107	0.0990	0.085 to 0.115	98.9	70 to 130	7.87	20
AW09680	Molybdenum, Total	mg/L	0.0000187	0.0044	0.100	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.00	20
AW09680	Selenium, Total	mg/L	0.0000700	0.0044	0.100	0.110	0.114	0.105	0.085 to 0.115	110	70 to 130	3.57	20
AW09680	Mercury, Total by CVAA	mg/L	0.000106	0.0005	0.004	0.00406	0.00393	0.00403	0.0034 to 0.0046	102	70 to 130	3.20	20
AW09680	Thallium, Total	mg/L	0.0000110	0.00044	0.10	0.0935	0.102	0.0926	0.085 to 0.115	93.5	70 to 130	8.40	20
AW09680	Antimony, Total	mg/L	0.000201	0.00132	0.100	0.104	0.104	0.0979	0.085 to 0.115	104	70 to 130	0.00	20
AW09680	Barium, Total	mg/L	0.00000921	0.0044	0.100	0.136	0.136	0.100	0.085 to 0.115	103	70 to 130	0.00	20
AW09680	Boron, Total	mg/L	0.000963	0.044	1.00	0.127	0.125	0.974	0.85 to 1.15	0.15(	70 to 130	1.45	20
AW09680	Calcium, Total	mg/L	-0.0125	0.22	5.00	75.0	74.0	4.97	4.25 to 5.75	96.0	70 to 130	1.34	20
AW09680	Chromium, Total	mg/L	0.00000814	0.0044	0.100	0.103	0.104	0.102	0.085 to 0.115	103	70 to 130	0.966	20
AW09680	Cobalt, Total	mg/L	-0.00000165	0.0044	0.100	0.112	0.112	0.0996	0.085 to 0.115	101	70 to 130	0.00	20

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Expiration: June 30, 2018

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Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AW09679

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09700	Solids, Dissolved	mg/L	15	25			185	40.0	40 to 60			1.93	5
AW09674	Fluoride, Total	mg/L	0.00	0.3	2.0	2.13	0.00	2.14	1.8 to 2.2	106	80 to 120	0	20
AW09674	Chloride, Total	mg/L	0.00	0.25	10.0	10.3	0.00	9.89	9 to 11	103	80 to 120	0	20
AW09674	Sulfate, Total	mg/L	0.00	1.0	20.0	21.5	0.462	20.5	18 to 22	105	80 to 120	2.14	20

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CC:

Reported: 7/20/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AW09680

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005		0.0145	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0334	mg/L
* Beryllium, Total	ABB	4/19/2016	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		0.125	mg/L
* Calcium, Total	HRG	5/16/2016	EPA 200.7		10.15	1.0	5.0		70.2	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0106	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		50		508	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25		14.3	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	J	0.0920	mg/L
* Sulfate, Total	SES	4/19/2016	EPA 300.0		5	1.5	5		307	mg/L

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Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17
Recovery for Boron was out of spec. Re-analysis presented passing results, indicating a lack of significant matrix effect on the sample.

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AW09680

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09680	Lead, Total	mg/L	0.0000222	0.0022	0.100	0.0944	0.102	0.0947	0.085 to 0.115	94.4	70 to 130	7.74	20
AW09680	Lithium, Total	mg/L	0.000103	0.022	0.20	0.232	0.230	0.193	0.17 to 0.23	116	70 to 130	0.866	20
AW09680	Arsenic, Total	mg/L	0.0000125	0.0022	0.100	0.125	0.127	0.101	0.085 to 0.115	110	70 to 130	1.59	20
AW09680	Cadmium, Total	mg/L	0.00000409	0.00044	0.100	0.0955	0.0962	0.0982	0.085 to 0.115	95.5	70 to 130	0.730	20
AW09680	Mercury, Total by CVAA	mg/L	0.000106	0.0005	0.004	0.00406	0.00393	0.00403	0.0034 to 0.0046	102	70 to 130	3.20	20
AW09680	Thallium, Total	mg/L	0.0000110	0.00044	0.10	0.0935	0.102	0.0926	0.085 to 0.115	93.5	70 to 130	8.40	20
AW09680	Beryllium, Total	mg/L	0.00000888	0.00132	0.100	0.0989	0.107	0.0990	0.085 to 0.115	98.9	70 to 130	7.87	20
AW09680	Molybdenum, Total	mg/L	0.0000187	0.0044	0.100	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.00	20
AW09680	Selenium, Total	mg/L	0.0000700	0.0044	0.100	0.110	0.114	0.105	0.085 to 0.115	110	70 to 130	3.57	20
AW09680	Antimony, Total	mg/L	0.000201	0.00132	0.100	0.104	0.104	0.0979	0.085 to 0.115	104	70 to 130	0.00	20
AW09680	Barium, Total	mg/L	0.00000921	0.0044	0.100	0.136	0.136	0.100	0.085 to 0.115	103	70 to 130	0.00	20
AW09680	Boron, Total	mg/L	0.000963	0.044	1.00	0.127	0.125	0.974	0.85 to 1.15	0.15(	70 to 130	1.45	20
AW09680	Calcium, Total	mg/L	-0.0125	0.22	5.00	75.0	74.0	4.97	4.25 to 5.75	96.0	70 to 130	1.34	20
AW09680	Chromium, Total	mg/L	0.00000814	0.0044	0.100	0.103	0.104	0.102	0.085 to 0.115	103	70 to 130	0.966	20
AW09680	Cobalt, Total	mg/L	-0.00000165	0.0044	0.100	0.112	0.112	0.0996	0.085 to 0.115	101	70 to 130	0.00	20

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Reported: 7/20/2017
Version: 2.0

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Calera, AL 35040
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AW09680

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09697	Solids, Dissolved	mg/L	-4	25			227	42.0	40 to 60			0.221	5
AW09683	Fluoride, Total	mg/L	0.00	0.3	2.0	2.15	0.00	2.12	1.8 to 2.2	108	80 to 120	0	20
AW09683	Sulfate, Total	mg/L	0.00	1.0	20.0	21.4	0.453	20.4	18 to 22	105	80 to 120	1.53	20
AW09683	Chloride, Total	mg/L	0.00	0.25	10.0	10.3	0.196	9.90	9 to 11	101	80 to 120	0.00	20

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Recovery for Boron was out of spec. Re-analysis presented passing results, indicating a lack of significant matrix effect on the sample.

CC:

Reported: 7/20/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AW09681

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.113	mg/L
* Beryllium, Total	ABB	4/19/2016	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		1.56	mg/L
* Calcium, Total	HRG	5/16/2016	EPA 200.7		10.15	1.0	5.0		74.1	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0139	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		50		634	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25		64.1	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	J	0.0880	mg/L
* Sulfate, Total	SES	4/19/2016	EPA 300.0		1	0.3	1		51.7	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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AW09681

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09690	Cobalt, Total	mg/L	-0.00000165	0.0044	0.100	0.104	0.105	0.0996	0.085 to 0.115	104	70 to 130	0.957	20
AW09690	Lithium, Total	mg/L	0.000104	0.022	0.200	0.700	0.701	0.194	0.17 to 0.23	96.0	70 to 130	0.143	20
AW09690	Cadmium, Total	mg/L	0.00000409	0.00044	0.100	0.0923	0.0985	0.0982	0.085 to 0.115	92.3	70 to 130	6.50	20
AW09690	Lead, Total	mg/L	0.0000222	0.0022	0.100	0.0941	0.0969	0.0947	0.085 to 0.115	94.1	70 to 130	2.93	20
AW09690	Beryllium, Total	mg/L	0.00000888	0.00132	0.100	0.102	0.105	0.0990	0.085 to 0.115	102	70 to 130	2.90	20
AW09690	Chromium, Total	mg/L	0.00000814	0.0044	0.100	0.101	0.105	0.102	0.085 to 0.115	101	70 to 130	3.88	20
AW09690	Barium, Total	mg/L	0.00000921	0.0044	0.100	0.191	0.198	0.100	0.085 to 0.115	99.8	70 to 130	3.60	20
AW09690	Calcium, Total	mg/L	-0.0137	0.22	5.00	28.1	28.0	4.98	4.25 to 5.75	96.0	70 to 130	0.356	20
AW09690	Mercury, Total by CVAA	mg/L	0.000106	0.0005	0.004	0.00408	0.00411	0.00406	0.0034 to 0.0046	102	70 to 130	0.753	20
AW09690	Selenium, Total	mg/L	0.0000700	0.0044	0.100	0.186	0.187	0.105	0.085 to 0.115	116	70 to 130	0.536	20
AW09690	Antimony, Total	mg/L	0.000201	0.00132	0.100	0.102	0.104	0.0979	0.085 to 0.115	102	70 to 130	1.94	20
AW09690	Arsenic, Total	mg/L	0.0000125	0.0022	0.100	0.123	0.127	0.101	0.085 to 0.115	109	70 to 130	3.20	20
AW09690	Boron, Total	mg/L	0.00305	0.044	1.00	1.26	1.26	0.969	0.85 to 1.15	100	70 to 130	0.00	20
AW09690	Molybdenum, Total	mg/L	0.0000187	0.0044	0.100	0.145	0.148	0.101	0.085 to 0.115	101	70 to 130	2.05	20
AW09690	Thallium, Total	mg/L	0.0000110	0.00044	0.10	0.0949	0.0980	0.0926	0.085 to 0.115	94.9	70 to 130	3.21	20

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Reported: 7/20/2017
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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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AW09681

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09697	Solids, Dissolved	mg/L	-4	25			227	42.0	40 to 60			0.221	5
AW09683	Fluoride, Total	mg/L	0.00	0.3	2.0	2.15	0.00	2.12	1.8 to 2.2	108	80 to 120	0	20
AW09683	Sulfate, Total	mg/L	0.00	1.0	20.0	21.4	0.453	20.4	18 to 22	105	80 to 120	1.53	20
AW09683	Chloride, Total	mg/L	0.00	0.25	10.0	10.3	0.196	9.90	9 to 11	101	80 to 120	0.00	20

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CC:

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AW09682

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0886	mg/L
* Beryllium, Total	ABB	4/19/2016	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		0.478	mg/L
* Calcium, Total	HRG	5/16/2016	EPA 200.7		10.15	1.0	5.0		151	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	J	0.00218	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		100		1010	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25		57.8	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	J	0.0810	mg/L
* Sulfate, Total	SES	4/19/2016	EPA 300.0		5	1.5	5		330	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AW09682

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09690	Cobalt, Total	mg/L	-0.00000165	0.0044	0.100	0.104	0.105	0.0996	0.085 to 0.115	104	70 to 130	0.957	20
AW09690	Lithium, Total	mg/L	0.000104	0.022	0.200	0.700	0.701	0.194	0.17 to 0.23	96.0	70 to 130	0.143	20
AW09690	Mercury, Total by CVAA	mg/L	0.000106	0.0005	0.004	0.00408	0.00411	0.00406	0.0034 to 0.0046	102	70 to 130	0.753	20
AW09690	Selenium, Total	mg/L	0.0000700	0.0044	0.100	0.186	0.187	0.105	0.085 to 0.115	116	70 to 130	0.536	20
AW09690	Cadmium, Total	mg/L	0.00000409	0.00044	0.100	0.0923	0.0985	0.0982	0.085 to 0.115	92.3	70 to 130	6.50	20
AW09690	Lead, Total	mg/L	0.0000222	0.0022	0.100	0.0941	0.0969	0.0947	0.085 to 0.115	94.1	70 to 130	2.93	20
AW09690	Antimony, Total	mg/L	0.000201	0.00132	0.100	0.102	0.104	0.0979	0.085 to 0.115	102	70 to 130	1.94	20
AW09690	Arsenic, Total	mg/L	0.0000125	0.0022	0.100	0.123	0.127	0.101	0.085 to 0.115	109	70 to 130	3.20	20
AW09690	Boron, Total	mg/L	0.00305	0.044	1.00	1.26	1.26	0.969	0.85 to 1.15	100	70 to 130	0.00	20
AW09690	Molybdenum, Total	mg/L	0.0000187	0.0044	0.100	0.145	0.148	0.101	0.085 to 0.115	101	70 to 130	2.05	20
AW09690	Thallium, Total	mg/L	0.0000110	0.00044	0.10	0.0949	0.0980	0.0926	0.085 to 0.115	94.9	70 to 130	3.21	20
AW09690	Beryllium, Total	mg/L	0.00000888	0.00132	0.100	0.102	0.105	0.0990	0.085 to 0.115	102	70 to 130	2.90	20
AW09690	Chromium, Total	mg/L	0.00000814	0.0044	0.100	0.101	0.105	0.102	0.085 to 0.115	101	70 to 130	3.88	20
AW09690	Barium, Total	mg/L	0.00000921	0.0044	0.100	0.191	0.198	0.100	0.085 to 0.115	99.8	70 to 130	3.60	20
AW09690	Calcium, Total	mg/L	-0.0137	0.22	5.00	28.1	28.0	4.98	4.25 to 5.75	96.0	70 to 130	0.356	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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AW09682

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09683	Chloride, Total	mg/L	0.00	0.25	10.0	10.3	0.196	9.90	9 to 11	101	80 to 120	0.00	20
AW09697	Solids, Dissolved	mg/L	-4	25			227	42.0	40 to 60			0.221	5
AW09683	Fluoride, Total	mg/L	0.00	0.3	2.0	2.15	0.00	2.12	1.8 to 2.2	108	80 to 120	0	20
AW09683	Sulfate, Total	mg/L	0.00	1.0	20.0	21.4	0.453	20.4	18 to 22	105	80 to 120	1.53	20

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW09683

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	ABB	4/19/2016	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	5/6/2016	EPA 200.7		1.015	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25	J	0.196	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	4/19/2016	EPA 300.0		1	0.3	1	J	0.460	mg/L

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Batch QC Summary

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Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW09683

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09690	Lithium, Total	mg/L	0.000104	0.022	0.200	0.700	0.701	0.194	0.17 to 0.23	96.0	70 to 130	0.143	20
AW09690	Cobalt, Total	mg/L	-0.00000165	0.0044	0.100	0.104	0.105	0.0996	0.085 to 0.115	104	70 to 130	0.957	20
AW09690	Cadmium, Total	mg/L	0.00000409	0.00044	0.100	0.0923	0.0985	0.0982	0.085 to 0.115	92.3	70 to 130	6.50	20
AW09690	Lead, Total	mg/L	0.0000222	0.0022	0.100	0.0941	0.0969	0.0947	0.085 to 0.115	94.1	70 to 130	2.93	20
AW09690	Mercury, Total by CVAA	mg/L	0.000106	0.0005	0.004	0.00408	0.00411	0.00406	0.0034 to 0.0046	102	70 to 130	0.753	20
AW09690	Selenium, Total	mg/L	0.0000700	0.0044	0.100	0.186	0.187	0.105	0.085 to 0.115	116	70 to 130	0.536	20
AW09690	Beryllium, Total	mg/L	0.00000888	0.00132	0.100	0.102	0.105	0.0990	0.085 to 0.115	102	70 to 130	2.90	20
AW09690	Chromium, Total	mg/L	0.00000814	0.0044	0.100	0.101	0.105	0.102	0.085 to 0.115	101	70 to 130	3.88	20
AW09690	Barium, Total	mg/L	0.00000921	0.0044	0.100	0.191	0.198	0.100	0.085 to 0.115	99.8	70 to 130	3.60	20
AW09690	Calcium, Total	mg/L	-0.0137	0.22	5.00	28.1	28.0	4.98	4.25 to 5.75	96.0	70 to 130	0.356	20
AW09690	Antimony, Total	mg/L	0.000201	0.00132	0.100	0.102	0.104	0.0979	0.085 to 0.115	102	70 to 130	1.94	20
AW09690	Arsenic, Total	mg/L	0.0000125	0.0022	0.100	0.123	0.127	0.101	0.085 to 0.115	109	70 to 130	3.20	20
AW09690	Boron, Total	mg/L	0.00305	0.044	1.00	1.26	1.26	0.969	0.85 to 1.15	100	70 to 130	0.00	20
AW09690	Molybdenum, Total	mg/L	0.0000187	0.0044	0.100	0.145	0.148	0.101	0.085 to 0.115	101	70 to 130	2.05	20
AW09690	Thallium, Total	mg/L	0.0000110	0.00044	0.10	0.0949	0.0980	0.0926	0.085 to 0.115	94.9	70 to 130	3.21	20

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Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW09683

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09697	Solids, Dissolved	mg/L	-4	25			227	42.0	40 to 60			0.221	5
AW09683	Sulfate, Total	mg/L	0.00	1.0	20.0	21.4	0.453	20.4	18 to 22	105	80 to 120	1.53	20
AW09683	Fluoride, Total	mg/L	0.00	0.3	2.0	2.15	0.00	2.12	1.8 to 2.2	108	80 to 120	0	20
AW09683	Chloride, Total	mg/L	0.00	0.25	10.0	10.3	0.196	9.90	9 to 11	101	80 to 120	0.00	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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

CC:

Reported: 7/20/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AW09684

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0200	mg/L
* Beryllium, Total	ABB	4/19/2016	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		0.276	mg/L
* Calcium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.1	0.5		32.2	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05		0.544	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.101	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25		238	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25		8.20	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	J	0.163	mg/L
* Sulfate, Total	SES	4/19/2016	EPA 300.0		5	1.5	5		122	mg/L

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AW09684

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09690	Lithium, Total	mg/L	0.000104	0.022	0.200	0.700	0.701	0.194	0.17 to 0.23	96.0	70 to 130	0.143	20
AW09690	Cobalt, Total	mg/L	-0.00000165	0.0044	0.100	0.104	0.105	0.0996	0.085 to 0.115	104	70 to 130	0.957	20
AW09690	Cadmium, Total	mg/L	0.00000409	0.00044	0.100	0.0923	0.0985	0.0982	0.085 to 0.115	92.3	70 to 130	6.50	20
AW09690	Lead, Total	mg/L	0.0000222	0.0022	0.100	0.0941	0.0969	0.0947	0.085 to 0.115	94.1	70 to 130	2.93	20
AW09690	Barium, Total	mg/L	0.00000921	0.0044	0.100	0.191	0.198	0.100	0.085 to 0.115	99.8	70 to 130	3.60	20
AW09690	Calcium, Total	mg/L	-0.0137	0.22	5.00	28.1	28.0	4.98	4.25 to 5.75	96.0	70 to 130	0.356	20
AW09690	Mercury, Total by CVAA	mg/L	0.000106	0.0005	0.004	0.00408	0.00411	0.00406	0.0034 to 0.0046	102	70 to 130	0.753	20
AW09690	Selenium, Total	mg/L	0.0000700	0.0044	0.100	0.186	0.187	0.105	0.085 to 0.115	116	70 to 130	0.536	20
AW09690	Antimony, Total	mg/L	0.000201	0.00132	0.100	0.102	0.104	0.0979	0.085 to 0.115	102	70 to 130	1.94	20
AW09690	Arsenic, Total	mg/L	0.0000125	0.0022	0.100	0.123	0.127	0.101	0.085 to 0.115	109	70 to 130	3.20	20
AW09690	Boron, Total	mg/L	0.00305	0.044	1.00	1.26	1.26	0.969	0.85 to 1.15	100	70 to 130	0.00	20
AW09690	Molybdenum, Total	mg/L	0.0000187	0.0044	0.100	0.145	0.148	0.101	0.085 to 0.115	101	70 to 130	2.05	20
AW09690	Thallium, Total	mg/L	0.0000110	0.00044	0.10	0.0949	0.0980	0.0926	0.085 to 0.115	94.9	70 to 130	3.21	20
AW09690	Beryllium, Total	mg/L	0.00000888	0.00132	0.100	0.102	0.105	0.0990	0.085 to 0.115	102	70 to 130	2.90	20
AW09690	Chromium, Total	mg/L	0.00000814	0.0044	0.100	0.101	0.105	0.102	0.085 to 0.115	101	70 to 130	3.88	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

Alabama Power

Corrected Copy

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AW09684

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09697	Solids, Dissolved	mg/L	-4	25			227	42.0	40 to 60			0.221	5
AW09683	Chloride, Total	mg/L	0.00	0.25	10.0	10.3	0.196	9.90	9 to 11	101	80 to 120	0.00	20
AW09683	Sulfate, Total	mg/L	0.00	1.0	20.0	21.4	0.453	20.4	18 to 22	105	80 to 120	1.53	20
AW09683	Fluoride, Total	mg/L	0.00	0.3	2.0	2.15	0.00	2.12	1.8 to 2.2	108	80 to 120	0	20

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CC:

Reported: 7/20/2017
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AW09685

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005		0.00695	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.106	mg/L
* Beryllium, Total	ABB	4/19/2016	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		0.610	mg/L
* Calcium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.1	0.5		17.8	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0448	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05		0.0730	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	J	0.00646	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25		161	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25		17.0	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	J	0.119	mg/L
* Sulfate, Total	SES	4/19/2016	EPA 300.0		1	0.3	1		33.1	mg/L

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Calera, AL 35040
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AW09685

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09690	Cobalt, Total	mg/L	-0.00000165	0.0044	0.100	0.104	0.105	0.0996	0.085 to 0.115	104	70 to 130	0.957	20
AW09690	Lithium, Total	mg/L	0.000104	0.022	0.200	0.700	0.701	0.194	0.17 to 0.23	96.0	70 to 130	0.143	20
AW09690	Barium, Total	mg/L	0.00000921	0.0044	0.100	0.191	0.198	0.100	0.085 to 0.115	99.8	70 to 130	3.60	20
AW09690	Calcium, Total	mg/L	-0.0137	0.22	5.00	28.1	28.0	4.98	4.25 to 5.75	96.0	70 to 130	0.356	20
AW09690	Cadmium, Total	mg/L	0.00000409	0.00044	0.100	0.0923	0.0985	0.0982	0.085 to 0.115	92.3	70 to 130	6.50	20
AW09690	Lead, Total	mg/L	0.0000222	0.0022	0.100	0.0941	0.0969	0.0947	0.085 to 0.115	94.1	70 to 130	2.93	20
AW09690	Beryllium, Total	mg/L	0.00000888	0.00132	0.100	0.102	0.105	0.0990	0.085 to 0.115	102	70 to 130	2.90	20
AW09690	Chromium, Total	mg/L	0.00000814	0.0044	0.100	0.101	0.105	0.102	0.085 to 0.115	101	70 to 130	3.88	20
AW09690	Mercury, Total by CVAA	mg/L	0.000106	0.0005	0.004	0.00408	0.00411	0.00406	0.0034 to 0.0046	102	70 to 130	0.753	20
AW09690	Selenium, Total	mg/L	0.0000700	0.0044	0.100	0.186	0.187	0.105	0.085 to 0.115	116	70 to 130	0.536	20
AW09690	Antimony, Total	mg/L	0.000201	0.00132	0.100	0.102	0.104	0.0979	0.085 to 0.115	102	70 to 130	1.94	20
AW09690	Arsenic, Total	mg/L	0.0000125	0.0022	0.100	0.123	0.127	0.101	0.085 to 0.115	109	70 to 130	3.20	20
AW09690	Boron, Total	mg/L	0.00305	0.044	1.00	1.26	1.26	0.969	0.85 to 1.15	100	70 to 130	0.00	20
AW09690	Molybdenum, Total	mg/L	0.0000187	0.0044	0.100	0.145	0.148	0.101	0.085 to 0.115	101	70 to 130	2.05	20
AW09690	Thallium, Total	mg/L	0.0000110	0.00044	0.10	0.0949	0.0980	0.0926	0.085 to 0.115	94.9	70 to 130	3.21	20

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Expiration: June 30, 2018

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Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AW09685

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09697	Solids, Dissolved	mg/L	-4	25			227	42.0	40 to 60			0.221	5
AW09683	Sulfate, Total	mg/L	0.00	1.0	20.0	21.4	0.453	20.4	18 to 22	105	80 to 120	1.53	20
AW09683	Chloride, Total	mg/L	0.00	0.25	10.0	10.3	0.196	9.90	9 to 11	101	80 to 120	0.00	20
AW09683	Fluoride, Total	mg/L	0.00	0.3	2.0	2.15	0.00	2.12	1.8 to 2.2	108	80 to 120	0	20

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CC:

Reported: 7/20/2017
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AW09686

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005		0.00556	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0552	mg/L
* Beryllium, Total	ABB	4/19/2016	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		0.376	mg/L
* Calcium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.1	0.5		32.5	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	J	0.00936	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05	J	0.0276	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25		202	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25		14.3	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	J	0.150	mg/L
* Sulfate, Total	SES	4/19/2016	EPA 300.0		1	0.3	1		43.9	mg/L

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Expiration: June 30, 2018

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Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AW09686

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09690	Cobalt, Total	mg/L	-0.00000165	0.0044	0.100	0.104	0.105	0.0996	0.085 to 0.115	104	70 to 130	0.957	20
AW09690	Lithium, Total	mg/L	0.000104	0.022	0.200	0.700	0.701	0.194	0.17 to 0.23	96.0	70 to 130	0.143	20
AW09690	Mercury, Total by CVAA	mg/L	0.000106	0.0005	0.004	0.00408	0.00411	0.00406	0.0034 to 0.0046	102	70 to 130	0.753	20
AW09690	Selenium, Total	mg/L	0.0000700	0.0044	0.100	0.186	0.187	0.105	0.085 to 0.115	116	70 to 130	0.536	20
AW09690	Cadmium, Total	mg/L	0.00000409	0.00044	0.100	0.0923	0.0985	0.0982	0.085 to 0.115	92.3	70 to 130	6.50	20
AW09690	Lead, Total	mg/L	0.0000222	0.0022	0.100	0.0941	0.0969	0.0947	0.085 to 0.115	94.1	70 to 130	2.93	20
AW09690	Beryllium, Total	mg/L	0.00000888	0.00132	0.100	0.102	0.105	0.0990	0.085 to 0.115	102	70 to 130	2.90	20
AW09690	Chromium, Total	mg/L	0.00000814	0.0044	0.100	0.101	0.105	0.102	0.085 to 0.115	101	70 to 130	3.88	20
AW09690	Barium, Total	mg/L	0.00000921	0.0044	0.100	0.191	0.198	0.100	0.085 to 0.115	99.8	70 to 130	3.60	20
AW09690	Calcium, Total	mg/L	-0.0137	0.22	5.00	28.1	28.0	4.98	4.25 to 5.75	96.0	70 to 130	0.356	20
AW09690	Antimony, Total	mg/L	0.000201	0.00132	0.100	0.102	0.104	0.0979	0.085 to 0.115	102	70 to 130	1.94	20
AW09690	Arsenic, Total	mg/L	0.0000125	0.0022	0.100	0.123	0.127	0.101	0.085 to 0.115	109	70 to 130	3.20	20
AW09690	Boron, Total	mg/L	0.00305	0.044	1.00	1.26	1.26	0.969	0.85 to 1.15	100	70 to 130	0.00	20
AW09690	Molybdenum, Total	mg/L	0.0000187	0.0044	0.100	0.145	0.148	0.101	0.085 to 0.115	101	70 to 130	2.05	20
AW09690	Thallium, Total	mg/L	0.0000110	0.00044	0.10	0.0949	0.0980	0.0926	0.085 to 0.115	94.9	70 to 130	3.21	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AW09686

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09697	Solids, Dissolved	mg/L	-4	25			227	42.0	40 to 60			0.221	5
AW09683	Chloride, Total	mg/L	0.00	0.25	10.0	10.3	0.196	9.90	9 to 11	101	80 to 120	0.00	20
AW09683	Sulfate, Total	mg/L	0.00	1.0	20.0	21.4	0.453	20.4	18 to 22	105	80 to 120	1.53	20
AW09683	Fluoride, Total	mg/L	0.00	0.3	2.0	2.15	0.00	2.12	1.8 to 2.2	108	80 to 120	0	20

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John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-9 Dup

Laboratory ID Number: AW09687

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005		0.00585	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0575	mg/L
* Beryllium, Total	ABB	4/19/2016	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		0.255	mg/L
* Calcium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.1	0.5		31.9	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	J	0.00947	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05	J	0.0305	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25		182	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25		13.8	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	J	0.164	mg/L
* Sulfate, Total	SES	4/19/2016	EPA 300.0		1	0.3	1		42.9	mg/L

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Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-9 Dup

Laboratory ID Number: AW09687

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09690	Lithium, Total	mg/L	0.000104	0.022	0.200	0.700	0.701	0.194	0.17 to 0.23	96.0	70 to 130	0.143	20
AW09690	Cobalt, Total	mg/L	-0.00000165	0.0044	0.100	0.104	0.105	0.0996	0.085 to 0.115	104	70 to 130	0.957	20
AW09690	Mercury, Total by CVAA	mg/L	0.000106	0.0005	0.004	0.00408	0.00411	0.00406	0.0034 to 0.0046	102	70 to 130	0.753	20
AW09690	Selenium, Total	mg/L	0.0000700	0.0044	0.100	0.186	0.187	0.105	0.085 to 0.115	116	70 to 130	0.536	20
AW09690	Cadmium, Total	mg/L	0.00000409	0.00044	0.100	0.0923	0.0985	0.0982	0.085 to 0.115	92.3	70 to 130	6.50	20
AW09690	Lead, Total	mg/L	0.0000222	0.0022	0.100	0.0941	0.0969	0.0947	0.085 to 0.115	94.1	70 to 130	2.93	20
AW09690	Beryllium, Total	mg/L	0.00000888	0.00132	0.100	0.102	0.105	0.0990	0.085 to 0.115	102	70 to 130	2.90	20
AW09690	Chromium, Total	mg/L	0.00000814	0.0044	0.100	0.101	0.105	0.102	0.085 to 0.115	101	70 to 130	3.88	20
AW09690	Antimony, Total	mg/L	0.000201	0.00132	0.100	0.102	0.104	0.0979	0.085 to 0.115	102	70 to 130	1.94	20
AW09690	Arsenic, Total	mg/L	0.0000125	0.0022	0.100	0.123	0.127	0.101	0.085 to 0.115	109	70 to 130	3.20	20
AW09690	Boron, Total	mg/L	0.00305	0.044	1.00	1.26	1.26	0.969	0.85 to 1.15	100	70 to 130	0.00	20
AW09690	Molybdenum, Total	mg/L	0.0000187	0.0044	0.100	0.145	0.148	0.101	0.085 to 0.115	101	70 to 130	2.05	20
AW09690	Thallium, Total	mg/L	0.0000110	0.00044	0.10	0.0949	0.0980	0.0926	0.085 to 0.115	94.9	70 to 130	3.21	20
AW09690	Barium, Total	mg/L	0.00000921	0.0044	0.100	0.191	0.198	0.100	0.085 to 0.115	99.8	70 to 130	3.60	20
AW09690	Calcium, Total	mg/L	-0.0137	0.22	5.00	28.1	28.0	4.98	4.25 to 5.75	96.0	70 to 130	0.356	20

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Batch QC Summary

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Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-9 Dup

Laboratory ID Number: AW09687

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09697	Solids, Dissolved	mg/L	-4	25			227	42.0	40 to 60			0.221	5
AW09683	Chloride, Total	mg/L	0.00	0.25	10.0	10.3	0.196	9.90	9 to 11	101	80 to 120	0.00	20
AW09683	Sulfate, Total	mg/L	0.00	1.0	20.0	21.4	0.453	20.4	18 to 22	105	80 to 120	1.53	20
AW09683	Fluoride, Total	mg/L	0.00	0.3	2.0	2.15	0.00	2.12	1.8 to 2.2	108	80 to 120	0	20

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To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AW09688

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005		0.0143	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.185	mg/L
* Beryllium, Total	ABB	4/19/2016	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		0.373	mg/L
* Calcium, Total	HRG	5/16/2016	EPA 200.7		10.15	1.0	5.0		30.5	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0155	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05		0.135	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0127	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25		324	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25		19.0	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	J	0.236	mg/L
* Sulfate, Total	SES	4/19/2016	EPA 300.0		1	0.3	1		10.7	mg/L

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John Pugh

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Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AW09688

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09690	Cobalt, Total	mg/L	-0.00000165	0.0044	0.100	0.104	0.105	0.0996	0.085 to 0.115	104	70 to 130	0.957	20
AW09690	Lithium, Total	mg/L	0.000104	0.022	0.200	0.700	0.701	0.194	0.17 to 0.23	96.0	70 to 130	0.143	20
AW09690	Cadmium, Total	mg/L	0.00000409	0.00044	0.100	0.0923	0.0985	0.0982	0.085 to 0.115	92.3	70 to 130	6.50	20
AW09690	Lead, Total	mg/L	0.0000222	0.0022	0.100	0.0941	0.0969	0.0947	0.085 to 0.115	94.1	70 to 130	2.93	20
AW09690	Mercury, Total by CVAA	mg/L	0.000106	0.0005	0.004	0.00408	0.00411	0.00406	0.0034 to 0.0046	102	70 to 130	0.753	20
AW09690	Selenium, Total	mg/L	0.0000700	0.0044	0.100	0.186	0.187	0.105	0.085 to 0.115	116	70 to 130	0.536	20
AW09690	Barium, Total	mg/L	0.00000921	0.0044	0.100	0.191	0.198	0.100	0.085 to 0.115	99.8	70 to 130	3.60	20
AW09690	Calcium, Total	mg/L	-0.0137	0.22	5.00	28.1	28.0	4.98	4.25 to 5.75	96.0	70 to 130	0.356	20
AW09690	Antimony, Total	mg/L	0.000201	0.00132	0.100	0.102	0.104	0.0979	0.085 to 0.115	102	70 to 130	1.94	20
AW09690	Arsenic, Total	mg/L	0.0000125	0.0022	0.100	0.123	0.127	0.101	0.085 to 0.115	109	70 to 130	3.20	20
AW09690	Boron, Total	mg/L	0.00305	0.044	1.00	1.26	1.26	0.969	0.85 to 1.15	100	70 to 130	0.00	20
AW09690	Molybdenum, Total	mg/L	0.0000187	0.0044	0.100	0.145	0.148	0.101	0.085 to 0.115	101	70 to 130	2.05	20
AW09690	Thallium, Total	mg/L	0.0000110	0.00044	0.10	0.0949	0.0980	0.0926	0.085 to 0.115	94.9	70 to 130	3.21	20
AW09690	Beryllium, Total	mg/L	0.00000888	0.00132	0.100	0.102	0.105	0.0990	0.085 to 0.115	102	70 to 130	2.90	20
AW09690	Chromium, Total	mg/L	0.00000814	0.0044	0.100	0.101	0.105	0.102	0.085 to 0.115	101	70 to 130	3.88	20

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Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AW09688

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09683	Chloride, Total	mg/L	0.00	0.25	10.0	10.3	0.196	9.90	9 to 11	101	80 to 120	0.00	20
AW09683	Sulfate, Total	mg/L	0.00	1.0	20.0	21.4	0.453	20.4	18 to 22	105	80 to 120	1.53	20
AW09697	Solids, Dissolved	mg/L	-4	25			227	42.0	40 to 60			0.221	5
AW09683	Fluoride, Total	mg/L	0.00	0.3	2.0	2.15	0.00	2.12	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: 7/20/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW09689

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	ABB	4/19/2016	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	5/6/2016	EPA 200.7		1.015	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25	J	0.208	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	4/19/2016	EPA 300.0		1	0.3	1	J	0.452	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

Reported: 7/20/2017
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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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW09689

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09690	Lithium, Total	mg/L	0.000104	0.022	0.200	0.700	0.701	0.194	0.17 to 0.23	96.0	70 to 130	0.143	20
AW09690	Cobalt, Total	mg/L	-0.00000165	0.0044	0.100	0.104	0.105	0.0996	0.085 to 0.115	104	70 to 130	0.957	20
AW09690	Beryllium, Total	mg/L	0.00000888	0.00132	0.100	0.102	0.105	0.0990	0.085 to 0.115	102	70 to 130	2.90	20
AW09690	Chromium, Total	mg/L	0.00000814	0.0044	0.100	0.101	0.105	0.102	0.085 to 0.115	101	70 to 130	3.88	20
AW09690	Barium, Total	mg/L	0.00000921	0.0044	0.100	0.191	0.198	0.100	0.085 to 0.115	99.8	70 to 130	3.60	20
AW09690	Calcium, Total	mg/L	-0.0137	0.22	5.00	28.1	28.0	4.98	4.25 to 5.75	96.0	70 to 130	0.356	20
AW09690	Antimony, Total	mg/L	0.000201	0.00132	0.100	0.102	0.104	0.0979	0.085 to 0.115	102	70 to 130	1.94	20
AW09690	Arsenic, Total	mg/L	0.0000125	0.0022	0.100	0.123	0.127	0.101	0.085 to 0.115	109	70 to 130	3.20	20
AW09690	Boron, Total	mg/L	0.00305	0.044	1.00	1.26	1.26	0.969	0.85 to 1.15	100	70 to 130	0.00	20
AW09690	Molybdenum, Total	mg/L	0.0000187	0.0044	0.100	0.145	0.148	0.101	0.085 to 0.115	101	70 to 130	2.05	20
AW09690	Thallium, Total	mg/L	0.0000110	0.00044	0.10	0.0949	0.0980	0.0926	0.085 to 0.115	94.9	70 to 130	3.21	20
AW09690	Cadmium, Total	mg/L	0.00000409	0.00044	0.100	0.0923	0.0985	0.0982	0.085 to 0.115	92.3	70 to 130	6.50	20
AW09690	Lead, Total	mg/L	0.0000222	0.0022	0.100	0.0941	0.0969	0.0947	0.085 to 0.115	94.1	70 to 130	2.93	20
AW09690	Mercury, Total by CVAA	mg/L	0.000106	0.0005	0.004	0.00408	0.00411	0.00406	0.0034 to 0.0046	102	70 to 130	0.753	20
AW09690	Selenium, Total	mg/L	0.0000700	0.0044	0.100	0.186	0.187	0.105	0.085 to 0.115	116	70 to 130	0.536	20

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW09689

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09697	Solids, Dissolved	mg/L	-4	25			227	42.0	40 to 60			0.221	5
AW09699	Fluoride, Total	mg/L	0.00	0.3	2.0	2.12	0.00	2.12	1.8 to 2.2	106	80 to 120	0	20
AW09699	Sulfate, Total	mg/L	0.450	1.0	20.0	21.4	0.452	20.6	18 to 22	105	80 to 120	0.881	20
AW09699	Chloride, Total	mg/L	0.00	0.25	10.0	9.98	0.00	9.91	9 to 11	99.8	80 to 120	0	20

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AW09690

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005		0.0144	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0912	mg/L
* Beryllium, Total	ABB	4/19/2016	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		0.260	mg/L
* Calcium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.1	0.5		23.3	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05		0.508	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0442	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0701	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25		176	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25		4.47	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	J	0.119	mg/L
* Sulfate, Total	SES	4/19/2016	EPA 300.0		1	0.3	1		86.7	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AW09690

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09690	Cobalt, Total	mg/L	-0.00000165	0.0044	0.100	0.104	0.105	0.0996	0.085 to 0.115	104	70 to 130	0.957	20
AW09690	Lithium, Total	mg/L	0.000104	0.022	0.200	0.700	0.701	0.194	0.17 to 0.23	96.0	70 to 130	0.143	20
AW09690	Cadmium, Total	mg/L	0.00000409	0.00044	0.100	0.0923	0.0985	0.0982	0.085 to 0.115	92.3	70 to 130	6.50	20
AW09690	Lead, Total	mg/L	0.0000222	0.0022	0.100	0.0941	0.0969	0.0947	0.085 to 0.115	94.1	70 to 130	2.93	20
AW09690	Mercury, Total by CVAA	mg/L	0.000106	0.0005	0.004	0.00408	0.00411	0.00406	0.0034 to 0.0046	102	70 to 130	0.753	20
AW09690	Selenium, Total	mg/L	0.0000700	0.0044	0.100	0.186	0.187	0.105	0.085 to 0.115	116	70 to 130	0.536	20
AW09690	Antimony, Total	mg/L	0.000201	0.00132	0.100	0.102	0.104	0.0979	0.085 to 0.115	102	70 to 130	1.94	20
AW09690	Arsenic, Total	mg/L	0.0000125	0.0022	0.100	0.123	0.127	0.101	0.085 to 0.115	109	70 to 130	3.20	20
AW09690	Boron, Total	mg/L	0.00305	0.044	1.00	1.26	1.26	0.969	0.85 to 1.15	100	70 to 130	0.00	20
AW09690	Molybdenum, Total	mg/L	0.0000187	0.0044	0.100	0.145	0.148	0.101	0.085 to 0.115	101	70 to 130	2.05	20
AW09690	Thallium, Total	mg/L	0.0000110	0.00044	0.10	0.0949	0.0980	0.0926	0.085 to 0.115	94.9	70 to 130	3.21	20
AW09690	Barium, Total	mg/L	0.00000921	0.0044	0.100	0.191	0.198	0.100	0.085 to 0.115	99.8	70 to 130	3.60	20
AW09690	Calcium, Total	mg/L	-0.0137	0.22	5.00	28.1	28.0	4.98	4.25 to 5.75	96.0	70 to 130	0.356	20
AW09690	Beryllium, Total	mg/L	0.00000888	0.00132	0.100	0.102	0.105	0.0990	0.085 to 0.115	102	70 to 130	2.90	20
AW09690	Chromium, Total	mg/L	0.00000814	0.0044	0.100	0.101	0.105	0.102	0.085 to 0.115	101	70 to 130	3.88	20

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Expiration: June 30, 2018

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AW09690

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09697	Solids, Dissolved	mg/L	-4	25			227	42.0	40 to 60			0.221	5
AW09699	Fluoride, Total	mg/L	0.00	0.3	2.0	2.12	0.00	2.12	1.8 to 2.2	106	80 to 120	0	20
AW09699	Chloride, Total	mg/L	0.00	0.25	10.0	9.98	0.00	9.91	9 to 11	99.8	80 to 120	0	20
AW09699	Sulfate, Total	mg/L	0.450	1.0	20.0	21.4	0.452	20.6	18 to 22	105	80 to 120	0.881	20

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AW09691

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005		0.0214	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0430	mg/L
* Beryllium, Total	ABB	4/19/2016	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		0.733	mg/L
* Calcium, Total	HRG	5/16/2016	EPA 200.7		10.15	1.0	5.0		43.2	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	J	0.00785	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05		0.615	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	J	0.00918	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25		298	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25		15.9	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	J	0.137	mg/L
* Sulfate, Total	SES	4/20/2016	EPA 300.0		5	1.5	5		114	mg/L

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Expiration: June 30, 2018

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Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AW09691

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
	Lead, Total	mg/L		0.0022					0.085 to 0.115		70 to 130		20
AW09700	Boron, Total	mg/L	0.00459	0.044	1.00	0.944	0.948	0.971	0.85 to 1.15	78.8	70 to 130	0.423	20
AW09700	Molybdenum, Total	mg/L	0.0000167	0.0044	0.100	0.0997	0.101	0.0993	0.085 to 0.115	99.7	70 to 130	1.30	20
AW09700	Arsenic, Total	mg/L	0.0000122	0.0022	0.100	0.109	0.109	0.100	0.085 to 0.115	109	70 to 130	0.00	20
AW09700	Chromium, Total	mg/L	0.00000667	0.0044	0.100	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.00	20
AW09700	Lithium, Total	mg/L	0.0000980	0.022	0.20	0.220	0.220	0.194	0.17 to 0.23	110	70 to 130	0.00	20
AW09700	Antimony, Total	mg/L	0.000214	0.00132	0.100	0.0984	0.101	0.0955	0.085 to 0.115	98.4	70 to 130	2.61	20
AW09700	Selenium, Total	mg/L	0.0000603	0.0044	0.100	0.114	0.112	0.0997	0.085 to 0.115	114	70 to 130	1.77	20
AW09700	Thallium, Total	mg/L	0.00000817	0.00044	0.10	0.100	0.0948	0.0900	0.085 to 0.115	100	70 to 130	5.55	20
AW09700	Calcium, Total	mg/L	-0.0127	0.22	5.00	5.34	5.46	4.99	4.25 to 5.75	100	70 to 130	2.22	20
AW09700	Lead, Total	mg/L	0.0000125	0.0022	0.100	0.0992	0.0943	0.0918	0.085 to 0.115	99.2	70 to 130	5.06	20
AW09700	Mercury, Total by CVAA	mg/L	0.000104	0.0005	0.004	0.00404	0.00398	0.00413	0.0034 to 0.0046	101	70 to 130	1.58	20
	Chromium, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
	Molybdenum, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
AW09700	Cobalt, Total	mg/L	-0.000000693	0.0044	0.100	0.101	0.102	0.0985	0.085 to 0.115	101	70 to 130	0.985	20
	Selenium, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
	Thallium, Total	mg/L		0.00044					0.085 to 0.115		70 to 130		20
AW09700	Cadmium, Total	mg/L	0.00000246	0.00044	0.100	0.0949	0.0957	0.0973	0.085 to 0.115	94.9	70 to 130	0.839	20
	Antimony, Total	mg/L		0.00132					0.085 to 0.115		70 to 130		20
AW09700	Barium, Total	mg/L	0.0000106	0.0044	0.100	0.101	0.102	0.0989	0.085 to 0.115	101	70 to 130	0.985	20
AW09700	Beryllium, Total	mg/L	0.00000788	0.00132	0.100	0.107	0.102	0.0948	0.085 to 0.115	107	70 to 130	4.78	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AW09691

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09697	Solids, Dissolved	mg/L	-4	25			227	42.0	40 to 60			0.221	5
AW09699	Sulfate, Total	mg/L	0.450	1.0	20.0	21.4	0.452	20.6	18 to 22	105	80 to 120	0.881	20
AW09699	Chloride, Total	mg/L	0.00	0.25	10.0	9.98	0.00	9.91	9 to 11	99.8	80 to 120	0	20
AW09699	Fluoride, Total	mg/L	0.00	0.3	2.0	2.12	0.00	2.12	1.8 to 2.2	106	80 to 120	0	20

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Certificate Of Analysis

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To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-14 Dup

Laboratory ID Number: AW09692

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005		0.0206	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0417	mg/L
* Beryllium, Total	ABB	4/19/2016	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		0.734	mg/L
* Calcium, Total	HRG	5/16/2016	EPA 200.7		10.15	1.0	5.0		42.2	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	J	0.00785	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05		0.624	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	J	0.00966	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25		312	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25		15.9	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	J	0.137	mg/L
* Sulfate, Total	SES	4/20/2016	EPA 300.0		5	1.5	5		114	mg/L

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Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-14 Dup

Laboratory ID Number: AW09692

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
	Lead, Total	mg/L		0.0022					0.085 to 0.115		70 to 130		20
	Antimony, Total	mg/L		0.00132					0.085 to 0.115		70 to 130		20
AW09700	Barium, Total	mg/L	0.0000106	0.0044	0.100	0.101	0.102	0.0989	0.085 to 0.115	101	70 to 130	0.985	20
AW09700	Beryllium, Total	mg/L	0.00000788	0.00132	0.100	0.107	0.102	0.0948	0.085 to 0.115	107	70 to 130	4.78	20
	Selenium, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
	Thallium, Total	mg/L		0.00044					0.085 to 0.115		70 to 130		20
AW09700	Cadmium, Total	mg/L	0.00000246	0.00044	0.100	0.0949	0.0957	0.0973	0.085 to 0.115	94.9	70 to 130	0.839	20
AW09700	Boron, Total	mg/L	0.00459	0.044	1.00	0.944	0.948	0.971	0.85 to 1.15	78.8	70 to 130	0.423	20
AW09700	Molybdenum, Total	mg/L	0.0000167	0.0044	0.100	0.0997	0.101	0.0993	0.085 to 0.115	99.7	70 to 130	1.30	20
	Chromium, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
	Molybdenum, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
AW09700	Cobalt, Total	mg/L	-0.000000693	0.0044	0.100	0.101	0.102	0.0985	0.085 to 0.115	101	70 to 130	0.985	20
AW09700	Antimony, Total	mg/L	0.000214	0.00132	0.100	0.0984	0.101	0.0955	0.085 to 0.115	98.4	70 to 130	2.61	20
AW09700	Selenium, Total	mg/L	0.0000603	0.0044	0.100	0.114	0.112	0.0997	0.085 to 0.115	114	70 to 130	1.77	20
AW09700	Thallium, Total	mg/L	0.00000817	0.00044	0.10	0.100	0.0948	0.0900	0.085 to 0.115	100	70 to 130	5.55	20
AW09700	Arsenic, Total	mg/L	0.0000122	0.0022	0.100	0.109	0.109	0.100	0.085 to 0.115	109	70 to 130	0.00	20
AW09700	Chromium, Total	mg/L	0.00000667	0.0044	0.100	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.00	20
AW09700	Lithium, Total	mg/L	0.0000980	0.022	0.20	0.220	0.220	0.194	0.17 to 0.23	110	70 to 130	0.00	20
AW09700	Calcium, Total	mg/L	-0.0127	0.22	5.00	5.34	5.46	4.99	4.25 to 5.75	100	70 to 130	2.22	20
AW09700	Lead, Total	mg/L	0.0000125	0.0022	0.100	0.0992	0.0943	0.0918	0.085 to 0.115	99.2	70 to 130	5.06	20
AW09700	Mercury, Total by CVAA	mg/L	0.000104	0.0005	0.004	0.00404	0.00398	0.00413	0.0034 to 0.0046	101	70 to 130	1.58	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-14 Dup

Laboratory ID Number: AW09692

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09697	Solids, Dissolved	mg/L	-4	25			227	42.0	40 to 60			0.221	5
AW09699	Fluoride, Total	mg/L	0.00	0.3	2.0	2.12	0.00	2.12	1.8 to 2.2	106	80 to 120	0	20
AW09699	Chloride, Total	mg/L	0.00	0.25	10.0	9.98	0.00	9.91	9 to 11	99.8	80 to 120	0	20
AW09699	Sulfate, Total	mg/L	0.450	1.0	20.0	21.4	0.452	20.6	18 to 22	105	80 to 120	0.881	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: 7/20/2017
Version: 2.0

Alabama Power General Test Laboratory
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Calera, AL 35040
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AW09693

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0242	mg/L
* Beryllium, Total	ABB	4/19/2016	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		0.444	mg/L
* Calcium, Total	HRG	5/16/2016	EPA 200.7		10.15	1.0	5.0		44.4	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0158	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05		0.719	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25		334	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25		12.6	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	J	0.107	mg/L
* Sulfate, Total	SES	4/20/2016	EPA 300.0		5	1.5	5		188	mg/L

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Cadmium MDL was increased from 0.0001 to 0.0002. The result for Cd has been corrected to Not Detected. SGC 3/17/17

Reported: 7/20/2017
Version: 2.0

Alabama Power General Test Laboratory
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Calera, AL 35040
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Batch QC Summary

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AW09693

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
	Lead, Total	mg/L		0.0022					0.085 to 0.115		70 to 130		20
	Selenium, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
	Thallium, Total	mg/L		0.00044					0.085 to 0.115		70 to 130		20
AW09700	Cadmium, Total	mg/L	0.00000246	0.00044	0.100	0.0949	0.0957	0.0973	0.085 to 0.115	94.9	70 to 130	0.839	20
AW09700	Arsenic, Total	mg/L	0.0000122	0.0022	0.100	0.109	0.109	0.100	0.085 to 0.115	109	70 to 130	0.00	20
AW09700	Chromium, Total	mg/L	0.00000667	0.0044	0.100	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.00	20
AW09700	Lithium, Total	mg/L	0.0000980	0.022	0.20	0.220	0.220	0.194	0.17 to 0.23	110	70 to 130	0.00	20
AW09700	Calcium, Total	mg/L	-0.0127	0.22	5.00	5.34	5.46	4.99	4.25 to 5.75	100	70 to 130	2.22	20
AW09700	Lead, Total	mg/L	0.0000125	0.0022	0.100	0.0992	0.0943	0.0918	0.085 to 0.115	99.2	70 to 130	5.06	20
AW09700	Mercury, Total by CVAA	mg/L	0.000104	0.0005	0.004	0.00404	0.00398	0.00413	0.0034 to 0.0046	101	70 to 130	1.58	20
	Antimony, Total	mg/L		0.00132					0.085 to 0.115		70 to 130		20
AW09700	Barium, Total	mg/L	0.0000106	0.0044	0.100	0.101	0.102	0.0989	0.085 to 0.115	101	70 to 130	0.985	20
AW09700	Beryllium, Total	mg/L	0.00000788	0.00132	0.100	0.107	0.102	0.0948	0.085 to 0.115	107	70 to 130	4.78	20
	Chromium, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
	Molybdenum, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
AW09700	Cobalt, Total	mg/L	-0.000000693	0.0044	0.100	0.101	0.102	0.0985	0.085 to 0.115	101	70 to 130	0.985	20
AW09700	Boron, Total	mg/L	0.00459	0.044	1.00	0.944	0.948	0.971	0.85 to 1.15	78.8	70 to 130	0.423	20
AW09700	Molybdenum, Total	mg/L	0.0000167	0.0044	0.100	0.0997	0.101	0.0993	0.085 to 0.115	99.7	70 to 130	1.30	20
AW09700	Antimony, Total	mg/L	0.000214	0.00132	0.100	0.0984	0.101	0.0955	0.085 to 0.115	98.4	70 to 130	2.61	20
AW09700	Selenium, Total	mg/L	0.0000603	0.0044	0.100	0.114	0.112	0.0997	0.085 to 0.115	114	70 to 130	1.77	20
AW09700	Thallium, Total	mg/L	0.00000817	0.00044	0.10	0.100	0.0948	0.0900	0.085 to 0.115	100	70 to 130	5.55	20

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Cadmium MDL was increased from 0.0001 to 0.0002. The result for Cd has been corrected to Not Detected. SGC 3/17/17

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Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AW09693

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09699	Fluoride, Total	mg/L	0.00	0.3	2.0	2.12	0.00	2.12	1.8 to 2.2	106	80 to 120	0	20
AW09699	Chloride, Total	mg/L	0.00	0.25	10.0	9.98	0.00	9.91	9 to 11	99.8	80 to 120	0	20
AW09699	Sulfate, Total	mg/L	0.450	1.0	20.0	21.4	0.452	20.6	18 to 22	105	80 to 120	0.881	20
AW09697	Solids, Dissolved	mg/L	-4	25			227	42.0	40 to 60			0.221	5

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

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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

CC:

Reported: 7/20/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AW09694

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005		0.134	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.131	mg/L
* Beryllium, Total	ABB	4/19/2016	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		2.03	mg/L
* Calcium, Total	HRG	5/16/2016	EPA 200.7		10.15	1.0	5.0		96.2	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0209	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05		0.655	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25		491	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25		22.1	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	J	0.168	mg/L
* Sulfate, Total	SES	4/19/2016	EPA 300.0		1	0.3	1		68.2	mg/L

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

Reported: 7/20/2017
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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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AW09694

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
	Lead, Total	mg/L		0.0022					0.085 to 0.115		70 to 130		20
AW09700	Antimony, Total	mg/L	0.000214	0.00132	0.100	0.0984	0.101	0.0955	0.085 to 0.115	98.4	70 to 130	2.61	20
AW09700	Selenium, Total	mg/L	0.0000603	0.0044	0.100	0.114	0.112	0.0997	0.085 to 0.115	114	70 to 130	1.77	20
AW09700	Thallium, Total	mg/L	0.00000817	0.00044	0.10	0.100	0.0948	0.0900	0.085 to 0.115	100	70 to 130	5.55	20
	Antimony, Total	mg/L		0.00132					0.085 to 0.115		70 to 130		20
AW09700	Barium, Total	mg/L	0.0000106	0.0044	0.100	0.101	0.102	0.0989	0.085 to 0.115	101	70 to 130	0.985	20
AW09700	Beryllium, Total	mg/L	0.00000788	0.00132	0.100	0.107	0.102	0.0948	0.085 to 0.115	107	70 to 130	4.78	20
AW09700	Arsenic, Total	mg/L	0.0000122	0.0022	0.100	0.109	0.109	0.100	0.085 to 0.115	109	70 to 130	0.00	20
AW09700	Chromium, Total	mg/L	0.00000667	0.0044	0.100	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.00	20
AW09700	Lithium, Total	mg/L	0.0000980	0.022	0.20	0.220	0.220	0.194	0.17 to 0.23	110	70 to 130	0.00	20
	Chromium, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
	Molybdenum, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
AW09700	Cobalt, Total	mg/L	-0.000000693	0.0044	0.100	0.101	0.102	0.0985	0.085 to 0.115	101	70 to 130	0.985	20
	Selenium, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
	Thallium, Total	mg/L		0.00044					0.085 to 0.115		70 to 130		20
AW09700	Cadmium, Total	mg/L	0.00000246	0.00044	0.100	0.0949	0.0957	0.0973	0.085 to 0.115	94.9	70 to 130	0.839	20
AW09700	Calcium, Total	mg/L	-0.0127	0.22	5.00	5.34	5.46	4.99	4.25 to 5.75	100	70 to 130	2.22	20
AW09700	Lead, Total	mg/L	0.0000125	0.0022	0.100	0.0992	0.0943	0.0918	0.085 to 0.115	99.2	70 to 130	5.06	20
AW09700	Mercury, Total by CVAA	mg/L	0.000104	0.0005	0.004	0.00404	0.00398	0.00413	0.0034 to 0.0046	101	70 to 130	1.58	20
AW09700	Boron, Total	mg/L	0.00459	0.044	1.00	0.944	0.948	0.971	0.85 to 1.15	78.8	70 to 130	0.423	20
AW09700	Molybdenum, Total	mg/L	0.0000167	0.0044	0.100	0.0997	0.101	0.0993	0.085 to 0.115	99.7	70 to 130	1.30	20

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Expiration: June 30, 2018

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Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AW09694

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09697	Solids, Dissolved	mg/L	-4	25			227	42.0	40 to 60			0.221	5
AW09699	Fluoride, Total	mg/L	0.00	0.3	2.0	2.12	0.00	2.12	1.8 to 2.2	106	80 to 120	0	20
AW09699	Sulfate, Total	mg/L	0.450	1.0	20.0	21.4	0.452	20.6	18 to 22	105	80 to 120	0.881	20
AW09699	Chloride, Total	mg/L	0.00	0.25	10.0	9.98	0.00	9.91	9 to 11	99.8	80 to 120	0	20

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CC:

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AW09695

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005		0.0759	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0440	mg/L
* Beryllium, Total	ABB	4/19/2016	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		1.48	mg/L
* Calcium, Total	HRG	5/16/2016	EPA 200.7		10.15	1.0	5.0		62.5	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0139	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05		0.594	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25		372	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25		13.6	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	J	0.173	mg/L
* Sulfate, Total	SES	4/19/2016	EPA 300.0		1	0.3	1		92.7	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AW09695

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
	Lead, Total	mg/L		0.0022					0.085 to 0.115		70 to 130		20
AW09700	Boron, Total	mg/L	0.00459	0.044	1.00	0.944	0.948	0.971	0.85 to 1.15	78.8	70 to 130	0.423	20
AW09700	Molybdenum, Total	mg/L	0.0000167	0.0044	0.100	0.0997	0.101	0.0993	0.085 to 0.115	99.7	70 to 130	1.30	20
	Antimony, Total	mg/L		0.00132					0.085 to 0.115		70 to 130		20
AW09700	Barium, Total	mg/L	0.0000106	0.0044	0.100	0.101	0.102	0.0989	0.085 to 0.115	101	70 to 130	0.985	20
AW09700	Beryllium, Total	mg/L	0.00000788	0.00132	0.100	0.107	0.102	0.0948	0.085 to 0.115	107	70 to 130	4.78	20
AW09700	Arsenic, Total	mg/L	0.0000122	0.0022	0.100	0.109	0.109	0.100	0.085 to 0.115	109	70 to 130	0.00	20
AW09700	Chromium, Total	mg/L	0.00000667	0.0044	0.100	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.00	20
AW09700	Lithium, Total	mg/L	0.0000980	0.022	0.20	0.220	0.220	0.194	0.17 to 0.23	110	70 to 130	0.00	20
AW09700	Calcium, Total	mg/L	-0.0127	0.22	5.00	5.34	5.46	4.99	4.25 to 5.75	100	70 to 130	2.22	20
AW09700	Lead, Total	mg/L	0.0000125	0.0022	0.100	0.0992	0.0943	0.0918	0.085 to 0.115	99.2	70 to 130	5.06	20
AW09700	Mercury, Total by CVAA	mg/L	0.000104	0.0005	0.004	0.00404	0.00398	0.00413	0.0034 to 0.0046	101	70 to 130	1.58	20
	Chromium, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
	Molybdenum, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
AW09700	Cobalt, Total	mg/L	-0.000000693	0.0044	0.100	0.101	0.102	0.0985	0.085 to 0.115	101	70 to 130	0.985	20
	Selenium, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
	Thallium, Total	mg/L		0.00044					0.085 to 0.115		70 to 130		20
AW09700	Cadmium, Total	mg/L	0.00000246	0.00044	0.100	0.0949	0.0957	0.0973	0.085 to 0.115	94.9	70 to 130	0.839	20
AW09700	Antimony, Total	mg/L	0.000214	0.00132	0.100	0.0984	0.101	0.0955	0.085 to 0.115	98.4	70 to 130	2.61	20
AW09700	Selenium, Total	mg/L	0.0000603	0.0044	0.100	0.114	0.112	0.0997	0.085 to 0.115	114	70 to 130	1.77	20
AW09700	Thallium, Total	mg/L	0.00000817	0.00044	0.10	0.100	0.0948	0.0900	0.085 to 0.115	100	70 to 130	5.55	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

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AW09695

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09697	Solids, Dissolved	mg/L	-4	25			227	42.0	40 to 60			0.221	5
AW09699	Sulfate, Total	mg/L	0.450	1.0	20.0	21.4	0.452	20.6	18 to 22	105	80 to 120	0.881	20
AW09699	Chloride, Total	mg/L	0.00	0.25	10.0	9.98	0.00	9.91	9 to 11	99.8	80 to 120	0	20
AW09699	Fluoride, Total	mg/L	0.00	0.3	2.0	2.12	0.00	2.12	1.8 to 2.2	106	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: 7/20/2017
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AW09697

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0291	mg/L
* Beryllium, Total	ABB	4/19/2016	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		0.260	mg/L
* Calcium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.1	0.5		32.2	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05		0.532	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0567	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25		226	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25		7.33	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	J	0.191	mg/L
* Sulfate, Total	SES	4/20/2016	EPA 300.0		5	1.5	5		119	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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AW09697

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
	Lead, Total	mg/L		0.0022					0.085 to 0.115		70 to 130		20
	Antimony, Total	mg/L		0.00132					0.085 to 0.115		70 to 130		20
AW09700	Barium, Total	mg/L	0.0000106	0.0044	0.100	0.101	0.102	0.0989	0.085 to 0.115	101	70 to 130	0.985	20
AW09700	Beryllium, Total	mg/L	0.00000788	0.00132	0.100	0.107	0.102	0.0948	0.085 to 0.115	107	70 to 130	4.78	20
	Selenium, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
	Thallium, Total	mg/L		0.00044					0.085 to 0.115		70 to 130		20
AW09700	Cadmium, Total	mg/L	0.00000246	0.00044	0.100	0.0949	0.0957	0.0973	0.085 to 0.115	94.9	70 to 130	0.839	20
AW09700	Boron, Total	mg/L	0.00459	0.044	1.00	0.944	0.948	0.971	0.85 to 1.15	78.8	70 to 130	0.423	20
AW09700	Molybdenum, Total	mg/L	0.0000167	0.0044	0.100	0.0997	0.101	0.0993	0.085 to 0.115	99.7	70 to 130	1.30	20
AW09700	Calcium, Total	mg/L	-0.0127	0.22	5.00	5.34	5.46	4.99	4.25 to 5.75	100	70 to 130	2.22	20
AW09700	Lead, Total	mg/L	0.0000125	0.0022	0.100	0.0992	0.0943	0.0918	0.085 to 0.115	99.2	70 to 130	5.06	20
AW09700	Mercury, Total by CVAA	mg/L	0.000104	0.0005	0.004	0.00404	0.00398	0.00413	0.0034 to 0.0046	101	70 to 130	1.58	20
AW09700	Antimony, Total	mg/L	0.000214	0.00132	0.100	0.0984	0.101	0.0955	0.085 to 0.115	98.4	70 to 130	2.61	20
AW09700	Selenium, Total	mg/L	0.0000603	0.0044	0.100	0.114	0.112	0.0997	0.085 to 0.115	114	70 to 130	1.77	20
AW09700	Thallium, Total	mg/L	0.00000817	0.00044	0.10	0.100	0.0948	0.0900	0.085 to 0.115	100	70 to 130	5.55	20
AW09700	Arsenic, Total	mg/L	0.0000122	0.0022	0.100	0.109	0.109	0.100	0.085 to 0.115	109	70 to 130	0.00	20
AW09700	Chromium, Total	mg/L	0.00000667	0.0044	0.100	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.00	20
AW09700	Lithium, Total	mg/L	0.0000980	0.022	0.20	0.220	0.220	0.194	0.17 to 0.23	110	70 to 130	0.00	20
	Chromium, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
	Molybdenum, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
AW09700	Cobalt, Total	mg/L	-0.000000693	0.0044	0.100	0.101	0.102	0.0985	0.085 to 0.115	101	70 to 130	0.985	20

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Expiration: June 30, 2018

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Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AW09697

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09699	Chloride, Total	mg/L	0.00	0.25	10.0	9.98	0.00	9.91	9 to 11	99.8	80 to 120	0	20
AW09699	Fluoride, Total	mg/L	0.00	0.3	2.0	2.12	0.00	2.12	1.8 to 2.2	106	80 to 120	0	20
AW09699	Sulfate, Total	mg/L	0.450	1.0	20.0	21.4	0.452	20.6	18 to 22	105	80 to 120	0.881	20
AW09697	Solids, Dissolved	mg/L	-4	25			227	42.0	40 to 60			0.221	5

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CC:

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Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AW09698

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005		0.271	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0637	mg/L
* Beryllium, Total	ABB	4/19/2016	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		1.64	mg/L
* Calcium, Total	HRG	5/18/2016	EPA 200.7		10.15	1.0	5.0		39.5	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0109	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05		0.694	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01		0.0835	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25		373	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25		14.9	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3		0.437	mg/L
* Sulfate, Total	SES	4/20/2016	EPA 300.0		5	1.5	5		123	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AW09698

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
	Lead, Total	mg/L		0.0022					0.085 to 0.115		70 to 130		20
AW09700	Boron, Total	mg/L	0.00459	0.044	1.00	0.944	0.948	0.971	0.85 to 1.15	78.8	70 to 130	0.423	20
AW09700	Molybdenum, Total	mg/L	0.0000167	0.0044	0.100	0.0997	0.101	0.0993	0.085 to 0.115	99.7	70 to 130	1.30	20
AW09700	Arsenic, Total	mg/L	0.0000122	0.0022	0.100	0.109	0.109	0.100	0.085 to 0.115	109	70 to 130	0.00	20
AW09700	Chromium, Total	mg/L	0.00000667	0.0044	0.100	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.00	20
AW09700	Lithium, Total	mg/L	0.0000980	0.022	0.20	0.220	0.220	0.194	0.17 to 0.23	110	70 to 130	0.00	20
AW09700	Calcium, Total	mg/L	-0.0127	0.22	5.00	5.34	5.46	4.99	4.25 to 5.75	100	70 to 130	2.22	20
AW09700	Lead, Total	mg/L	0.0000125	0.0022	0.100	0.0992	0.0943	0.0918	0.085 to 0.115	99.2	70 to 130	5.06	20
AW09700	Mercury, Total by CVAA	mg/L	0.000104	0.0005	0.004	0.00404	0.00398	0.00413	0.0034 to 0.0046	101	70 to 130	1.58	20
	Chromium, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
	Molybdenum, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
AW09700	Cobalt, Total	mg/L	-0.000000693	0.0044	0.100	0.101	0.102	0.0985	0.085 to 0.115	101	70 to 130	0.985	20
	Antimony, Total	mg/L		0.00132					0.085 to 0.115		70 to 130		20
AW09700	Barium, Total	mg/L	0.0000106	0.0044	0.100	0.101	0.102	0.0989	0.085 to 0.115	101	70 to 130	0.985	20
AW09700	Beryllium, Total	mg/L	0.00000788	0.00132	0.100	0.107	0.102	0.0948	0.085 to 0.115	107	70 to 130	4.78	20
	Selenium, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
	Thallium, Total	mg/L		0.00044					0.085 to 0.115		70 to 130		20
AW09700	Cadmium, Total	mg/L	0.00000246	0.00044	0.100	0.0949	0.0957	0.0973	0.085 to 0.115	94.9	70 to 130	0.839	20
AW09700	Antimony, Total	mg/L	0.000214	0.00132	0.100	0.0984	0.101	0.0955	0.085 to 0.115	98.4	70 to 130	2.61	20
AW09700	Selenium, Total	mg/L	0.0000603	0.0044	0.100	0.114	0.112	0.0997	0.085 to 0.115	114	70 to 130	1.77	20
AW09700	Thallium, Total	mg/L	0.00000817	0.00044	0.10	0.100	0.0948	0.0900	0.085 to 0.115	100	70 to 130	5.55	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

Reported: 7/20/2017
Version: 2.0

Alabama Power General Test Laboratory
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AW09698

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09697	Solids, Dissolved	mg/L	-4	25			227	42.0	40 to 60			0.221	5
AW09699	Chloride, Total	mg/L	0.00	0.25	10.0	9.98	0.00	9.91	9 to 11	99.8	80 to 120	0	20
AW09699	Sulfate, Total	mg/L	0.450	1.0	20.0	21.4	0.452	20.6	18 to 22	105	80 to 120	0.881	20
AW09699	Fluoride, Total	mg/L	0.00	0.3	2.0	2.12	0.00	2.12	1.8 to 2.2	106	80 to 120	0	20

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Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW09699

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium,GPEL	SGC	10/13/2016	GA		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	ABB	4/19/2016	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	5/6/2016	EPA 200.7		1.015	0.1	0.5	J	0.109	mg/L
* Cadmium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	4/20/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/6/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	4/19/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	4/19/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	4/18/2016	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	4/19/2016	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	4/19/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	4/19/2016	EPA 300.0		1	0.3	1	J	0.456	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW09699

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
	Lead, Total	mg/L		0.0022					0.085 to 0.115		70 to 130		20
AW09700	Boron, Total	mg/L	0.00459	0.044	1.00	0.944	0.948	0.971	0.85 to 1.15	78.8	70 to 130	0.423	20
AW09700	Molybdenum, Total	mg/L	0.0000167	0.0044	0.100	0.0997	0.101	0.0993	0.085 to 0.115	99.7	70 to 130	1.30	20
	Antimony, Total	mg/L		0.00132					0.085 to 0.115		70 to 130		20
AW09700	Barium, Total	mg/L	0.0000106	0.0044	0.100	0.101	0.102	0.0989	0.085 to 0.115	101	70 to 130	0.985	20
AW09700	Beryllium, Total	mg/L	0.00000788	0.00132	0.100	0.107	0.102	0.0948	0.085 to 0.115	107	70 to 130	4.78	20
AW09700	Antimony, Total	mg/L	0.000214	0.00132	0.100	0.0984	0.101	0.0955	0.085 to 0.115	98.4	70 to 130	2.61	20
AW09700	Selenium, Total	mg/L	0.0000603	0.0044	0.100	0.114	0.112	0.0997	0.085 to 0.115	114	70 to 130	1.77	20
AW09700	Thallium, Total	mg/L	0.00000817	0.00044	0.10	0.100	0.0948	0.0900	0.085 to 0.115	100	70 to 130	5.55	20
AW09700	Calcium, Total	mg/L	-0.0127	0.22	5.00	5.34	5.46	4.99	4.25 to 5.75	100	70 to 130	2.22	20
AW09700	Lead, Total	mg/L	0.0000125	0.0022	0.100	0.0992	0.0943	0.0918	0.085 to 0.115	99.2	70 to 130	5.06	20
AW09700	Mercury, Total by CVAA	mg/L	0.000104	0.0005	0.004	0.00404	0.00398	0.00413	0.0034 to 0.0046	101	70 to 130	1.58	20
	Chromium, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
	Molybdenum, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
AW09700	Cobalt, Total	mg/L	-0.000000693	0.0044	0.100	0.101	0.102	0.0985	0.085 to 0.115	101	70 to 130	0.985	20
	Selenium, Total	mg/L		0.0044					0.085 to 0.115		70 to 130		20
	Thallium, Total	mg/L		0.00044					0.085 to 0.115		70 to 130		20
AW09700	Cadmium, Total	mg/L	0.00000246	0.00044	0.100	0.0949	0.0957	0.0973	0.085 to 0.115	94.9	70 to 130	0.839	20
AW09700	Arsenic, Total	mg/L	0.0000122	0.0022	0.100	0.109	0.109	0.100	0.085 to 0.115	109	70 to 130	0.00	20
AW09700	Chromium, Total	mg/L	0.00000667	0.0044	0.100	0.103	0.103	0.101	0.085 to 0.115	103	70 to 130	0.00	20
AW09700	Lithium, Total	mg/L	0.0000980	0.022	0.20	0.220	0.220	0.194	0.17 to 0.23	110	70 to 130	0.00	20

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report
Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 13-Apr-16
Customer ID:
Delivery Date: 14-Apr-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW09699

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW09697	Solids, Dissolved	mg/L	-4	25			227	42.0	40 to 60			0.221	5
AW09699	Fluoride, Total	mg/L	0.00	0.3	2.0	2.12	0.00	2.12	1.8 to 2.2	106	80 to 120	0	20
AW09699	Chloride, Total	mg/L	0.00	0.25	10.0	9.98	0.00	9.91	9 to 11	99.8	80 to 120	0	20
AW09699	Sulfate, Total	mg/L	0.450	1.0	20.0	21.4	0.452	20.6	18 to 22	105	80 to 120	0.881	20

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report
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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: 7/20/2017
Version: 2.0

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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: 04/14/2016 10:47

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Nick Pitts	Location	Greene 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	Separate pH strips were used for bottles 1&2; 4831-24377-20-4

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-23	04/12/2016	11:00	4	Groundwater		4950-25063-10-3	1.2	AW09671
MW-24	04/12/2016	12:05	4	Groundwater		4950-25063-10-3	1.2	AW09672
MW-24 Du	04/12/2016	12:05	4	Sample Duplicate		4950-25063-10-3	1.2	AW09673
FB-1	04/12/2016	12:30	4	Field Blank		4950-25063-10-3	1.2	AW09674
MW-6	04/12/2016	14:05	4	Groundwater		4950-25067-10-7	1.4	AW09675
MW-5	04/12/2016	15:05	4	Groundwater		4950-25067-10-7	1.4	AW09676
MW-25	04/12/2016	16:35	4	Groundwater		4950-25067-10-7	1.4	AW09677
MW-3	04/12/2016	17:42	4	Groundwater		4950-25067-10-7	1.4	AW09678
MW-1	04/13/2016	10:45	4	Groundwater		4950-25068-10-8	1.0	AW09679
MW-2	04/13/2016	12:00	4	Groundwater		4950-25068-10-8	1.0	AW09680
MW-8	04/13/2016	13:10	4	Groundwater		4950-25068-10-8	1.0	AW09681
MW-7	04/13/2016	14:05	4	Groundwater		4950-25068-10-8	1.0	AW09682
EB-1	04/13/2016	15:15	4	Equipment Blank		4950-25066-10-6	0.6	AW09683
MW-12	04/13/2016	16:10	4	Groundwater		4950-25065-10-5	0.9	AW09684
MW-11	04/13/2016	17:05	4	Groundwater		4950-25065-10-5	0.9	AW09685

Relinquished By	Received By	Date/Time
[signature]	[signature]	04/14/2016 10:39

SmarTroll ID	4696-23441-1-1	All metals and radiological bottles have pH < 2	✔
Turbidity ID	4677-23343-4-2	Thermometer ID	1506-3968-4-4
		pH Strip ID	4826-24363-2-1(bottle 3)

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

✔ Field Complete
✔ Lab Complete

Lab ETA: 04/14/2016 10:45

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Jason Rouss	Location	Greene 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	Separate lot of pH strips used for bottles 1&2, 4831-24377-20-4 AW09696 deleted-Radiological QC only. SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-13	04/12/2016	12:05	4	Groundwater		4950-25070-10-1	0.4	AW09690
MW-14	04/12/2016	13:25	4	Groundwater		4950-25070-10-1	0.4	AW09691
MW-14 Du	04/12/2016	13:25	4	Sample Duplicate		4950-25070-10-1	0.4	AW09692
MW-15	04/12/2016	15:15	4	Groundwater		4950-25070-10-1	0.4	AW09693
MW-18	04/12/2016	17:25	4	Groundwater		4950-25066-10-6	0.6	AW09694
MW-16	04/13/2016	11:30	4	Groundwater		4950-25064-10-4	3.1	AW09695
MW-21	04/13/2016	13:17	4	Groundwater		4950-25064-10-4	3.1	AW09697
MW-17	04/13/2016	15:22	4	Groundwater		4950-25064-10-4	3.1	AW09698
FB-3	04/13/2016	15:50	4	Field Blank		4950-25065-10-5	0.9	AW09699

Relinquished By	Received By	Date/Time
		04/14/2016 10:43

SmarTroll ID	4696-23444-3-3	All metals and radiological bottles have pH < 2	✔
Turbidity ID	4677-23342-4-1	Thermometer ID	1506-3968-4-4
		pH Strip ID	4826-24363-2-1 (bottle 3)

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

✔ Field Complete
✔ Lab Complete

Lab ETA: 04/14/2016 11:46

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Clarence Specht	Location	Greene 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	Separate lot of pH strips used for bottles 1&2, 4831-24377-20-4

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Cooler ID	Cooler Temp	Lab Id
MW-9	04/13/2016	15:50	4	Groundwater		4950-25069-10-9	1.7	AW09686
MW-9-dup	04/13/2016	15:50	4	Sample Duplicate		4950-25069-10-9	1.7	AW09687
MW-10	04/13/2016	14:25	4	Groundwater		4950-25069-10-9	1.7	AW09688
FB-2	04/13/2016	14:47	4	Field Blank		4950-25066-10-6	0.6	AW09689

Relinquished By	Received By	Date/Time
C. Specht		04/14/2016 10:39

SmarTroll ID	4696-23443-3-2	All metals and radiological bottles have pH < 2	✔
Turbidity ID	3901-20009-2-1	Thermometer ID	1506-3968-4-4
		pH Strip ID	4826-24363-2-1 (bottle 3)

Georgia Power Company
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Report To

Sarah Copeland
APC GSC Building 8
744 Highway 87
Calera, AL 35040

Sample #	Location	Sample Description	Customer Sample ID	Date Collected	Test Method
102950001	Greene Co. Ash Pond	MW-23	AW09671, Water	4/12/2016 11:00:00 AM	Ga Tech
102950002	Greene Co. Ash Pond	MW-24	AW09672, Water	4/12/2016 12:05:00 PM	Ga Tech
102950003	Greene Co. Ash Pond	MW-24 DUP	AW09673, Water	4/12/2016 12:05:00 PM	Ga Tech
102950004	Greene Co. Ash Pond	FB-1 Field Blank	AW09674, Water	4/12/2016 12:30:00 PM	Ga Tech
102950005	Greene Co. Ash Pond	MW-6	AW09675, Water	4/12/2016 2:05:00 PM	Ga Tech
102950006	Greene Co. Ash Pond	MW-5	AW09676, Water	4/12/2016 3:05:00 PM	Ga Tech
102950007	Greene Co. Ash Pond	MW-25	AW09677, Water	4/12/2016 4:35:00 PM	Ga Tech
102950008	Greene Co. Ash Pond	MW-3	AW09678, Water	4/12/2016 5:42:00 PM	Ga Tech
102950009	Greene Co. Ash Pond	MW-1	AW09679, Water	4/13/2016 10:45:00 AM	Ga Tech
102950010	Greene Co. Ash Pond	MW-2	AW09680, Water	4/13/2016 12:00:00 PM	Ga Tech
102950011	Greene Co. Ash Pond	MW-8	AW09681, Water	4/13/2016 1:10:00 PM	Ga Tech
102950012	Greene Co. Ash Pond	MW-7	AW09682, Water	4/13/2016 2:05:00 PM	Ga Tech
102950013	Greene Co. Ash Pond	EB-1 Equipment	AW09683, Water	4/13/2016 3:15:00 PM	Ga Tech
102950014	Greene Co. Ash Pond	MW-12	AW09684, Water	4/13/2016 4:10:00 PM	Ga Tech
102950015	Greene Co. Ash Pond	MW-11	AW09685, Water	4/13/2016 5:05:00 PM	Ga Tech
102950016	Greene Co. Ash Pond	MW-9	AW09686, Water	4/13/2016 3:50:00 PM	Ga Tech
102950017	Greene Co. Ash Pond	MW-9 DUP	AW09687, Water	4/13/2016 3:50:00 PM	Ga Tech
102950018	Greene Co. Ash Pond	MW-10	AW09688, Water	4/13/2016 2:25:00 PM	Ga Tech
102950019	Greene Co. Ash Pond	FB-2 Field Blank	AW09689, Water	4/13/2016 2:47:00 PM	Ga Tech
102950020	Greene Co. Ash Pond	MW-13	AW09690, Water	4/12/2016 12:05:00 PM	Ga Tech
102950021	Greene Co. Ash Pond	MW-14	AW09691, Water	4/12/2016 1:25:00 PM	Ga Tech
102950022	Greene Co. Ash Pond	MW-14 DUP	AW09692, Water	4/12/2016 1:25:00 PM	Ga Tech

Certification

Data approved by Gary Smith

QA/QC Specialist

Georgia Power Company
2480 Maner Road
Atlanta, Ga. 30339
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Report To

Sarah Copeland
APC GSC Building 8
744 Highway 87
Calera, AL 35040

Sample #	Location	Sample Description	Customer Sample ID	Date Collected	Test Method
102950023	Greene Co. Ash Pond	MW-15	AW09693, Water	4/12/2016 3:15:00 PM	Ga Tech
102950024	Greene Co. Ash Pond	MW-18	AW09694, Water	4/12/2016 5:25:00 PM	Ga Tech
102950025	Greene Co. Ash Pond	MW-16 (Invalid	AW09695, Water	4/13/2016 11:30:00 AM	Ga Tech
102950026	Greene Co. Ash Pond	MW-16 (Was RD-1)	AW09696, Water	4/13/2016 11:30:00 AM	Ga Tech
102950027	Greene Co. Ash Pond	MW-21	AW09697, Water	4/13/2016 1:17:00 PM	Ga Tech
102950028	Greene Co. Ash Pond	MW-17	AW09698, Water	4/13/2016 3:22:00 PM	Ga Tech
102950029	Greene Co. Ash Pond	FB-3 Field Blank	AW09699, Water	4/13/2016 3:50:00 PM	Ga Tech

Sample Comments

102950025	Invalid sample results due to inadequate precipitation
102950026	This sample used to report results for MW-16

Certification

Data approved by Gary Smith
QA/QC Specialist

Georgia Power Company
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Atlanta, Ga. 30339
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Report To

Sarah Copeland
APC GSC Building 8
744 Highway 87
Calera, AL 35040

Location	APC Lab
Sample Number	102950001
Collection Date	4/12/2016 11:00:00 AM
Sampling Media	Water
Station	AW09671
Sample ID	MW-23 Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.93E-01
Ra-228	Ga Tech	pCi/L			6.45E-01

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Report To

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APC GSC Building 8
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Location	APC Lab
Sample Number	102950002
Collection Date	4/12/2016 12:05:00 PM
Sampling Media	Water
Station	AW09672
Sample ID	MW-24 Greene Co. 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			7.20E-01

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Report To

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APC GSC Building 8
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Location	APC Lab
Sample Number	102950003
Collection Date	4/12/2016 12:05:00 PM
Sampling Media	Water
Station	AW09673
Sample ID	MW-24 DUP Greene Co. 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			5.96E-01

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Report To

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Location	APC Lab
Sample Number	102950004
Collection Date	4/12/2016 12:30:00 PM
Sampling Media	Water
Station	AW09674
Sample ID	FB-1 Field Blank Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.19E-01
Ra-228	Ga Tech	pCi/L			4.65E-01

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Report To

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Location	APC Lab
Sample Number	102950005
Collection Date	4/12/2016 2:05:00 PM
Sampling Media	Water
Station	AW09675
Sample ID	MW-6 Greene Co. 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			5.38E-01

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Report To

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APC GSC Building 8
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Location	APC Lab
Sample Number	102950006
Collection Date	4/12/2016 3:05:00 PM
Sampling Media	Water
Station	AW09676
Sample ID	MW-5 Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L	1.03E+00	+/- 5.68E-01	
Ra-228	Ga Tech	pCi/L			7.11E-01

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Report To

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Location	APC Lab
Sample Number	102950007
Collection Date	4/12/2016 4:35:00 PM
Sampling Media	Water
Station	AW09677
Sample ID	MW-25 Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.22E-01
Ra-228	Ga Tech	pCi/L			7.54E-01

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Report To

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Location	APC Lab
Sample Number	102950008
Collection Date	4/12/2016 5:42:00 PM
Sampling Media	Water
Station	AW09678
Sample ID	MW-3 Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.01E-01
Ra-228	Ga Tech	pCi/L			6.67E-01

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Report To

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APC GSC Building 8
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Location	APC Lab
Sample Number	102950009
Collection Date	4/13/2016 10:45:00 AM
Sampling Media	Water
Station	AW09679
Sample ID	MW-1 Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L	1.05E+00	+/- 8.93E-01	
Ra-228	Ga Tech	pCi/L			8.08E-01

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Report To

Sarah Copeland
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Location	APC Lab
Sample Number	102950010
Collection Date	4/13/2016 12:00:00 PM
Sampling Media	Water
Station	AW09680
Sample ID	MW-2 Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.98E-01
Ra-228	Ga Tech	pCi/L			6.93E-01

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Report To

Sarah Copeland
APC GSC Building 8
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Location	APC Lab
Sample Number	102950011
Collection Date	4/13/2016 1:10:00 PM
Sampling Media	Water
Station	AW09681
Sample ID	MW-8 Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L	1.09E+00	+/- 9.20E-01	
Ra-228	Ga Tech	pCi/L			6.86E-01

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Report To

Sarah Copeland
APC GSC Building 8
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Location	APC Lab
Sample Number	102950012
Collection Date	4/13/2016 2:05:00 PM
Sampling Media	Water
Station	AW09682
Sample ID	MW-7 Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.08E-01
Ra-228	Ga Tech	pCi/L			5.62E-01

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Report To

Sarah Copeland
APC GSC Building 8
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Calera, AL 35040

Location	APC Lab
Sample Number	102950013
Collection Date	4/13/2016 3:15:00 PM
Sampling Media	Water
Station	AW09683
Sample ID	EB-1 Equipment Blank Greene Co. 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			6.10E-01

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Report To

Sarah Copeland
APC GSC Building 8
744 Highway 87
Calera, AL 35040

Location	APC Lab
Sample Number	102950014
Collection Date	4/13/2016 4:10:00 PM
Sampling Media	Water
Station	AW09684
Sample ID	MW-12 Greene Co. 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			6.70E-01

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Report To

Sarah Copeland
APC GSC Building 8
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Calera, AL 35040

Location	APC Lab
Sample Number	102950015
Collection Date	4/13/2016 5:05:00 PM
Sampling Media	Water
Station	AW09685
Sample ID	MW-11 Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.76E-01
Ra-228	Ga Tech	pCi/L			4.38E-01

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Report To

Sarah Copeland
APC GSC Building 8
744 Highway 87
Calera, AL 35040

Location	APC Lab
Sample Number	102950016
Collection Date	4/13/2016 3:50:00 PM
Sampling Media	Water
Station	AW09686
Sample ID	MW-9 Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.83E-01
Ra-228	Ga Tech	pCi/L			6.80E-01

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

Report To

Sarah Copeland
APC GSC Building 8
744 Highway 87
Calera, AL 35040

Location	APC Lab
Sample Number	102950017
Collection Date	4/13/2016 3:50:00 PM
Sampling Media	Water
Station	AW09687
Sample ID	MW-9 DUP Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.03E-01
Ra-228	Ga Tech	pCi/L			6.53E-01

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

Report To

Sarah Copeland
APC GSC Building 8
744 Highway 87
Calera, AL 35040

Location	APC Lab
Sample Number	102950018
Collection Date	4/13/2016 2:25:00 PM
Sampling Media	Water
Station	AW09688
Sample ID	MW-10 Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.35E-01
Ra-228	Ga Tech	pCi/L			5.92E-01

Georgia Power Company
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Atlanta, Ga. 30339
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Report To

Sarah Copeland
APC GSC Building 8
744 Highway 87
Calera, AL 35040

Location	APC Lab
Sample Number	102950019
Collection Date	4/13/2016 2:47:00 PM
Sampling Media	Water
Station	AW09689
Sample ID	FB-2 Field Blank Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.69E-01
Ra-228	Ga Tech	pCi/L			5.94E-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
744 Highway 87
Calera, AL 35040

Location	APC Lab
Sample Number	102950020
Collection Date	4/12/2016 12:05:00 PM
Sampling Media	Water
Station	AW09690
Sample ID	MW-13 Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			3.28E-01
Ra-228	Ga Tech	pCi/L			3.40E-01

Georgia Power Company
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Atlanta, Ga. 30339
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Report To

Sarah Copeland
APC GSC Building 8
744 Highway 87
Calera, AL 35040

Location	APC Lab
Sample Number	102950021
Collection Date	4/12/2016 1:25:00 PM
Sampling Media	Water
Station	AW09691
Sample ID	MW-14 Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			3.95E-01
Ra-228	Ga Tech	pCi/L			6.67E-01

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

Report To

Sarah Copeland
APC GSC Building 8
744 Highway 87
Calera, AL 35040

Location	APC Lab
Sample Number	102950022
Collection Date	4/12/2016 1:25:00 PM
Sampling Media	Water
Station	AW09692
Sample ID	MW-14 DUP Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.93E-01
Ra-228	Ga Tech	pCi/L			6.41E-01

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

Report To

Sarah Copeland
APC GSC Building 8
744 Highway 87
Calera, AL 35040

Location	APC Lab
Sample Number	102950023
Collection Date	4/12/2016 3:15:00 PM
Sampling Media	Water
Station	AW09693
Sample ID	MW-15 Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			5.10E-01
Ra-228	Ga Tech	pCi/L			6.80E-01

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

Report To

Sarah Copeland
APC GSC Building 8
744 Highway 87
Calera, AL 35040

Location	APC Lab
Sample Number	102950024
Collection Date	4/12/2016 5:25:00 PM
Sampling Media	Water
Station	AW09694
Sample ID	MW-18 Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			3.94E-01
Ra-228	Ga Tech	pCi/L			6.20E-01

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

Report To

Sarah Copeland
APC GSC Building 8
744 Highway 87
Calera, AL 35040

Location	APC Lab
Sample Number	102950025
Collection Date	4/13/2016 11:30:00 AM
Sampling Media	Water
Station	AW09695
Sample ID	MW-16 (Invalid sample) Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			6.84E+01
Ra-228	Ga Tech	pCi/L			1.08E+02

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

Report To

Sarah Copeland
APC GSC Building 8
744 Highway 87
Calera, AL 35040

Location	APC Lab
Sample Number	102950026
Collection Date	4/13/2016 11:30:00 AM
Sampling Media	Water
Station	AW09696
Sample ID	MW-16 (Was RD-1) Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.47E-01
Ra-228	Ga Tech	pCi/L			6.81E-01

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

Report To

Sarah Copeland
APC GSC Building 8
744 Highway 87
Calera, AL 35040

Location	APC Lab
Sample Number	102950027
Collection Date	4/13/2016 1:17:00 PM
Sampling Media	Water
Station	AW09697
Sample ID	MW-21 Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.64E-01
Ra-228	Ga Tech	pCi/L			6.99E-01

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

Report To

Sarah Copeland
APC GSC Building 8
744 Highway 87
Calera, AL 35040

Location	APC Lab
Sample Number	102950028
Collection Date	4/13/2016 3:22:00 PM
Sampling Media	Water
Station	AW09698
Sample ID	MW-17 Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.63E-01
Ra-228	Ga Tech	pCi/L	1.47E+00	+/- 1.14E+00	

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

Report To

Sarah Copeland
APC GSC Building 8
744 Highway 87
Calera, AL 35040

Location	APC Lab
Sample Number	102950029
Collection Date	4/13/2016 3:50:00 PM
Sampling Media	Water
Station	AW09699
Sample ID	FB-3 Field Blank Greene Co. Ash Pond

Nuclide	Method	Units	Activity Mean	95% CL	MDA
Ra-226	Ga Tech	pCi/L			4.36E-01
Ra-228	Ga Tech	pCi/L			6.05E-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

LAB USE ONLY
Work Order No. 102950
Reviewed By: AWJ 4/22/16

[12] Page 1 of 3

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

Company: [1] Alabama Power Company
Report To ~~Sarah~~
Address: [2] sgcopela@southernco.com

Phone/Fax: [3] 205-1694-1121
Contact: [4] Sarah Copeland
Project Location: [5] Greene Co Ash Pond
Account Number: [6]
Special Instructions: [7]

Sample Shipment Date: [8] 4/19/16
Sampled By: [9] N.P. / C.S. / J.B.
Print Name

Signature
Sample Received Date: [10] 4-20-16 @1000
Sample Received By: [11]
Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise

PRESERVATIVE [21]: N

ANALYSIS REQUESTED [22]

Sample Type Key: [23] G-Grab C-Composite D-Other

Matrix Key: [24] O-Oil SW-Surface Water S-Solid GW-Ground Water SL-Sludge WW-Waste Water W-Water DW-Drinking Water L-Liquid OW-Other Water

Preservative Key: [25] H-Hydrochloric Acid N-Nitric Acid S-Sulfuric Acid SH-Sodium Hydroxide P-Phosphoric Acid ST-Sodium Thiosulfate H-Ice U-Unpreserved O-Other (Specify)

LAB USE ONLY [14] LAB ID	Sample Number [15]	Collection [16] Date	Collection [16] Time	Sample Description [17]	[18] Sample Type	[19] Matrix	[20] No. of Containers	Ra-226	Ra-228	LAB USE ONLY [26] Comments
102950001	AW0916071	4/12	1100	MW-23		GW	2	X	X	
2	AW0916072	4/12	1205	MW-24		GW	2	X	X	
3	AW0916073	4/12	1205	MW-24 DUP		GW	2	X	X	
4	AW0916074	4/12	1230	FB-1 Field Blank		GW	2	X	X	
5	AW0916075	4/12	1405	MW-6		GW	2	X	X	
6	AW0916076	4/12	1505	MW-5		GW	2	X	X	
7	AW0916077	4/12	1635	MW-25		GW	2	X	X	
8	AW0916078	4/12	1742	MW-3		GW	2	X	X	
9	AW0916079	4/13	1045	MW-1		GW	2	X	X	
10	AW0916080	4/13	1200	MW-2		GW	2	X	X	

FOR CHAIN OF CUSTODY USE ONLY [27]

Relinquished by: [28] Sarah Copeland — Date/Time 4/19/16 0900
Received by: [29] — Date/Time 4-20-16 @1000
Relinquished by: — Date/Time
Received by: — Date/Time 4-20-16

LAB USE ONLY: Sample Receipt Information [30]

20.0°C (GPFL-IR-3P), courier, no ice, coolers in good condition
No Seal, PH≤2
AWJ 4/22/16

247156B

WHITE, CANARY & PINK—Laboratory GOLDENROD—Originator

(See Back For Instructions)

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

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY
Work Order No. 102950
Reviewed By: AWG 4/22/16

12 Page 2 of 3

[X] 13 Standard Turnaround Time

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

Company: 1 APC
Report To sgcapela@southernco.com
Address: 2

Phone/Fax: 3 205-664-6121
Contact: 4 Sarah Copeland
Project Location: 5 Greene Co Ash Pond
Account Number: 6
Special Instructions: 7

Sample Shipment Date: 8 4/19/16
Sampled By: 9 N.P./C.S./J.R.
Print Name
Signature
Sample Received Date: 10 4-20-16 @1000
Sample Received By: 11 [signature]
Authorization to subcontract analysis will be assumed acceptable by customer unless stated otherwise.

PRESERVATIVE 21: N

ANALYSIS REQUESTED 22

Sample Type Key: 23
G-Grab C-Composite
D-Other

Matrix Key: 24
O-Oil SW-Surface Water
S-Solid GW-Ground Water
SL-Sludge WW-Waste Water
W-Wipe DW-Drinking Water
LO-Liquid OW-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 14 LAB ID	Sample Number 15	Collection 16 Date	Collection 16 Time	Sample Description 17	Sample Type 18	Matrix 19	No. of Containers 20	Ra-226	Ra-228						LAB USE ONLY 26 Comments
102950011	AW09681	4/13	1310	MW-8		GW	2	X	X						
12	AW09682	4/13	1405	MW-7		GW	2	X	X						
13	AW09683	4/13	1515	FB-1 Equipment Blank		GW	2	X	X						
14	AW09684	4/13	1610	MW-12		GW	2	X	X						
15	AW09685	4/13	1705	MW-11		GW	2	X	X						
16	AW09686	4/13	1550	MW-9		GW	2	X	X						
17	AW09687	4/13	1550	MW-9 DUP		GW	2	X	X						
18	AW09688	4/13	1425	MW-10		GW	2	X	X						
19	AW09689	4/13	1447	FB-2 Field Blank		GW	2	X	X						
20	AW09690	4/12	1205	MW-13		GW	2	X	X						

FOR CHAIN OF CUSTODY USE ONLY 27

Relinquished by: 28 [signature]	Date/Time	4/19/16 0900
Received by: 29 [signature]	Date/Time	4-20-16 @1000
Relinquished by:	Date/Time	
Received by:	Date/Time	

LAB USE ONLY: Sample Receipt Information 30

20.0 °C (GPEL-IR-3P), courier, no ice, cooler in good condition no seal, PH<2. Sample number AW09689 bottle has two labels with inconsistent sample time/date. One label matches COC time/date, the other label does not.

[signature] 4-20-16

3471566

WHITE, CANARY & PINK—Laboratory GOLDENROD—Originator

(See Back For Instructions)

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

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

LAB USE ONLY — Work Order No. 102950 — Reviewed By: AMJ 4/22/16

[12] Page 3 of 3

[13] Standard Turnaround Time

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

Company: [1] APC
Report To: sgcopela@southernco.com
Address: [2]

Phone/Fax: [3] 205-1264-6121
Contact: [4] Sarah Copeland
Project Location: [5] Greene Co Ash Pond
Account Number: [6]
Special Instructions: [7]

Sample Shipment Date: [8] 4/19/16
Sampled By: [9] N.P./C.S./J.R.
Print Name
Signature
Sample Received Date: [10] 4-20-16 @1000
Sample Received By: [11]

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

PRESERVATIVE [21]: N

ANALYSIS REQUESTED [22]

Sample Type Key: [23] G-Grab C-Composite D-Other

Matrix Key: [24] O-Oil SW-Surface Water S-Solid GW-Ground Water SL-Sludge WW-Waste Water W-Wipe DW-Drinking Water LQ-Liquid OW-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 [14] LAB ID	Sample Number [15]	Collection [16] Date	Collection [16] Time	Sample Description [17]	[18] Sample Type	[19] Matrix	[20] No. of Containers	Ra-226	Ra-228	LAB USE ONLY [26] Comments
102950021	AW091691	4/12	1325	MW-14		GW	2	X	X	
22	AW091692	4/12	1325	MW-14 DUP				X	X	
23	AW091693	4/12	1515	MW-15				X	X	
24	AW091694	4/12	1725	MW-18				X	X	
25	AW091695	4/13	1130	MW-16				X	X	
26	AW091696	4/13	1130	RD-1 Pond DUP				X	X	
27	AW091697	4/13	1317	MW-21				X	X	
28	AW091698	4/13	1522	MW-17				X	X	
29	AW091699	4/13	1550	FB-3 Field Blank				X	X	

FOR CHAIN OF CUSTODY USE ONLY [27]

Relinquished by: [28]	Date/Time	4/19/16 0900
Received by: [29]	Date/Time	4-20-16 @1000
Relinquished by:	Date/Time	
Received by:	Date/Time	

LAB USE ONLY: Sample Receipt Information [39]

20.0°C (GPEL-IR-3P), cooler, no ice, cooler in good condition, no seal, PHL2.

3471568

4-20-16

WHITE, CANARY & PINK—Laboratory GOLDENROD—Originator

(See Back For Instructions)

Sample Receipt Checklist

GEORGIA POWER
A SOUTHERN COMPANY

Client: APC Lab
Workorder No.: 102950
Carrier: COURIER

# of Samples: 29
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	
Cooler temperature is acceptable	True	
Cooler temperature is recorded	True	20
COC is present	True	
COC is filled out in ink and is legible	True	
COC is filled out with pertinent information	False	Sample collection dates are missing the year on the COC. Samples were logged in based on year present on sample container labels.
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 number AW09689 sample bottle has two labels with conflicting sample time/date information. One label has a sample time and date that agrees with the COC, while the other label does not agree with COC time and date information. Sample was logged in based on sample collection time and date that is in agreement with both COC and sample container label.
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:

Completed By: Sutton, Nick

Date: 04/22/2016

ENVIRONMENTAL LABORATORY

QUALITY CONTROL DATA

Workorders: 102948, 102936, 102950

QC Batch: 16999 Analysis Method: Ga Tech
QC Batch Method: Ga Tech
Associated Lab Samples: 102948008--013, 102936001-005, 102950001-009

METHOD BLANK:

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Radium-226	pCi/l	<4.046E-01	1.0	
Radium-228	pCi/l	<6.382E-01	1.0	

Laboratory Control Sample:

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Radium-226	pCi/l	4.763	5.102	107	70-130	
Radium-228	pCi/l	4.878	5.172	106	70-130	

Laboratory Control Sample Duplicate:

Parameter	Units	RPD	Max RPD	Qualifiers
Radium-226	pCi/l	4.8	20	
Radium-228	pCi/l	0.94	20	

QUALITY CONTROL DATA

Workorder: 102950

QC Batch: 17000 Analysis Method: Ga Tech
QC Batch Method: Ga Tech
Associated Lab Samples: 102950010-029

METHOD BLANK:

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
Radium-226	pCi/l	<3.062E-01	1.0	
Radium-228	pCi/l	<4.811E-01	1.0	

Laboratory Control Sample:

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Radium-226	pCi/l	4.796	5.138	107	70-130	
Radium-228	pCi/l	4.887	6.345	130	70-130	

Laboratory Control Sample Duplicate:

Parameter	Units	RPD	Max RPD	Qualifiers
Radium-226	pCi/l	0	20	
Radium-228	pCi/l	12.2	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

Lab & Field SERVICES

Sample Group : WMWGREAP_1066

Project/Site : Greene County Ash Pond
Demopolis, AL 36732

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

Alabama Power

Lab & Field SERVICES

Anions

Greene County Ash Pond

WMWGREAP_1066

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

Sample ID	Chloride Batch ID	Fluoride Batch ID	Sulfate Batch ID	Project ID
AX00200	585212	585214	585216	WMWGREAP_1066
AX00201	585213	585215	585217	WMWGREAP_1066
AX00202	585213	585215	585217	WMWGREAP_1066
AX00203	585213	585215	585217	WMWGREAP_1066
AX00204	585213	585215	585217	WMWGREAP_1066
AX00205	585213	585215	585217	WMWGREAP_1066
AX00206	585213	585215	585217	WMWGREAP_1066
AX00207	585213	585215	585217	WMWGREAP_1066
AX00208	585213	585215	585217	WMWGREAP_1066
AX00209	585213	585215	585217	WMWGREAP_1066
AX00210	585213	585215	585217	WMWGREAP_1066

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 585216 presented a negative concentration above the MDL of 0.3, at -0.462 mg/L. Sample AX00200 presented a positive sulfate concentration above the RL but below 10x the absolute blank value, and is considered as quantitatively estimated with indication of potential low bias on the reported result.

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

2. The blank for anion sulfate in batch 585217 presented a negative concentration above the MDL of 0.3, at -0.463 mg/L. Two batch samples (AX00207 and AX00210) presented negative sulfate concentrations greater than absolute MDL and below 10x the absolute blank value, and are considered as quantitatively estimated non-detect results, with indication of low bias on the reported RL values. One batch sample (AX00208) presented a positive sulfate result above MDL but below RL, and less than 10x the absolute blank value, and is qualified as a quantitatively estimated result with indication of potential low bias, and two batch samples (AX00202 and AX00203) presented sulfate concentrations above RL but below 10x the absolute blank value, and are qualified as quantitatively estimated results with indication of potential low 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. All associated batch samples were analyzed without 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.

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

Case Narrative

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

Lab & Field SERVICES

Metals ICP

Greene County Ash Pond

WMWGREAP_1066

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

Sample ID	Batch ID	Project ID
AX00200	20170124C_20170126B_20170124C	WMWGREAP_1066
AX00201	20170124B	WMWGREAP_1066
AX00202	20170124B	WMWGREAP_1066
AX00203	20170124B	WMWGREAP_1066
AX00204	20170124B	WMWGREAP_1066
AX00205	20170124B	WMWGREAP_1066
AX00206	20170124B	WMWGREAP_1066
AX00207	20170124B	WMWGREAP_1066
AX00208	20170124B	WMWGREAP_1066
AX00209	20170124B	WMWGREAP_1066
AX00210	20170124B	WMWGREAP_1066

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.

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- 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 results not corrected for dilution.

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Case Narrative

Alabama Power

Lab & Field SERVICES

Metals ICPMS

Greene County Ash Pond

WMWGREAP_1066

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

Sample ID	Batch ID	Project ID
AX00200	585062	WMWGREAP_1066
AX00201	585062	WMWGREAP_1066
AX00202	585074	WMWGREAP_1066
AX00203	585074	WMWGREAP_1066
AX00204	585074	WMWGREAP_1066
AX00205	585074	WMWGREAP_1066
AX00206	585074	WMWGREAP_1066
AX00207	585074	WMWGREAP_1066
AX00208	585074	WMWGREAP_1066
AX00209	585074	WMWGREAP_1066
AX00210	585074	WMWGREAP_1066

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.

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

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 except for AX00210msd. This sample was re-analyzed with passing criteria, indicating a lack of matrix effect on the sample.

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.

Alabama Power General Test Laboratory
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Case Narrative

Alabama Power

Lab & Field SERVICES

Mercury

Greene County Ash Pond

WMWGREAP_1066

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

Sample ID	Batch ID	Project ID
AX00200	585237	WMWGREAP_1066
AX00201	585237	WMWGREAP_1066
AX00202	585238	WMWGREAP_1066
AX00203	585238	WMWGREAP_1066
AX00204	585238	WMWGREAP_1066
AX00205	585238	WMWGREAP_1066
AX00206	585238	WMWGREAP_1066
AX00207	585238	WMWGREAP_1066
AX00208	585238	WMWGREAP_1066
AX00209	585238	WMWGREAP_1066
AX00210	585238	WMWGREAP_1066

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.

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- All response signals were satisfactory except for 3 of the CCBs. The CCBs had a dip in signal response, but they were not rerun because they were still less than the lowest standard even at the highest point of the run.

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution.
8. The raw data results are shown with dilution factors included.

Alabama Power General Test Laboratory
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Case Narrative

Alabama Power

Lab & Field SERVICES

TDS

Greene County Ash Pond

WMWGREAP_1066

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

Sample ID	Batch ID	Project ID
AX00200	584907	WMWGREAP_1066
AX00201	584907	WMWGREAP_1066
AX00202	584907	WMWGREAP_1066
AX00203	584907	WMWGREAP_1066
AX00204	584907	WMWGREAP_1066
AX00205	584907	WMWGREAP_1066
AX00206	584907	WMWGREAP_1066
AX00207	584907	WMWGREAP_1066
AX00208	584960	WMWGREAP_1066
AX00209	584960	WMWGREAP_1066
AX00210	584960	WMWGREAP_1066

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

General Quality Control Procedures:

- A blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5 mg of the previous weight.
- A sample duplicate was analyzed with each batch. RPD/2 was not less than 5% for batch 584907 or 584960. The QC samples AX00207 and AX00210 did not meet the 2.5 mg requirement.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- All samples were between 2.5 mg and 200 mg residue with the exception of AX00207 and AX00210 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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 03-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AX00200

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010		0.0116	mg/L
* Beryllium, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	1/24/2017	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	1/24/2017	EPA 200.7		1	0.1	0.5		9.66	mg/L
* Cadmium, Total	ABB	1/12/2017	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	1/12/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	1/24/2017	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	ABB	1/12/2017	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	1/10/2017	SM 2540C		1		25		49.3	mg/L
* Chloride, Total	SES	1/11/2017	EPA 300.0		1	0.04	0.25		4.06	mg/L
* Fluoride, Total	SES	1/11/2017	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	1/11/2017	EPA 300.0		1	0.3	1		1.57	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:

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 03-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AX00200

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX00123	Lithium, Total	mg/L	-0.0000169	0.022	0.20	0.232	0.228	0.224	0.17 to 0.23	116	70 to 130	1.64	20
AX00201	Selenium, Total	mg/L	0.0000905	0.0044	0.10	0.0924	0.0933	0.0967	0.085 to 0.115	92.4	70 to 130	0.959	20
AX00201	Thallium, Total	mg/L	0.0000224	0.00044	0.10	0.0966	0.0984	0.0977	0.085 to 0.115	96.6	70 to 130	1.84	20
AX00201	Cobalt, Total	mg/L	0.00000694	0.0044	0.10	0.0857	0.0874	0.0920	0.085 to 0.115	82.0	70 to 130	1.94	20
AX00123	Boron, Total	mg/L	0.00143	0.044	1.00	0.947	0.946	0.942	0.85 to 1.15	94.7	70 to 130	0.0624	20
AX00123	Calcium, Total	mg/L	-0.00565	0.22	5.00	5.04	5.02	5.04	4.25 to 5.75	101	70 to 130	0.442	20
AX00201	Barium, Total	mg/L	-0.00000198	0.0044	0.10	0.126	0.130	0.0901	0.085 to 0.115	85.3	70 to 130	2.69	20
AX00201	Arsenic, Total	mg/L	0.0000169	0.0022	0.10	0.0951	0.0971	0.0963	0.085 to 0.115	95.1	70 to 130	2.13	20
AX00201	Cadmium, Total	mg/L	0.00000861	0.00044	0.10	0.0873	0.0878	0.0933	0.085 to 0.115	87.3	70 to 130	0.544	20
AX00201	Molybdenum, Total	mg/L	0.0000112	0.0044	0.10	0.0831	0.0839	0.0870	0.085 to 0.115	83.1	70 to 130	0.905	20
AX00201	Antimony, Total	mg/L	0.0000781	0.00132	0.10	0.0833	0.0849	0.0880	0.085 to 0.115	83.3	70 to 130	1.98	20
AX00201	Beryllium, Total	mg/L	0.0000210	0.00132	0.10	0.0991	0.101	0.103	0.085 to 0.115	99.1	70 to 130	1.89	20
AX00201	Chromium, Total	mg/L	0.0000115	0.0044	0.10	0.0925	0.0951	0.0948	0.085 to 0.115	92.5	70 to 130	2.74	20
AX00201	Lead, Total	mg/L	0.0000260	0.0022	0.10	0.0976	0.0995	0.0998	0.085 to 0.115	97.6	70 to 130	1.86	20
AX00201	Mercury, Total by CVAA	mg/L	0.000108	0.0005	0.004	0.00373	0.00375	0.00374	0.0034 to 0.0046	93.2	70 to 130	0.623	20

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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:

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 03-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AX00200

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX00117	Chloride, Total	mg/L	0.00	0.25	10.00	9.83	0.00	9.98	9 to 11	98.3	80 to 120	0.00	20
AX00117	Fluoride, Total	mg/L	0.00	0.3	2.00	2.00	0.00	2.15	1.8 to 2.2	100	80 to 120	0.00	20
AX00117	Sulfate, Total	mg/L	-0.462	1.0	20.00	19.3	-0.457	20.5	18 to 22	96.5	80 to 120	0.00	20
AX00207	Solids, Dissolved	mg/L	-1.0	25			1.3	53.0	40 to 60			0.00	5

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

CC:

Reported: 7/20/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 03-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AX00201

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010		0.0409	mg/L
* Beryllium, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	1/24/2017	EPA 200.7		1	0.02	0.1	J	0.0304	mg/L
* Calcium, Total	HRG	1/24/2017	EPA 200.7		1	0.1	0.5		2.94	mg/L
* Cadmium, Total	ABB	1/12/2017	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	J	0.00370	mg/L
* Chromium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	1/12/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	1/24/2017	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	ABB	1/12/2017	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	1/10/2017	SM 2540C		1		25		60.7	mg/L
* Chloride, Total	SES	1/11/2017	EPA 300.0		1	0.04	0.25		5.18	mg/L
* Fluoride, Total	SES	1/11/2017	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	1/11/2017	EPA 300.0		1	0.3	1		14.3	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:

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 03-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AX00201

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX00201	Selenium, Total	mg/L	0.0000905	0.0044	0.10	0.0924	0.0933	0.0967	0.085 to 0.115	92.4	70 to 130	0.959	20
AX00210	Boron, Total	mg/L	0.00576	0.044	1.00	0.958	0.929	0.917	0.85 to 1.15	95.8	70 to 130	3.04	20
AX00201	Thallium, Total	mg/L	0.0000224	0.00044	0.10	0.0966	0.0984	0.0977	0.085 to 0.115	96.6	70 to 130	1.84	20
AX00201	Barium, Total	mg/L	-0.00000198	0.0044	0.10	0.126	0.130	0.0901	0.085 to 0.115	85.3	70 to 130	2.69	20
AX00201	Cobalt, Total	mg/L	0.00000694	0.0044	0.10	0.0857	0.0874	0.0920	0.085 to 0.115	82.0	70 to 130	1.94	20
AX00201	Arsenic, Total	mg/L	0.0000169	0.0022	0.10	0.0951	0.0971	0.0963	0.085 to 0.115	95.1	70 to 130	2.13	20
AX00201	Cadmium, Total	mg/L	0.00000861	0.00044	0.10	0.0873	0.0878	0.0933	0.085 to 0.115	87.3	70 to 130	0.544	20
AX00201	Molybdenum, Total	mg/L	0.0000112	0.0044	0.10	0.0831	0.0839	0.0870	0.085 to 0.115	83.1	70 to 130	0.905	20
AX00201	Antimony, Total	mg/L	0.0000781	0.00132	0.10	0.0833	0.0849	0.0880	0.085 to 0.115	83.3	70 to 130	1.98	20
AX00201	Beryllium, Total	mg/L	0.0000210	0.00132	0.10	0.0991	0.101	0.103	0.085 to 0.115	99.1	70 to 130	1.89	20
AX00201	Chromium, Total	mg/L	0.0000115	0.0044	0.10	0.0925	0.0951	0.0948	0.085 to 0.115	92.5	70 to 130	2.74	20
AX00201	Lead, Total	mg/L	0.0000260	0.0022	0.10	0.0976	0.0995	0.0998	0.085 to 0.115	97.6	70 to 130	1.86	20
AX00201	Mercury, Total by CVAA	mg/L	0.000108	0.0005	0.004	0.00373	0.00375	0.00374	0.0034 to 0.0046	93.2	70 to 130	0.623	20
AX00210	Calcium, Total	mg/L	-0.00685	0.22	5.00	4.96	4.99	4.95	4.25 to 5.75	99.1	70 to 130	0.736	20
AX00210	Lithium, Total	mg/L	0.000618	0.022	0.20	0.216	0.217	0.214	0.17 to 0.23	108	70 to 130	0.617	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 03-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AX00201

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX00207	Solids, Dissolved	mg/L	-1.0	25			1.3	53.0	40 to 60			0.00	5
AX00210	Chloride, Total	mg/L	0.00	0.25	10.00	9.98	0.00	10.0	9 to 11	99.8	80 to 120	0.00	20
AX00210	Fluoride, Total	mg/L	0.00	0.3	2.00	2.17	0.00	2.16	1.8 to 2.2	108	80 to 120	0.00	20
AX00210	Sulfate, Total	mg/L	-0.463	1.0	20.00	20.5	-0.464	20.4	18 to 22	102	80 to 120	0.00	20

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Expiration: June 30, 2018

Comments:

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Reported: 7/20/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 03-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AX00202

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010		0.0190	mg/L
* Beryllium, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	1/24/2017	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	1/24/2017	EPA 200.7		1	0.1	0.5		22.6	mg/L
* Cadmium, Total	ABB	1/12/2017	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	J	0.00217	mg/L
* Chromium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	1/12/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	1/24/2017	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	ABB	1/12/2017	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	1/10/2017	SM 2540C		1		25		89.3	mg/L
* Chloride, Total	SES	1/11/2017	EPA 300.0		1	0.04	0.25		5.18	mg/L
* Fluoride, Total	SES	1/11/2017	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	1/11/2017	EPA 300.0		1	0.3	1		2.81	mg/L

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

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Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 03-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AX00202

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX00210	Chromium, Total	mg/L	0.0000115	0.0044	0.10	0.0910	0.101	0.0948	0.085 to 0.115	91.0	70 to 130	10.1	20
AX00210	Barium, Total	mg/L	-0.00000198	0.0044	0.10	0.0828	0.0930	0.0901	0.085 to 0.115	82.8	70 to 130	11.6	20
AX00210	Antimony, Total	mg/L	0.0000781	0.00132	0.10	0.0813	0.0946	0.0880	0.085 to 0.115	81.3	70 to 130	15.1	20
AX00210	Arsenic, Total	mg/L	0.0000169	0.0022	0.10	0.0926	0.110	0.0963	0.085 to 0.115	92.6	70 to 130	16.8	20
AX00210	Beryllium, Total	mg/L	0.0000210	0.00132	0.10	0.0966	0.107	0.103	0.085 to 0.115	96.6	70 to 130	10.1	20
AX00527	Mercury, Total by CVAA	mg/L	0.000112	0.0005	0.004	0.00370	0.00368	0.00369	0.0034 to 0.0046	92.5	70 to 130	0.504	20
AX00210	Calcium, Total	mg/L	-0.00685	0.22	5.00	4.96	4.99	4.95	4.25 to 5.75	99.1	70 to 130	0.736	20
AX00210	Lithium, Total	mg/L	0.000618	0.022	0.20	0.216	0.217	0.214	0.17 to 0.23	108	70 to 130	0.617	20
AX00210	Selenium, Total	mg/L	0.0000905	0.0044	0.10	0.0905	0.104	0.0967	0.085 to 0.115	90.5	70 to 130	13.7	20
AX00210	Boron, Total	mg/L	0.00576	0.044	1.00	0.958	0.929	0.917	0.85 to 1.15	95.8	70 to 130	3.04	20
AX00210	Cadmium, Total	mg/L	0.00000861	0.00044	0.10	0.0849	0.0979	0.0933	0.085 to 0.115	84.9	70 to 130	14.2	20
AX00210	Cobalt, Total	mg/L	0.00000694	0.0044	0.10	0.0799	0.0911	0.0920	0.085 to 0.115	79.9	70 to 130	13.0	20
AX00210	Lead, Total	mg/L	0.0000260	0.0022	0.10	0.0956	0.0990	0.0998	0.085 to 0.115	95.6	70 to 130	3.45	20
AX00210	Molybdenum, Total	mg/L	0.0000112	0.0044	0.10	0.0808	0.0905	0.0870	0.085 to 0.115	80.8	70 to 130	11.3	20
AX00210	Thallium, Total	mg/L	0.0000224	0.00044	0.10	0.0944	0.0967	0.0977	0.085 to 0.115	94.4	70 to 130	2.36	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 03-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AX00202

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX00207	Solids, Dissolved	mg/L	-1.0	25			1.3	53.0	40 to 60			0.00	5
AX00210	Chloride, Total	mg/L	0.00	0.25	10.00	9.98	0.00	10.0	9 to 11	99.8	80 to 120	0.00	20
AX00210	Fluoride, Total	mg/L	0.00	0.3	2.00	2.17	0.00	2.16	1.8 to 2.2	108	80 to 120	0.00	20
AX00210	Sulfate, Total	mg/L	-0.463	1.0	20.00	20.5	-0.464	20.4	18 to 22	102	80 to 120	0.00	20

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 03-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-31 Dup

Laboratory ID Number: AX00203

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010		0.0182	mg/L
* Beryllium, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	1/24/2017	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	1/24/2017	EPA 200.7		1	0.1	0.5		22.7	mg/L
* Cadmium, Total	ABB	1/12/2017	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	J	0.00212	mg/L
* Chromium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	1/12/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	1/24/2017	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	ABB	1/12/2017	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	1/10/2017	SM 2540C		1		25		90.0	mg/L
* Chloride, Total	SES	1/11/2017	EPA 300.0		1	0.04	0.25		5.18	mg/L
* Fluoride, Total	SES	1/11/2017	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	1/11/2017	EPA 300.0		1	0.3	1		2.82	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 03-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-31 Dup

Laboratory ID Number: AX00203

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX00210	Barium, Total	mg/L	-0.00000198	0.0044	0.10	0.0828	0.0930	0.0901	0.085 to 0.115	82.8	70 to 130	11.6	20
AX00210	Chromium, Total	mg/L	0.0000115	0.0044	0.10	0.0910	0.101	0.0948	0.085 to 0.115	91.0	70 to 130	10.1	20
AX00210	Antimony, Total	mg/L	0.0000781	0.00132	0.10	0.0813	0.0946	0.0880	0.085 to 0.115	81.3	70 to 130	15.1	20
AX00210	Arsenic, Total	mg/L	0.0000169	0.0022	0.10	0.0926	0.110	0.0963	0.085 to 0.115	92.6	70 to 130	16.8	20
AX00210	Calcium, Total	mg/L	-0.00685	0.22	5.00	4.96	4.99	4.95	4.25 to 5.75	99.1	70 to 130	0.736	20
AX00210	Lithium, Total	mg/L	0.000618	0.022	0.20	0.216	0.217	0.214	0.17 to 0.23	108	70 to 130	0.617	20
AX00210	Selenium, Total	mg/L	0.0000905	0.0044	0.10	0.0905	0.104	0.0967	0.085 to 0.115	90.5	70 to 130	13.7	20
AX00210	Beryllium, Total	mg/L	0.0000210	0.00132	0.10	0.0966	0.107	0.103	0.085 to 0.115	96.6	70 to 130	10.1	20
AX00527	Mercury, Total by CVAA	mg/L	0.000112	0.0005	0.004	0.00370	0.00368	0.00369	0.0034 to 0.0046	92.5	70 to 130	0.504	20
AX00210	Boron, Total	mg/L	0.00576	0.044	1.00	0.958	0.929	0.917	0.85 to 1.15	95.8	70 to 130	3.04	20
AX00210	Cadmium, Total	mg/L	0.00000861	0.00044	0.10	0.0849	0.0979	0.0933	0.085 to 0.115	84.9	70 to 130	14.2	20
AX00210	Cobalt, Total	mg/L	0.00000694	0.0044	0.10	0.0799	0.0911	0.0920	0.085 to 0.115	79.9	70 to 130	13.0	20
AX00210	Lead, Total	mg/L	0.0000260	0.0022	0.10	0.0956	0.0990	0.0998	0.085 to 0.115	95.6	70 to 130	3.45	20
AX00210	Molybdenum, Total	mg/L	0.0000112	0.0044	0.10	0.0808	0.0905	0.0870	0.085 to 0.115	80.8	70 to 130	11.3	20
AX00210	Thallium, Total	mg/L	0.0000224	0.00044	0.10	0.0944	0.0967	0.0977	0.085 to 0.115	94.4	70 to 130	2.36	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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 03-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-31 Dup

Laboratory ID Number: AX00203

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX00207	Solids, Dissolved	mg/L	-1.0	25			1.3	53.0	40 to 60			0.00	5
AX00210	Chloride, Total	mg/L	0.00	0.25	10.00	9.98	0.00	10.0	9 to 11	99.8	80 to 120	0.00	20
AX00210	Fluoride, Total	mg/L	0.00	0.3	2.00	2.17	0.00	2.16	1.8 to 2.2	108	80 to 120	0.00	20
AX00210	Sulfate, Total	mg/L	-0.463	1.0	20.00	20.5	-0.464	20.4	18 to 22	102	80 to 120	0.00	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

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Reported: 7/20/2017
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Calera, AL 35040
(205) 664-6032 or 6171
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 04-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AX00204

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	J	0.00280	mg/L
* Barium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010		0.0518	mg/L
* Beryllium, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	J	0.00141	mg/L
* Boron, Total	HRG	1/24/2017	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	1/24/2017	EPA 200.7		1	0.1	0.5		4.97	mg/L
* Cadmium, Total	ABB	1/12/2017	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	J	0.00655	mg/L
* Chromium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	1/12/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	1/24/2017	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	ABB	1/12/2017	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	1/10/2017	SM 2540C		1		25		56.0	mg/L
* Chloride, Total	SES	1/11/2017	EPA 300.0		1	0.04	0.25		2.92	mg/L
* Fluoride, Total	SES	1/11/2017	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	1/11/2017	EPA 300.0		1	0.3	1		12.2	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 04-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AX00204

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX00210	Chromium, Total	mg/L	0.0000115	0.0044	0.10	0.0910	0.101	0.0948	0.085 to 0.115	91.0	70 to 130	10.1	20
AX00210	Barium, Total	mg/L	-0.00000198	0.0044	0.10	0.0828	0.0930	0.0901	0.085 to 0.115	82.8	70 to 130	11.6	20
AX00210	Antimony, Total	mg/L	0.0000781	0.00132	0.10	0.0813	0.0946	0.0880	0.085 to 0.115	81.3	70 to 130	15.1	20
AX00210	Arsenic, Total	mg/L	0.0000169	0.0022	0.10	0.0926	0.110	0.0963	0.085 to 0.115	92.6	70 to 130	16.8	20
AX00210	Beryllium, Total	mg/L	0.0000210	0.00132	0.10	0.0966	0.107	0.103	0.085 to 0.115	96.6	70 to 130	10.1	20
AX00527	Mercury, Total by CVAA	mg/L	0.000112	0.0005	0.004	0.00370	0.00368	0.00369	0.0034 to 0.0046	92.5	70 to 130	0.504	20
AX00210	Calcium, Total	mg/L	-0.00685	0.22	5.00	4.96	4.99	4.95	4.25 to 5.75	99.1	70 to 130	0.736	20
AX00210	Lithium, Total	mg/L	0.000618	0.022	0.20	0.216	0.217	0.214	0.17 to 0.23	108	70 to 130	0.617	20
AX00210	Selenium, Total	mg/L	0.0000905	0.0044	0.10	0.0905	0.104	0.0967	0.085 to 0.115	90.5	70 to 130	13.7	20
AX00210	Boron, Total	mg/L	0.00576	0.044	1.00	0.958	0.929	0.917	0.85 to 1.15	95.8	70 to 130	3.04	20
AX00210	Cadmium, Total	mg/L	0.00000861	0.00044	0.10	0.0849	0.0979	0.0933	0.085 to 0.115	84.9	70 to 130	14.2	20
AX00210	Cobalt, Total	mg/L	0.00000694	0.0044	0.10	0.0799	0.0911	0.0920	0.085 to 0.115	79.9	70 to 130	13.0	20
AX00210	Lead, Total	mg/L	0.0000260	0.0022	0.10	0.0956	0.0990	0.0998	0.085 to 0.115	95.6	70 to 130	3.45	20
AX00210	Molybdenum, Total	mg/L	0.0000112	0.0044	0.10	0.0808	0.0905	0.0870	0.085 to 0.115	80.8	70 to 130	11.3	20
AX00210	Thallium, Total	mg/L	0.0000224	0.00044	0.10	0.0944	0.0967	0.0977	0.085 to 0.115	94.4	70 to 130	2.36	20

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Expiration: June 30, 2018

Comments:

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 04-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AX00204

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX00207	Solids, Dissolved	mg/L	-1.0	25			1.3	53.0	40 to 60			0.00	5
AX00210	Chloride, Total	mg/L	0.00	0.25	10.00	9.98	0.00	10.0	9 to 11	99.8	80 to 120	0.00	20
AX00210	Fluoride, Total	mg/L	0.00	0.3	2.00	2.17	0.00	2.16	1.8 to 2.2	108	80 to 120	0.00	20
AX00210	Sulfate, Total	mg/L	-0.463	1.0	20.00	20.5	-0.464	20.4	18 to 22	102	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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Reported: 7/20/2017
Version: 2.0

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Calera, AL 35040
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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 04-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AX00205

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	J	0.00123	mg/L
* Barium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010		0.0513	mg/L
* Beryllium, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	1/24/2017	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	1/24/2017	EPA 200.7		1	0.1	0.5		1.11	mg/L
* Cadmium, Total	ABB	1/12/2017	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	J	0.00859	mg/L
* Chromium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	1/12/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	1/24/2017	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	ABB	1/12/2017	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	1/10/2017	SM 2540C		1		25		34.0	mg/L
* Chloride, Total	SES	1/11/2017	EPA 300.0		1	0.04	0.25		2.15	mg/L
* Fluoride, Total	SES	1/11/2017	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	1/11/2017	EPA 300.0		1	0.3	1	U	Not Detected	mg/L

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(205) 664-6032 or 6171
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 04-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AX00205

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX00210	Chromium, Total	mg/L	0.0000115	0.0044	0.10	0.0910	0.101	0.0948	0.085 to 0.115	91.0	70 to 130	10.1	20
AX00210	Barium, Total	mg/L	-0.00000198	0.0044	0.10	0.0828	0.0930	0.0901	0.085 to 0.115	82.8	70 to 130	11.6	20
AX00210	Antimony, Total	mg/L	0.0000781	0.00132	0.10	0.0813	0.0946	0.0880	0.085 to 0.115	81.3	70 to 130	15.1	20
AX00210	Arsenic, Total	mg/L	0.0000169	0.0022	0.10	0.0926	0.110	0.0963	0.085 to 0.115	92.6	70 to 130	16.8	20
AX00210	Beryllium, Total	mg/L	0.0000210	0.00132	0.10	0.0966	0.107	0.103	0.085 to 0.115	96.6	70 to 130	10.1	20
AX00527	Mercury, Total by CVAA	mg/L	0.000112	0.0005	0.004	0.00370	0.00368	0.00369	0.0034 to 0.0046	92.5	70 to 130	0.504	20
AX00210	Boron, Total	mg/L	0.00576	0.044	1.00	0.958	0.929	0.917	0.85 to 1.15	95.8	70 to 130	3.04	20
AX00210	Cadmium, Total	mg/L	0.00000861	0.00044	0.10	0.0849	0.0979	0.0933	0.085 to 0.115	84.9	70 to 130	14.2	20
AX00210	Cobalt, Total	mg/L	0.00000694	0.0044	0.10	0.0799	0.0911	0.0920	0.085 to 0.115	79.9	70 to 130	13.0	20
AX00210	Lead, Total	mg/L	0.0000260	0.0022	0.10	0.0956	0.0990	0.0998	0.085 to 0.115	95.6	70 to 130	3.45	20
AX00210	Molybdenum, Total	mg/L	0.0000112	0.0044	0.10	0.0808	0.0905	0.0870	0.085 to 0.115	80.8	70 to 130	11.3	20
AX00210	Thallium, Total	mg/L	0.0000224	0.00044	0.10	0.0944	0.0967	0.0977	0.085 to 0.115	94.4	70 to 130	2.36	20
AX00210	Calcium, Total	mg/L	-0.00685	0.22	5.00	4.96	4.99	4.95	4.25 to 5.75	99.1	70 to 130	0.736	20
AX00210	Lithium, Total	mg/L	0.000618	0.022	0.20	0.216	0.217	0.214	0.17 to 0.23	108	70 to 130	0.617	20
AX00210	Selenium, Total	mg/L	0.0000905	0.0044	0.10	0.0905	0.104	0.0967	0.085 to 0.115	90.5	70 to 130	13.7	20

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 04-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AX00205

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX00207	Solids, Dissolved	mg/L	-1.0	25			1.3	53.0	40 to 60			0.00	5
AX00210	Chloride, Total	mg/L	0.00	0.25	10.00	9.98	0.00	10.0	9 to 11	99.8	80 to 120	0.00	20
AX00210	Fluoride, Total	mg/L	0.00	0.3	2.00	2.17	0.00	2.16	1.8 to 2.2	108	80 to 120	0.00	20
AX00210	Sulfate, Total	mg/L	-0.463	1.0	20.00	20.5	-0.464	20.4	18 to 22	102	80 to 120	0.00	20

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 04-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AX00206

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010		0.299	mg/L
* Beryllium, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	1/24/2017	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	1/24/2017	EPA 200.7		1	0.1	0.5		2.70	mg/L
* Cadmium, Total	ABB	1/12/2017	EPA 200.8		5	0.0002	0.0010	J	0.000718	mg/L
* Cobalt, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	J	0.00448	mg/L
* Chromium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	1/12/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	1/24/2017	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	ABB	1/12/2017	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	1/10/2017	SM 2540C		1		25		42.0	mg/L
* Chloride, Total	SES	1/11/2017	EPA 300.0		1	0.04	0.25		1.58	mg/L
* Fluoride, Total	SES	1/11/2017	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	1/11/2017	EPA 300.0		1	0.3	1		7.85	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 04-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AX00206

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX00210	Chromium, Total	mg/L	0.0000115	0.0044	0.10	0.0910	0.101	0.0948	0.085 to 0.115	91.0	70 to 130	10.1	20
AX00210	Barium, Total	mg/L	-0.00000198	0.0044	0.10	0.0828	0.0930	0.0901	0.085 to 0.115	82.8	70 to 130	11.6	20
AX00210	Antimony, Total	mg/L	0.0000781	0.00132	0.10	0.0813	0.0946	0.0880	0.085 to 0.115	81.3	70 to 130	15.1	20
AX00210	Arsenic, Total	mg/L	0.0000169	0.0022	0.10	0.0926	0.110	0.0963	0.085 to 0.115	92.6	70 to 130	16.8	20
AX00210	Calcium, Total	mg/L	-0.00685	0.22	5.00	4.96	4.99	4.95	4.25 to 5.75	99.1	70 to 130	0.736	20
AX00210	Lithium, Total	mg/L	0.000618	0.022	0.20	0.216	0.217	0.214	0.17 to 0.23	108	70 to 130	0.617	20
AX00210	Selenium, Total	mg/L	0.0000905	0.0044	0.10	0.0905	0.104	0.0967	0.085 to 0.115	90.5	70 to 130	13.7	20
AX00210	Beryllium, Total	mg/L	0.0000210	0.00132	0.10	0.0966	0.107	0.103	0.085 to 0.115	96.6	70 to 130	10.1	20
AX00527	Mercury, Total by CVAA	mg/L	0.000112	0.0005	0.004	0.00370	0.00368	0.00369	0.0034 to 0.0046	92.5	70 to 130	0.504	20
AX00210	Boron, Total	mg/L	0.00576	0.044	1.00	0.958	0.929	0.917	0.85 to 1.15	95.8	70 to 130	3.04	20
AX00210	Cadmium, Total	mg/L	0.00000861	0.00044	0.10	0.0849	0.0979	0.0933	0.085 to 0.115	84.9	70 to 130	14.2	20
AX00210	Cobalt, Total	mg/L	0.00000694	0.0044	0.10	0.0799	0.0911	0.0920	0.085 to 0.115	79.9	70 to 130	13.0	20
AX00210	Lead, Total	mg/L	0.0000260	0.0022	0.10	0.0956	0.0990	0.0998	0.085 to 0.115	95.6	70 to 130	3.45	20
AX00210	Molybdenum, Total	mg/L	0.0000112	0.0044	0.10	0.0808	0.0905	0.0870	0.085 to 0.115	80.8	70 to 130	11.3	20
AX00210	Thallium, Total	mg/L	0.0000224	0.00044	0.10	0.0944	0.0967	0.0977	0.085 to 0.115	94.4	70 to 130	2.36	20

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 04-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AX00206

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX00207	Solids, Dissolved	mg/L	-1.0	25			1.3	53.0	40 to 60			0.00	5
AX00210	Chloride, Total	mg/L	0.00	0.25	10.00	9.98	0.00	10.0	9 to 11	99.8	80 to 120	0.00	20
AX00210	Fluoride, Total	mg/L	0.00	0.3	2.00	2.17	0.00	2.16	1.8 to 2.2	108	80 to 120	0.00	20
AX00210	Sulfate, Total	mg/L	-0.463	1.0	20.00	20.5	-0.464	20.4	18 to 22	102	80 to 120	0.00	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

CC:

Reported: 7/20/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 04-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX00207

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Beryllium, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	1/24/2017	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	1/24/2017	EPA 200.7		1	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	ABB	1/12/2017	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	1/12/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	1/24/2017	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	ABB	1/12/2017	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	1/10/2017	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	1/11/2017	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	1/11/2017	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	1/11/2017	EPA 300.0		1	0.3	1	U	Not Detected	mg/L

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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:

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 04-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX00207

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX00210	Barium, Total	mg/L	-0.00000198	0.0044	0.10	0.0828	0.0930	0.0901	0.085 to 0.115	82.8	70 to 130	11.6	20
AX00210	Chromium, Total	mg/L	0.0000115	0.0044	0.10	0.0910	0.101	0.0948	0.085 to 0.115	91.0	70 to 130	10.1	20
AX00210	Antimony, Total	mg/L	0.0000781	0.00132	0.10	0.0813	0.0946	0.0880	0.085 to 0.115	81.3	70 to 130	15.1	20
AX00210	Arsenic, Total	mg/L	0.0000169	0.0022	0.10	0.0926	0.110	0.0963	0.085 to 0.115	92.6	70 to 130	16.8	20
AX00210	Beryllium, Total	mg/L	0.0000210	0.00132	0.10	0.0966	0.107	0.103	0.085 to 0.115	96.6	70 to 130	10.1	20
AX00527	Mercury, Total by CVAA	mg/L	0.000112	0.0005	0.004	0.00370	0.00368	0.00369	0.0034 to 0.0046	92.5	70 to 130	0.504	20
AX00210	Calcium, Total	mg/L	-0.00685	0.22	5.00	4.96	4.99	4.95	4.25 to 5.75	99.1	70 to 130	0.736	20
AX00210	Lithium, Total	mg/L	0.000618	0.022	0.20	0.216	0.217	0.214	0.17 to 0.23	108	70 to 130	0.617	20
AX00210	Selenium, Total	mg/L	0.0000905	0.0044	0.10	0.0905	0.104	0.0967	0.085 to 0.115	90.5	70 to 130	13.7	20
AX00210	Boron, Total	mg/L	0.00576	0.044	1.00	0.958	0.929	0.917	0.85 to 1.15	95.8	70 to 130	3.04	20
AX00210	Cadmium, Total	mg/L	0.00000861	0.00044	0.10	0.0849	0.0979	0.0933	0.085 to 0.115	84.9	70 to 130	14.2	20
AX00210	Cobalt, Total	mg/L	0.00000694	0.0044	0.10	0.0799	0.0911	0.0920	0.085 to 0.115	79.9	70 to 130	13.0	20
AX00210	Lead, Total	mg/L	0.0000260	0.0022	0.10	0.0956	0.0990	0.0998	0.085 to 0.115	95.6	70 to 130	3.45	20
AX00210	Molybdenum, Total	mg/L	0.0000112	0.0044	0.10	0.0808	0.0905	0.0870	0.085 to 0.115	80.8	70 to 130	11.3	20
AX00210	Thallium, Total	mg/L	0.0000224	0.00044	0.10	0.0944	0.0967	0.0977	0.085 to 0.115	94.4	70 to 130	2.36	20

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Comments:

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Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 04-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX00207

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX00207	Solids, Dissolved	mg/L	-1.0	25			1.3	53.0	40 to 60			0.00	5
AX00210	Chloride, Total	mg/L	0.00	0.25	10.00	9.98	0.00	10.0	9 to 11	99.8	80 to 120	0.00	20
AX00210	Fluoride, Total	mg/L	0.00	0.3	2.00	2.17	0.00	2.16	1.8 to 2.2	108	80 to 120	0.00	20
AX00210	Sulfate, Total	mg/L	-0.463	1.0	20.00	20.5	-0.464	20.4	18 to 22	102	80 to 120	0.00	20

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Calera, AL 35040
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 04-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AX00208

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010		0.0477	mg/L
* Beryllium, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	1/24/2017	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	1/24/2017	EPA 200.7		1	0.1	0.5		0.797	mg/L
* Cadmium, Total	ABB	1/12/2017	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	1/12/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	1/24/2017	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	ABB	1/12/2017	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	1/11/2017	SM 2540C		1		25		27.3	mg/L
* Chloride, Total	SES	1/11/2017	EPA 300.0		1	0.04	0.25		1.53	mg/L
* Fluoride, Total	SES	1/11/2017	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	1/11/2017	EPA 300.0		1	0.3	1	J	0.627	mg/L

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Expiration: June 30, 2018

Comments:

Reported: 7/20/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 04-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AX00208

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX00210	Chromium, Total	mg/L	0.0000115	0.0044	0.10	0.0910	0.101	0.0948	0.085 to 0.115	91.0	70 to 130	10.1	20
AX00210	Barium, Total	mg/L	-0.00000198	0.0044	0.10	0.0828	0.0930	0.0901	0.085 to 0.115	82.8	70 to 130	11.6	20
AX00210	Antimony, Total	mg/L	0.0000781	0.00132	0.10	0.0813	0.0946	0.0880	0.085 to 0.115	81.3	70 to 130	15.1	20
AX00210	Arsenic, Total	mg/L	0.0000169	0.0022	0.10	0.0926	0.110	0.0963	0.085 to 0.115	92.6	70 to 130	16.8	20
AX00210	Beryllium, Total	mg/L	0.0000210	0.00132	0.10	0.0966	0.107	0.103	0.085 to 0.115	96.6	70 to 130	10.1	20
AX00527	Mercury, Total by CVAA	mg/L	0.000112	0.0005	0.004	0.00370	0.00368	0.00369	0.0034 to 0.0046	92.5	70 to 130	0.504	20
AX00210	Calcium, Total	mg/L	-0.00685	0.22	5.00	4.96	4.99	4.95	4.25 to 5.75	99.1	70 to 130	0.736	20
AX00210	Lithium, Total	mg/L	0.000618	0.022	0.20	0.216	0.217	0.214	0.17 to 0.23	108	70 to 130	0.617	20
AX00210	Selenium, Total	mg/L	0.0000905	0.0044	0.10	0.0905	0.104	0.0967	0.085 to 0.115	90.5	70 to 130	13.7	20
AX00210	Boron, Total	mg/L	0.00576	0.044	1.00	0.958	0.929	0.917	0.85 to 1.15	95.8	70 to 130	3.04	20
AX00210	Cadmium, Total	mg/L	0.00000861	0.00044	0.10	0.0849	0.0979	0.0933	0.085 to 0.115	84.9	70 to 130	14.2	20
AX00210	Cobalt, Total	mg/L	0.00000694	0.0044	0.10	0.0799	0.0911	0.0920	0.085 to 0.115	79.9	70 to 130	13.0	20
AX00210	Lead, Total	mg/L	0.0000260	0.0022	0.10	0.0956	0.0990	0.0998	0.085 to 0.115	95.6	70 to 130	3.45	20
AX00210	Molybdenum, Total	mg/L	0.0000112	0.0044	0.10	0.0808	0.0905	0.0870	0.085 to 0.115	80.8	70 to 130	11.3	20
AX00210	Thallium, Total	mg/L	0.0000224	0.00044	0.10	0.0944	0.0967	0.0977	0.085 to 0.115	94.4	70 to 130	2.36	20

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 04-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AX00208

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX00210	Chloride, Total	mg/L	0.00	0.25	10.00	9.98	0.00	10.0	9 to 11	99.8	80 to 120	0.00	20
AX00210	Fluoride, Total	mg/L	0.00	0.3	2.00	2.17	0.00	2.16	1.8 to 2.2	108	80 to 120	0.00	20
AX00210	Solids, Dissolved	mg/L	5.00	25			2.0	56.0	40 to 60			0.00	5
AX00210	Sulfate, Total	mg/L	-0.463	1.0	20.00	20.5	-0.464	20.4	18 to 22	102	80 to 120	0.00	20

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 04-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AX00209

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010		0.0238	mg/L
* Beryllium, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	1/24/2017	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	1/24/2017	EPA 200.7		1	0.1	0.5		2.39	mg/L
* Cadmium, Total	ABB	1/12/2017	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	1/12/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	1/24/2017	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	ABB	1/12/2017	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	1/11/2017	SM 2540C		1		25		34.7	mg/L
* Chloride, Total	SES	1/11/2017	EPA 300.0		1	0.04	0.25		2.44	mg/L
* Fluoride, Total	SES	1/11/2017	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	1/11/2017	EPA 300.0		1	0.3	1	U	Not Detected	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 04-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AX00209

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX00210	Barium, Total	mg/L	-0.00000198	0.0044	0.10	0.0828	0.0930	0.0901	0.085 to 0.115	82.8	70 to 130	11.6	20
AX00210	Chromium, Total	mg/L	0.0000115	0.0044	0.10	0.0910	0.101	0.0948	0.085 to 0.115	91.0	70 to 130	10.1	20
AX00210	Antimony, Total	mg/L	0.0000781	0.00132	0.10	0.0813	0.0946	0.0880	0.085 to 0.115	81.3	70 to 130	15.1	20
AX00210	Arsenic, Total	mg/L	0.0000169	0.0022	0.10	0.0926	0.110	0.0963	0.085 to 0.115	92.6	70 to 130	16.8	20
AX00210	Boron, Total	mg/L	0.00576	0.044	1.00	0.958	0.929	0.917	0.85 to 1.15	95.8	70 to 130	3.04	20
AX00210	Cadmium, Total	mg/L	0.00000861	0.00044	0.10	0.0849	0.0979	0.0933	0.085 to 0.115	84.9	70 to 130	14.2	20
AX00210	Cobalt, Total	mg/L	0.00000694	0.0044	0.10	0.0799	0.0911	0.0920	0.085 to 0.115	79.9	70 to 130	13.0	20
AX00210	Lead, Total	mg/L	0.0000260	0.0022	0.10	0.0956	0.0990	0.0998	0.085 to 0.115	95.6	70 to 130	3.45	20
AX00210	Molybdenum, Total	mg/L	0.0000112	0.0044	0.10	0.0808	0.0905	0.0870	0.085 to 0.115	80.8	70 to 130	11.3	20
AX00210	Thallium, Total	mg/L	0.0000224	0.00044	0.10	0.0944	0.0967	0.0977	0.085 to 0.115	94.4	70 to 130	2.36	20
AX00210	Calcium, Total	mg/L	-0.00685	0.22	5.00	4.96	4.99	4.95	4.25 to 5.75	99.1	70 to 130	0.736	20
AX00210	Lithium, Total	mg/L	0.000618	0.022	0.20	0.216	0.217	0.214	0.17 to 0.23	108	70 to 130	0.617	20
AX00210	Selenium, Total	mg/L	0.0000905	0.0044	0.10	0.0905	0.104	0.0967	0.085 to 0.115	90.5	70 to 130	13.7	20
AX00210	Beryllium, Total	mg/L	0.0000210	0.00132	0.10	0.0966	0.107	0.103	0.085 to 0.115	96.6	70 to 130	10.1	20
AX00527	Mercury, Total by CVAA	mg/L	0.000112	0.0005	0.004	0.00370	0.00368	0.00369	0.0034 to 0.0046	92.5	70 to 130	0.504	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:

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 04-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AX00209

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX00210	Chloride, Total	mg/L	0.00	0.25	10.00	9.98	0.00	10.0	9 to 11	99.8	80 to 120	0.00	20
AX00210	Fluoride, Total	mg/L	0.00	0.3	2.00	2.17	0.00	2.16	1.8 to 2.2	108	80 to 120	0.00	20
AX00210	Solids, Dissolved	mg/L	5.00	25			2.0	56.0	40 to 60			0.00	5
AX00210	Sulfate, Total	mg/L	-0.463	1.0	20.00	20.5	-0.464	20.4	18 to 22	102	80 to 120	0.00	20

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Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 04-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AX00210

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	3/16/2017	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Beryllium, Total	ABB	1/12/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	1/24/2017	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	1/24/2017	EPA 200.7		1	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	ABB	1/12/2017	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	1/12/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	1/24/2017	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	ABB	1/12/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	1/12/2017	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	ABB	1/12/2017	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	1/11/2017	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	1/11/2017	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	1/11/2017	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	1/11/2017	EPA 300.0		1	0.3	1	U	Not Detected	mg/L

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 04-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AX00210

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX00210	Chromium, Total	mg/L	0.0000115	0.0044	0.10	0.0910	0.101	0.0948	0.085 to 0.115	91.0	70 to 130	10.1	20
AX00210	Barium, Total	mg/L	-0.00000198	0.0044	0.10	0.0828	0.0930	0.0901	0.085 to 0.115	82.8	70 to 130	11.6	20
AX00210	Beryllium, Total	mg/L	0.0000210	0.00132	0.10	0.0966	0.107	0.103	0.085 to 0.115	96.6	70 to 130	10.1	20
AX00527	Mercury, Total by CVAA	mg/L	0.000112	0.0005	0.004	0.00370	0.00368	0.00369	0.0034 to 0.0046	92.5	70 to 130	0.504	20
AX00210	Calcium, Total	mg/L	-0.00685	0.22	5.00	4.96	4.99	4.95	4.25 to 5.75	99.1	70 to 130	0.736	20
AX00210	Lithium, Total	mg/L	0.000618	0.022	0.20	0.216	0.217	0.214	0.17 to 0.23	108	70 to 130	0.617	20
AX00210	Selenium, Total	mg/L	0.0000905	0.0044	0.10	0.0905	0.104	0.0967	0.085 to 0.115	90.5	70 to 130	13.7	20
AX00210	Boron, Total	mg/L	0.00576	0.044	1.00	0.958	0.929	0.917	0.85 to 1.15	95.8	70 to 130	3.04	20
AX00210	Cadmium, Total	mg/L	0.00000861	0.00044	0.10	0.0849	0.0979	0.0933	0.085 to 0.115	84.9	70 to 130	14.2	20
AX00210	Cobalt, Total	mg/L	0.00000694	0.0044	0.10	0.0799	0.0911	0.0920	0.085 to 0.115	79.9	70 to 130	13.0	20
AX00210	Lead, Total	mg/L	0.0000260	0.0022	0.10	0.0956	0.0990	0.0998	0.085 to 0.115	95.6	70 to 130	3.45	20
AX00210	Molybdenum, Total	mg/L	0.0000112	0.0044	0.10	0.0808	0.0905	0.0870	0.085 to 0.115	80.8	70 to 130	11.3	20
AX00210	Thallium, Total	mg/L	0.0000224	0.00044	0.10	0.0944	0.0967	0.0977	0.085 to 0.115	94.4	70 to 130	2.36	20
AX00210	Antimony, Total	mg/L	0.0000781	0.00132	0.10	0.0813	0.0946	0.0880	0.085 to 0.115	81.3	70 to 130	15.1	20
AX00210	Arsenic, Total	mg/L	0.0000169	0.0022	0.10	0.0926	0.110	0.0963	0.085 to 0.115	92.6	70 to 130	16.8	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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 04-Jan-17
Customer ID:
Delivery Date: 05-Jan-17

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AX00210

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX00210	Chloride, Total	mg/L	0.00	0.25	10.00	9.98	0.00	10.0	9 to 11	99.8	80 to 120	0.00	20
AX00210	Fluoride, Total	mg/L	0.00	0.3	2.00	2.17	0.00	2.16	1.8 to 2.2	108	80 to 120	0.00	20
AX00210	Solids, Dissolved	mg/L	5.00	25			2.0	56.0	40 to 60			0.00	5
AX00210	Sulfate, Total	mg/L	-0.463	1.0	20.00	20.5	-0.464	20.4	18 to 22	102	80 to 120	0.00	20

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Calera, AL 35040
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Definitions

Alabama Power

Lab & Field SERVICES

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

Alabama Power Lab & Field SERVICES

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

✔ Field Complete
✔ Lab Complete

Lab ETA 01/05/2017 08:30

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Ben Rothschadl	Location	Greene Ash Pond

Analysis Requested	Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle
Comments	Radium Duplicate collected at MW-26

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-32	01/03/2017	13:30	3	Groundwater		AX00200
MW-33	01/03/2017	14:30	3	Groundwater		AX00201
MW-31	01/03/2017	15:37	3	Groundwater		AX00202
MW-31 DUP	01/03/2017	15:37	3	Sample Duplicate		AX00203
MW-26	01/04/2017	10:05	5	Groundwater		AX00204
MW-29	01/04/2017	11:25	3	Groundwater		AX00205
MW-28	01/04/2017	12:40	3	Groundwater		AX00206
FB-1	01/04/2017	12:50	3	Field Blank		AX00207
MW-27	01/04/2017	13:50	3	Groundwater		AX00208
MW-30	01/04/2017	14:55	3	Groundwater		AX00209
EB-1	01/04/2017	15:15	3	Equipment Blank		AX00210

Relinquished By	Received By	Date/Time
Ben Rothschadl	Sarah Copeland Digitally signed by Sarah Copeland Date: 2017.01.05 09:11:57 -06'00'	01/05/2017 09:11

SmarTroll ID	4696-23441-1-1	All metals and radiological bottles have pH < 2	✔
Turbidity ID	3901-20010-2-2	Cooler Temp	0.7 degrees C
		Thermometer ID	5408-27568-2-2
		pH Strip ID	5521-28271-20-15

4.1

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 400-132445-1
TestAmerica SDG: Greene County Ash Pond New Wells (5)
Client Project/Site: CCR Plant Greene

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

Attn: Sarah Copeland

Cheyenne Whitmire

Authorized for release by:
2/9/2017 11:15:28 AM

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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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QC Sample Results 22
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Job ID: 400-132445-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-132445-1

RAD

Method(s) PrecSep_0: Radium-228 Prep Batch 160-287892: The following samples were prepared at a reduced aliquot due to limited volume: AX00200 MW-32 (400-132445-1), AX00201 MW-33 (400-132445-2), AX00202 MW-31 (400-132445-3), AX00203 MW-31 DUP (400-132445-4), AX00205 MW-29 (400-132445-6), AX00206 MW-28 (400-132445-7), AX00207 FB-1 (400-132445-8), AX00208 MW-27 (400-132445-9), AX00209 MW-30 (400-132445-10) and AX00210 EB-1 (400-132445-11).

Method(s) PrecSep-21: Radium-226 Prep Batch 160-287878: The following samples were prepared at a reduced aliquot due to limited volume: AX00200 MW-32 (400-132445-1), AX00201 MW-33 (400-132445-2), AX00202 MW-31 (400-132445-3), AX00203 MW-31 DUP (400-132445-4), AX00205 MW-29 (400-132445-6), AX00206 MW-28 (400-132445-7), AX00207 FB-1 (400-132445-8), AX00208 MW-27 (400-132445-9), AX00209 MW-30 (400-132445-10) and AX00210 EB-1 (400-132445-11).

Method Summary

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

TestAmerica Job ID: 400-132445-1
SDG: Greene County Ash Pond New Wells (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 Greene

TestAmerica Job ID: 400-132445-1
SDG: Greene County Ash Pond New Wells (5)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-132445-1	AX00200 MW-32	Water	01/03/17 13:30	01/10/17 15:30
400-132445-2	AX00201 MW-33	Water	01/03/17 14:30	01/10/17 15:30
400-132445-3	AX00202 MW-31	Water	01/03/17 15:37	01/10/17 15:30
400-132445-4	AX00203 MW-31 DUP	Water	01/03/17 15:37	01/10/17 15:30
400-132445-5	AX00204 MW-26	Water	01/04/17 10:05	01/10/17 15:30
400-132445-6	AX00205 MW-29	Water	01/04/17 11:25	01/10/17 15:30
400-132445-7	AX00206 MW-28	Water	01/04/17 12:40	01/10/17 15:30
400-132445-8	AX00207 FB-1	Water	01/04/17 12:50	01/10/17 15:30
400-132445-9	AX00208 MW-27	Water	01/04/17 13:50	01/10/17 15:30
400-132445-10	AX00209 MW-30	Water	01/04/17 14:55	01/10/17 15:30
400-132445-11	AX00210 EB-1	Water	01/04/17 15:15	01/10/17 15:30

Client Sample ID: AX00200 MW-32

Date Collected: 01/03/17 13:30
Date Received: 01/10/17 15:30

Lab Sample ID: 400-132445-1

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	0.104	U	0.172	0.172	1.00	0.300	pCi/L	01/16/17 11:36	02/07/17 07:13	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.9*		*40 - 110*	*01/16/17 11:36*	*02/07/17 07:13*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.624**		0.392	0.396	1.00	0.601	pCi/L	01/16/17 12:16	02/04/17 16:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.3*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:02*	*1*
Y Carrier	*84.1*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:02*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.729**		0.428	0.432	5.00	0.601	pCi/L		02/07/17 17:25	1

Client Sample ID: AX00201 MW-33

Date Collected: 01/03/17 14:30
Date Received: 01/10/17 15:30

Lab Sample ID: 400-132445-2

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	0.290		0.197	0.198	1.00	0.264	pCi/L	01/16/17 11:36	02/07/17 07:13	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.9*		*40 - 110*	*01/16/17 11:36*	*02/07/17 07:13*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.544	U	0.455	0.458	1.00	0.727	pCi/L	01/16/17 12:16	02/04/17 16:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.9*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:02*	*1*
Y Carrier	*78.9*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:02*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.834		0.496	0.499	5.00	0.727	pCi/L		02/07/17 17:25	1

Client Sample ID: AX00202 MW-31

Date Collected: 01/03/17 15:37
Date Received: 01/10/17 15:30

Lab Sample ID: 400-132445-3

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	0.0790	U	0.179	0.179	1.00	0.323	pCi/L	01/16/17 11:36	02/07/17 07:13	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.5*		*40 - 110*	*01/16/17 11:36*	*02/07/17 07:13*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.394	U	0.391	0.393	1.00	0.634	pCi/L	01/16/17 12:16	02/04/17 16:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.5*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:02*	*1*
Y Carrier	*81.9*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:02*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.473	U	0.430	0.432	5.00	0.634	pCi/L		02/07/17 17:25	1

Client Sample ID: AX00203 MW-31 DUP

Date Collected: 01/03/17 15:37
Date Received: 01/10/17 15:30

Lab Sample ID: 400-132445-4

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	0.180	U	0.175	0.176	1.00	0.271	pCi/L	01/16/17 11:36	02/07/17 07:13	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.3*		*40 - 110*	*01/16/17 11:36*	*02/07/17 07:13*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**1.04**		0.440	0.451	1.00	0.620	pCi/L	01/16/17 12:16	02/04/17 16:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.3*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:02*	*1*
Y Carrier	*80.0*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:02*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.22**		0.474	0.484	5.00	0.620	pCi/L		02/07/17 17:25	1

Client Sample ID: AX00204 MW-26

Date Collected: 01/04/17 10:05
Date Received: 01/10/17 15:30

Lab Sample ID: 400-132445-5

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	0.213		0.150	0.151	1.00	0.208	pCi/L	01/16/17 11:36	02/07/17 07:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.3*		*40 - 110*	*01/16/17 11:36*	*02/07/17 07:14*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0417	U	0.250	0.250	1.00	0.446	pCi/L	01/16/17 12:16	02/04/17 16:02	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.3*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:02*	*1*
Y Carrier	*78.9*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:02*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.255	U	0.292	0.292	5.00	0.446	pCi/L		02/07/17 17:25	1

Client Sample ID: AX00205 MW-29

Date Collected: 01/04/17 11:25
Date Received: 01/10/17 15:30

Lab Sample ID: 400-132445-6

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	0.210	U	0.189	0.190	1.00	0.287	pCi/L	01/16/17 11:36	02/07/17 07:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*77.2*		*40 - 110*	*01/16/17 11:36*	*02/07/17 07:14*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.438	U	0.415	0.417	1.00	0.670	pCi/L	01/16/17 12:16	02/04/17 16:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*77.2*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:01*	*1*
Y Carrier	*82.2*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:01*	*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	0.648	U	0.456	0.458	5.00	0.670	pCi/L		02/07/17 17:25	1

Client Sample ID: AX00206 MW-28

Date Collected: 01/04/17 12:40
Date Received: 01/10/17 15:30

Lab Sample ID: 400-132445-7

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	0.821		0.285	0.295	1.00	0.263	pCi/L	01/16/17 11:36	02/07/17 07:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.9*		*40 - 110*	*01/16/17 11:36*	*02/07/17 07:14*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.721		0.391	0.397	1.00	0.578	pCi/L	01/16/17 12:16	02/04/17 16:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.9*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:01*	*1*
Y Carrier	*85.6*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:01*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.54		0.484	0.494	5.00	0.578	pCi/L		02/07/17 17:25	1

Client Sample ID: AX00207 FB-1

Date Collected: 01/04/17 12:50
Date Received: 01/10/17 15:30

Lab Sample ID: 400-132445-8

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	0.146	U	0.164	0.165	1.00	0.264	pCi/L	01/16/17 11:36	02/07/17 07:14	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*40 - 110*	*01/16/17 11:36*	*02/07/17 07:14*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.251	U	0.302	0.303	1.00	0.499	pCi/L	01/16/17 12:16	02/04/17 16:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:01*	*1*
Y Carrier	*83.0*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:01*	*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	0.397	U	0.344	0.345	5.00	0.499	pCi/L		02/07/17 17:25	1

Client Sample ID: AX00208 MW-27

Date Collected: 01/04/17 13:50
Date Received: 01/10/17 15:30

Lab Sample ID: 400-132445-9

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	0.178	U	0.162	0.163	1.00	0.241	pCi/L	01/16/17 11:36	02/07/17 07:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.2*		*40 - 110*	*01/16/17 11:36*	*02/07/17 07:15*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.178	U	0.323	0.323	1.00	0.551	pCi/L	01/16/17 12:16	02/04/17 16:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.2*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:01*	*1*
Y Carrier	*84.1*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:01*	*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	0.356	U	0.361	0.362	5.00	0.551	pCi/L		02/07/17 17:25	1

Client Sample ID: AX00209 MW-30

Date Collected: 01/04/17 14:55
Date Received: 01/10/17 15:30

Lab Sample ID: 400-132445-10

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	0.138	U	0.181	0.181	1.00	0.302	pCi/L	01/16/17 11:36	02/07/17 07:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.5*		*40 - 110*	*01/16/17 11:36*	*02/07/17 07:15*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.521	U	0.401	0.404	1.00	0.631	pCi/L	01/16/17 12:16	02/04/17 16:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.5*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:01*	*1*
Y Carrier	*80.4*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:01*	*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	**0.659**		0.440	0.443	5.00	0.631	pCi/L		02/07/17 17:25	1

Client Sample ID: AX00210 EB-1

Date Collected: 01/04/17 15:15
Date Received: 01/10/17 15:30

Lab Sample ID: 400-132445-11

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	-0.0656	U	0.140	0.140	1.00	0.311	pCi/L	01/16/17 11:36	02/07/17 07:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.8*		*40 - 110*	*01/16/17 11:36*	*02/07/17 07:15*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0898	U	0.313	0.313	1.00	0.551	pCi/L	01/16/17 12:16	02/04/17 16:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.8*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:01*	*1*
Y Carrier	*82.6*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:01*	*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	0.0242	U	0.343	0.343	5.00	0.551	pCi/L		02/07/17 17:25	1

Definitions/Glossary

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

TestAmerica Job ID: 400-132445-1
SDG: Greene County Ash Pond New Wells (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 Greene

TestAmerica Job ID: 400-132445-1
SDG: Greene County Ash Pond New Wells (5)

Client Sample ID: AX00200 MW-32

Lab Sample ID: 400-132445-1
Date Collected: 01/03/17 13:30
Matrix: Water
Date Received: 01/10/17 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			287878	01/16/17 11:36	AS	TAL SL
Total/NA	Analysis	9315		1	291371	02/07/17 07:13	RTM	TAL SL
Total/NA	Prep	PrecSep_0			287892	01/16/17 12:16	AS	TAL SL
Total/NA	Analysis	9320		1	290975	02/04/17 16:02	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	291406	02/07/17 17:25	RTM	TAL SL

Client Sample ID: AX00201 MW-33

Lab Sample ID: 400-132445-2
Date Collected: 01/03/17 14:30
Matrix: Water
Date Received: 01/10/17 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			287878	01/16/17 11:36	AS	TAL SL
Total/NA	Analysis	9315		1	291371	02/07/17 07:13	RTM	TAL SL
Total/NA	Prep	PrecSep_0			287892	01/16/17 12:16	AS	TAL SL
Total/NA	Analysis	9320		1	290975	02/04/17 16:02	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	291406	02/07/17 17:25	RTM	TAL SL

Client Sample ID: AX00202 MW-31

Lab Sample ID: 400-132445-3
Date Collected: 01/03/17 15:37
Matrix: Water
Date Received: 01/10/17 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			287878	01/16/17 11:36	AS	TAL SL
Total/NA	Analysis	9315		1	291371	02/07/17 07:13	RTM	TAL SL
Total/NA	Prep	PrecSep_0			287892	01/16/17 12:16	AS	TAL SL
Total/NA	Analysis	9320		1	290975	02/04/17 16:02	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	291406	02/07/17 17:25	RTM	TAL SL

Client Sample ID: AX00203 MW-31 DUP

Lab Sample ID: 400-132445-4
Date Collected: 01/03/17 15:37
Matrix: Water
Date Received: 01/10/17 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			287878	01/16/17 11:36	AS	TAL SL
Total/NA	Analysis	9315		1	291371	02/07/17 07:13	RTM	TAL SL
Total/NA	Prep	PrecSep_0			287892	01/16/17 12:16	AS	TAL SL
Total/NA	Analysis	9320		1	290975	02/04/17 16:02	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	291406	02/07/17 17:25	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-132445-1
SDG: Greene County Ash Pond New Wells (5)

Client Sample ID: AX00204 MW-26

Date Collected: 01/04/17 10:05
Date Received: 01/10/17 15:30

Lab Sample ID: 400-132445-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			287878	01/16/17 11:36	AS	TAL SL
Total/NA	Analysis	9315		1	291371	02/07/17 07:14	RTM	TAL SL
Total/NA	Prep	PrecSep_0			287892	01/16/17 12:16	AS	TAL SL
Total/NA	Analysis	9320		1	290975	02/04/17 16:02	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	291406	02/07/17 17:25	RTM	TAL SL

Client Sample ID: AX00205 MW-29

Date Collected: 01/04/17 11:25
Date Received: 01/10/17 15:30

Lab Sample ID: 400-132445-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			287878	01/16/17 11:36	AS	TAL SL
Total/NA	Analysis	9315		1	291371	02/07/17 07:14	RTM	TAL SL
Total/NA	Prep	PrecSep_0			287892	01/16/17 12:16	AS	TAL SL
Total/NA	Analysis	9320		1	290975	02/04/17 16:01	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	291406	02/07/17 17:25	RTM	TAL SL

Client Sample ID: AX00206 MW-28

Date Collected: 01/04/17 12:40
Date Received: 01/10/17 15:30

Lab Sample ID: 400-132445-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			287878	01/16/17 11:36	AS	TAL SL
Total/NA	Analysis	9315		1	291371	02/07/17 07:14	RTM	TAL SL
Total/NA	Prep	PrecSep_0			287892	01/16/17 12:16	AS	TAL SL
Total/NA	Analysis	9320		1	290975	02/04/17 16:01	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	291406	02/07/17 17:25	RTM	TAL SL

Client Sample ID: AX00207 FB-1

Date Collected: 01/04/17 12:50
Date Received: 01/10/17 15:30

Lab Sample ID: 400-132445-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			287878	01/16/17 11:36	AS	TAL SL
Total/NA	Analysis	9315		1	291371	02/07/17 07:14	RTM	TAL SL
Total/NA	Prep	PrecSep_0			287892	01/16/17 12:16	AS	TAL SL
Total/NA	Analysis	9320		1	290975	02/04/17 16:01	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	291406	02/07/17 17:25	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-132445-1
SDG: Greene County Ash Pond New Wells (5)

Client Sample ID: AX00208 MW-27

Lab Sample ID: 400-132445-9
Date Collected: 01/04/17 13:50
Matrix: Water
Date Received: 01/10/17 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			287878	01/16/17 11:36	AS	TAL SL
Total/NA	Analysis	9315		1	291371	02/07/17 07:15	RTM	TAL SL
Total/NA	Prep	PrecSep_0			287892	01/16/17 12:16	AS	TAL SL
Total/NA	Analysis	9320		1	290975	02/04/17 16:01	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	291406	02/07/17 17:25	RTM	TAL SL

Client Sample ID: AX00209 MW-30

Lab Sample ID: 400-132445-10
Date Collected: 01/04/17 14:55
Matrix: Water
Date Received: 01/10/17 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			287878	01/16/17 11:36	AS	TAL SL
Total/NA	Analysis	9315		1	291322	02/07/17 07:15	ALD	TAL SL
Total/NA	Prep	PrecSep_0			287892	01/16/17 12:16	AS	TAL SL
Total/NA	Analysis	9320		1	290975	02/04/17 16:01	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	291406	02/07/17 17:25	RTM	TAL SL

Client Sample ID: AX00210 EB-1

Lab Sample ID: 400-132445-11
Date Collected: 01/04/17 15:15
Matrix: Water
Date Received: 01/10/17 15:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			287878	01/16/17 11:36	AS	TAL SL
Total/NA	Analysis	9315		1	291322	02/07/17 07:15	ALD	TAL SL
Total/NA	Prep	PrecSep_0			287892	01/16/17 12:16	AS	TAL SL
Total/NA	Analysis	9320		1	290975	02/04/17 16:01	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	291406	02/07/17 17:25	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 Greene

TestAmerica Job ID: 400-132445-1
SDG: Greene County Ash Pond New Wells (5)

Rad

Prep Batch: 287878

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132445-1	AX00200 MW-32	Total/NA	Water	PrecSep-21	
400-132445-2	AX00201 MW-33	Total/NA	Water	PrecSep-21	
400-132445-3	AX00202 MW-31	Total/NA	Water	PrecSep-21	
400-132445-4	AX00203 MW-31 DUP	Total/NA	Water	PrecSep-21	
400-132445-5	AX00204 MW-26	Total/NA	Water	PrecSep-21	
400-132445-6	AX00205 MW-29	Total/NA	Water	PrecSep-21	
400-132445-7	AX00206 MW-28	Total/NA	Water	PrecSep-21	
400-132445-8	AX00207 FB-1	Total/NA	Water	PrecSep-21	
400-132445-9	AX00208 MW-27	Total/NA	Water	PrecSep-21	
400-132445-10	AX00209 MW-30	Total/NA	Water	PrecSep-21	
400-132445-11	AX00210 EB-1	Total/NA	Water	PrecSep-21	
MB 160-287878/1-B	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-287878/2-B	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-132445-5 DU	AX00204 MW-26	Total/NA	Water	PrecSep-21	

Prep Batch: 287892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132445-1	AX00200 MW-32	Total/NA	Water	PrecSep_0	
400-132445-2	AX00201 MW-33	Total/NA	Water	PrecSep_0	
400-132445-3	AX00202 MW-31	Total/NA	Water	PrecSep_0	
400-132445-4	AX00203 MW-31 DUP	Total/NA	Water	PrecSep_0	
400-132445-5	AX00204 MW-26	Total/NA	Water	PrecSep_0	
400-132445-6	AX00205 MW-29	Total/NA	Water	PrecSep_0	
400-132445-7	AX00206 MW-28	Total/NA	Water	PrecSep_0	
400-132445-8	AX00207 FB-1	Total/NA	Water	PrecSep_0	
400-132445-9	AX00208 MW-27	Total/NA	Water	PrecSep_0	
400-132445-10	AX00209 MW-30	Total/NA	Water	PrecSep_0	
400-132445-11	AX00210 EB-1	Total/NA	Water	PrecSep_0	
MB 160-287892/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-287892/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-132445-5 DU	AX00204 MW-26	Total/NA	Water	PrecSep_0	

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-287878/1-B
Matrix: Water
Analysis Batch: 291371

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 287878

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.08557	U	0.161	0.161	1.00	0.287	pCi/L	01/16/17 11:36	02/07/17 07:12	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.5*		*40 - 110*	*01/16/17 11:36*	*02/07/17 07:12*	*1*

Lab Sample ID: LCS 160-287878/2-B
Matrix: Water
Analysis Batch: 291371

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 287878

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			14.8	19.90		2.18	1.00	0.298	pCi/L	134	68 - 137		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*84.6*		*40 - 110*

Lab Sample ID: 400-132445-5 DU
Matrix: Water
Analysis Batch: 291371

Client Sample ID: AX00204 MW-26
Prep Type: Total/NA
Prep Batch: 287878

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.213			0.2398		0.162	1.00	0.224	pCi/L			0.09	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*82.3*		*40 - 110*

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-287892/1-A
Matrix: Water
Analysis Batch: 290975

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 287892

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.5158	U	0.531	0.534	1.00	0.867	pCi/L	01/16/17 12:16	02/04/17 16:02	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.5*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:02*	*1*
Y Carrier	*66.5*		*40 - 110*	*01/16/17 12:16*	*02/04/17 16:02*	*1*

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

Lab Sample ID: LCS 160-287892/2-A
Matrix: Water
Analysis Batch: 290975

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 287892

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			18.5	22.23		2.42	1.00	0.637	pCi/L	120	56 - 140		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*84.6*		*40 - 110*
Y Carrier	*80.4*		*40 - 110*

Lab Sample ID: 400-132445-5 DU
Matrix: Water
Analysis Batch: 290975

Client Sample ID: AX00204 MW-26
Prep Type: Total/NA
Prep Batch: 287892

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.0417	U		0.4521	U	0.310	1.00	0.476	pCi/L			0.73	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*82.3*		*40 - 110*
Y Carrier	*82.6*		*40 - 110*

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

Lab Sample ID: 400-132445-5 DU
Matrix: Water
Analysis Batch: 291406

Client Sample ID: AX00204 MW-26
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	0.255	U		0.6918		0.350	5.00	0.476	pCi/L			0.68	

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 Rothschadl	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 1
Company: Alabama Power General Test Laboratory				Job #: 400-132445
Address: 744 County Rd 87 GSC #8	Due Date Requested:	Analysis Requested		Preservation Codes:
City: Calera	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, 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)
State, Zip: AL, 35040				
Phone: 205-664-6121(Tel)	PO #:			Other:
Email: sgcopela@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Greene County Ash Pond New Wells (5)	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D		
AX00200	1/3/17	1330	G	Water			X	1	MW-32
AX00201	1/3/17	1430	G	Water			X	1	MW-33
AX00202	1/3/17	1537	G	Water			X	1	MW-31
AX00203	1/3/17	1537	G	Water			X	1	MW-31 Dup (Sample Duplicate)
AX00204	1/4/17	1005	G	Water		Y	X	3	MW-26
AX00205	1/4/17	1125	G	Water			X	1	MW-29
AX00206	1/4/17	1240	G	Water			X	1	MW-28
AX00207	1/4/17	1250	G	Water			X	1	FB-1 (Field Blank)
AX00208	1/4/17	1350	G	Water			X	1	MW-27
AX00209	1/4/17	1455	G	Water			X	1	MW-30
AX00210	1/4/17	1515	G	Water			X	1	EB-1 (Equipment Blank)

400-132445 COC

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Sarah Copeland	Date/Time: 01/10/2017; 1300	Company APC	Received by:	Date/Time: 1/10/17 1530	Company TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: ∆ Yes ∆ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 17.4°C, 17.6°C IR6

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-132445-1
SDG Number: Greene County Ash Pond New Wells (5)

Login Number: 132445
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	17.6°C, 17.4°C IR-6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

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

TestAmerica Job ID: 400-132445-1
SDG: Greene County Ash Pond New Wells (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	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-17
Louisiana	NELAP	6	30976	06-30-17
Louisiana (DW)	NELAP Secondary AB	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	MO00054	06-30-17
California	State Program	9	2886	03-31-18 *
Connecticut	State Program	1	PH-0241	03-31-17 *
Florida	NELAP	4	E87689	06-30-17
Illinois	NELAP	5	200023	11-30-17
Iowa	State Program	7	373	02-01-18
Kansas	NELAP	7	E-10236	10-31-17
Kentucky (DW)	State Program	4	90125	12-31-17
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-17
Louisiana (DW)	NELAP	6	LA170011	12-31-17
Maryland	State Program	3	310	09-30-17
Missouri	State Program	7	780	06-30-17
Nevada	State Program	9	MO000542017-1	07-31-17
New Jersey	NELAP	2	MO002	06-30-17
New York	NELAP	2	11616	03-31-17 *
North Dakota	State Program	8	R207	06-30-17

* Certification renewal pending - certification considered valid.

Certification Summary

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

TestAmerica Job ID: 400-132445-1
SDG: Greene County Ash Pond New Wells (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		P330-17-0028	02-02-20
Utah	NELAP	8	MO000542016-8	07-31-17
Virginia	NELAP	3	460230	06-14-17
Washington	State Program	10	C592	08-30-17
West Virginia DEP	State Program	3	381	08-31-17 *

* Certification renewal pending - certification considered valid.

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

Analytical Report

Alabama Power

Lab & Field SERVICES

Sample Group : WMWGREAP_26

Project/Site : Greene County Ash Pond
Demopolis, AL 36732

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

Alabama Power

Lab & Field SERVICES

Anions

Greene County Ash Pond

WMWGREAP_26

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

Sample ID	Chloride Batch ID	Fluoride Batch ID	Sulfate Batch ID	Project ID
AW14061	567045	567048	567051	WMWGREAP_26
AW14062	567045	567048	567051	WMWGREAP_26
AW14063	567045	567048	567051	WMWGREAP_26
AW14064	567045	567048	567051	WMWGREAP_26
AW14065	567045	567048	567051	WMWGREAP_26
AW14066	567046	567049	567052	WMWGREAP_26
AW14067	567046	567049	567052	WMWGREAP_26
AW14068	567046	567049	567052	WMWGREAP_26
AW14069	567046	567049	567052	WMWGREAP_26
AW14070	567046	567049	567052	WMWGREAP_26
AW14071	567046	567049	567052	WMWGREAP_26
AW14072	567046	567049	567052	WMWGREAP_26
AW14073	567046	567049	567052	WMWGREAP_26
AW14074	567046	567049	567052	WMWGREAP_26
AW14075	567046	567049	567052	WMWGREAP_26
AW14076	567047	567050	567053	WMWGREAP_26
AW14077	567047	567050	567053	WMWGREAP_26
AW14078	567047	567050	567053	WMWGREAP_26
AW14079	567047	567050	567053	WMWGREAP_26
AW14080	567047	567050	567053	WMWGREAP_26
AW14081	567047	567050	567053	WMWGREAP_26
AW14082	567047	567050	567053	WMWGREAP_26
AW14083	567047	567050	567053	WMWGREAP_26
AW14084	567047	567050	567053	WMWGREAP_26
AW14085	567146	567149	567152	WMWGREAP_26
AW14086	567146	567149	567152	WMWGREAP_26
AW14087	567146	567149	567152	WMWGREAP_26
AW14088	567146	567149	567152	WMWGREAP_26

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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 567052 presented a concentration above the MDL of 0.3 mg/L, at 0.480 mg/L. Samples AW14067, AW14069 and AW14074 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 567053 presented a concentration above the MDL of 0.3 mg/L, at 0.481 mg/L. All associated sample sulfate concentrations were above 10x the blank value, and no qualification was necessary.
    3. The blank for anion sulfate in batch 567152 presented a concentration above the MDL of 0.3 mg/L, at 0.483 mg/L. Sample AW14088 presented sulfate concentration above the MDL value but below 10x the blank result, and is qualified as quantitatively estimated with indication of potential high bias on the reported result.
- 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.

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

Alabama Power

Lab & Field SERVICES

7. Sample AW14066 was re-analyzed for chloride and sulfate at a 20x dilution, samples AW14070, AW14071 and AW14072 were re-analyzed for chloride and sulfate at a 10x dilution, and samples AW14068, AW14079, AW14080, AW14081, AW14085 and AW14086 were re-analyzed for sulfate at a 10x dilution, due to the undiluted results exceeding the calibrated range of the detector. The dilution results for chloride and sulfate for these respective samples should be used; reporting limit (RL) values are adjusted upward to reflect the dilution factor applied.

Sample ID		Analyte		Dilution Factor
AW14066		Chloride, Sulfate		20X
AW14068		Sulfate		10X
AW14070		Chloride, Sulfate		10X
AW14071		Chloride, Sulfate		10X
AW14072		Chloride, Sulfate		10X
AW14079		Sulfate		10X
AW14080		Sulfate		10X
AW14081		Sulfate		10X
AW14085		Sulfate		10X
AW14086		Sulfate		10X

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

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

Lab & Field SERVICES

Metals ICP

Greene County Ash Pond

WMWGREAP_26

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

Sample ID	Batch ID	Project ID
AW14061	20160623A	WMWGREAP_26
AW14062	20160623A	WMWGREAP_26
AW14063	20160623A	WMWGREAP_26
AW14064	20160623A	WMWGREAP_26
AW14065	20160623A	WMWGREAP_26
AW14066	20160623A	WMWGREAP_26
AW14067	20160623A	WMWGREAP_26
AW14068	20160623A	WMWGREAP_26
AW14069	20160623A	WMWGREAP_26
AW14070	20160623A	WMWGREAP_26
AW14071	20160623B	WMWGREAP_26
AW14072	20160623B	WMWGREAP_26
AW14073	20160623B	WMWGREAP_26
AW14074	20160623B	WMWGREAP_26
AW14075	20160623B	WMWGREAP_26
AW14076	20160623B	WMWGREAP_26
AW14077	20160623B	WMWGREAP_26
AW14078	20160623B	WMWGREAP_26
AW14079	20160623B	WMWGREAP_26
AW14080	20160623B	WMWGREAP_26
AW14081	20160623C_20160624	WMWGREAP_26
AW14082	20160623C_20160624	WMWGREAP_26
AW14083	20160623C_20160624	WMWGREAP_26
AW14084	20160623C_20160624	WMWGREAP_26
AW14085	20160623C_20160624	WMWGREAP_26
AW14086	20160623C_20160624	WMWGREAP_26
AW14087	20160623C_20160624	WMWGREAP_26
AW14088	20160623C_20160624	WMWGREAP_26

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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:

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

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

Sample ID	Analyte	Dilution Factor
AW14061	Calcium	10.15X
AW14062	Calcium	10.15X
AW14064	Calcium	10.15X

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AW14066	Calcium	10.15X
AW14067	Calcium	10.15X
AW14068	Calcium	10.15X
AW14070	Calcium	10.15X
AW14070MS	Calcium	10.15X
AW14070MSD	Calcium	10.15X
AW14071	Calcium	10.15X
AW14072	Calcium	10.15X
AW14076	Calcium	10.15X
AW14077	Calcium	10.15X
AW14079	Calcium	10.15X
AW14080	Calcium	10.15X
AW14080MS	Calcium	10.15X
AW14080MSD	Calcium	10.15X
AW14081	Calcium	10.15X
AW14084	Calcium	10.15X
AW14085	Calcium	10.15X
AW14086	Calcium	10.15X

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

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Case Narrative

Alabama Power

Lab & Field SERVICES

Metals ICPMS

Greene County Ash Pond

WMWGREAP_26

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

Sample ID	Batch ID	Project ID
AW14061	567402	WMWGREAP_26
AW14062	567402	WMWGREAP_26
AW14063	567402	WMWGREAP_26
AW14064	567402	WMWGREAP_26
AW14065	567402	WMWGREAP_26
AW14066	567402	WMWGREAP_26
AW14067	567402	WMWGREAP_26
AW14068	567402	WMWGREAP_26
AW14069	567402	WMWGREAP_26
AW14070	567402	WMWGREAP_26
AW14071	567403	WMWGREAP_26
AW14072	567403	WMWGREAP_26
AW14073	567403	WMWGREAP_26
AW14074	567403	WMWGREAP_26
AW14075	567403	WMWGREAP_26
AW14076	567403	WMWGREAP_26
AW14077	567403	WMWGREAP_26
AW14078	567403	WMWGREAP_26
AW14079	567403	WMWGREAP_26
AW14080	567403	WMWGREAP_26
AW14081	567404	WMWGREAP_26
AW14082	567404	WMWGREAP_26
AW14083	567404	WMWGREAP_26
AW14084	567404	WMWGREAP_26
AW14085	567404	WMWGREAP_26
AW14086	567404	WMWGREAP_26
AW14087	567404	WMWGREAP_26
AW14088	567404	WMWGREAP_26

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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 AW14080 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.

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Case Narrative

Alabama Power

Lab & Field SERVICES

Mercury

Greene County Ash Pond

WMWGREAP_26

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

Sample ID	Batch ID	Project ID
AW14061	567762	WMWGREAP_26
AW14062	567762	WMWGREAP_26
AW14063	567762	WMWGREAP_26
AW14064	567762	WMWGREAP_26
AW14065	567762	WMWGREAP_26
AW14066	567762	WMWGREAP_26
AW14067	567762	WMWGREAP_26
AW14068	567762	WMWGREAP_26
AW14069	567762	WMWGREAP_26
AW14070	567762	WMWGREAP_26
AW14071	567763	WMWGREAP_26
AW14072	567763	WMWGREAP_26
AW14073	567763	WMWGREAP_26
AW14074	567763	WMWGREAP_26
AW14075	567763	WMWGREAP_26
AW14076	567763	WMWGREAP_26
AW14077	567763	WMWGREAP_26
AW14078	567763	WMWGREAP_26
AW14079	567763	WMWGREAP_26
AW14080	567763	WMWGREAP_26
AW14081	567764	WMWGREAP_26
AW14082	567764	WMWGREAP_26
AW14083	567764	WMWGREAP_26
AW14084	567764	WMWGREAP_26
AW14085	567764	WMWGREAP_26
AW14086	567764	WMWGREAP_26
AW14087	567764	WMWGREAP_26
AW14088	567764	WMWGREAP_26

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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.

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Case Narrative

Alabama Power

Lab & Field SERVICES

TDS

Greene County Ash Pond

WMWGREAP_26

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

Sample ID	Batch ID	Project ID
AW14061	566751	WMWGREAP_26
AW14062	566751	WMWGREAP_26
AW14063	566751	WMWGREAP_26
AW14064	566751	WMWGREAP_26
AW14065	566751	WMWGREAP_26
AW14066	566751	WMWGREAP_26
AW14067	566751	WMWGREAP_26
AW14068	566751	WMWGREAP_26
AW14069	566751	WMWGREAP_26
AW14070	566751	WMWGREAP_26
AW14071	566752	WMWGREAP_26
AW14072	566752	WMWGREAP_26
AW14073	566752	WMWGREAP_26
AW14074	566752	WMWGREAP_26
AW14075	566752	WMWGREAP_26
AW14076	566752	WMWGREAP_26
AW14077	566753	WMWGREAP_26
AW14078	566753	WMWGREAP_26
AW14079	566753	WMWGREAP_26
AW14080	566753	WMWGREAP_26
AW14081	566753	WMWGREAP_26
AW14082	566753	WMWGREAP_26
AW14083	566753	WMWGREAP_26
AW14084	566754	WMWGREAP_26
AW14085	566754	WMWGREAP_26
AW14086	566754	WMWGREAP_26
AW14087	566754	WMWGREAP_26
AW14088	566754	WMWGREAP_26

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Case Narrative

Alabama Power

Lab & Field SERVICES

4. All of the above samples were analyzed by Standard Method 2540C.
5. All samples were analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.
7. The reporting limit for TDS was incorrectly listed as 2.5mg/L. It has been corrected based on filter volume and project limits. Samples AW14069, AW14074 and AW14088 are now reported as Not Detected.

General Quality Control Procedures:

- A blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5 mg of the previous weight.
- A sample duplicate was analyzed with each batch. RPD/2 was less than 5%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- All samples were between 2.5 mg and 200 mg residue with the exception of AW14065, AW14069, AW14074 and AW14088 which were <2.5mg.

Alabama Power General Test Laboratory
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AW14061

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005		0.330	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.354	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1		0.443	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		10.15	1.0	5.0		56.6	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0196	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05		0.0850	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	J	0.00261	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		25		320	mg/L
* Chloride, Total	SES	6/8/2016	EPA 300.0		1	0.04	0.25		16.8	mg/L
* Fluoride, Total	SES	6/8/2016	EPA 300.0		1	0.01	0.3	J	0.232	mg/L
* Sulfate, Total	SES	6/8/2016	EPA 300.0		1	0.3	1	J	0.518	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

Reported: 7/19/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AW14061

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14070	Calcium, Total	mg/L	0.103	0.22	5.00	80.7	80.1	4.93	4.25 to 5.75	86.0	70 to 130	0.746	20
AW14070	Boron, Total	mg/L	0.0178	0.044	1.00	2.47	2.48	0.967	0.85 to 1.15	98.0	70 to 130	0.404	20
AW14070	Chromium, Total	mg/L	0.0000210	0.0044	0.10	0.0955	0.100	0.0954	0.085 to 0.115	95.5	70 to 130	4.89	20
AW14070	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0958	0.0990	0.0999	0.085 to 0.115	95.8	70 to 130	3.29	20
AW14070	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.106	0.117	0.106	0.085 to 0.115	106	70 to 130	10.6	20
AW14070	Lead, Total	mg/L	0.00000409	0.0022	0.10	0.0938	0.0981	0.0944	0.085 to 0.115	93.8	70 to 130	4.43	20
AW14070	Selenium, Total	mg/L	0.0000532	0.0044	0.10	0.0929	0.0995	0.102	0.085 to 0.115	92.9	70 to 130	6.86	20
AW14070	Thallium, Total	mg/L	0.00000531	0.00044	0.10	0.0945	0.0987	0.0946	0.085 to 0.115	94.5	70 to 130	4.32	20
AW14070	Cobalt, Total	mg/L	-0.000000297	0.0044	0.10	0.110	0.116	0.0957	0.085 to 0.115	96.1	70 to 130	5.19	20
AW14070	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00385	0.00378	0.00396	0.0034 to 0.0046	96.2	70 to 130	1.83	20
AW14070	Molybdenum, Total	mg/L	0.0000369	0.0044	0.10	0.0940	0.0982	0.0937	0.085 to 0.115	94.0	70 to 130	4.34	20
AW14070	Antimony, Total	mg/L	0.000186	0.00132	0.10	0.0884	0.0919	0.0888	0.085 to 0.115	88.4	70 to 130	3.80	20
AW14070	Barium, Total	mg/L	0.00000952	0.0044	0.10	0.191	0.200	0.0903	0.085 to 0.115	86.0	70 to 130	4.67	20
AW14070	Cadmium, Total	mg/L	0.00000419	0.00044	0.10	0.0955	0.0987	0.0959	0.085 to 0.115	95.5	70 to 130	3.26	20
AW14070	Lithium, Total	mg/L	0.00406	0.022	0.20	0.239	0.236	0.199	0.17 to 0.23	114	70 to 130	1.26	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. SGC 1/26/17
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

Reported: 7/19/2017
Version: 2.0

Alabama Power General Test Laboratory
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AW14061

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW13176	Sulfate, Total	mg/L	0.000	1.0	20.00	20.5	0.482	19.6	18 to 22	102	80 to 120	0	20
AW13176	Fluoride, Total	mg/L	0.00	0.3	2.00	2.08	0.00	1.99	1.8 to 2.2	104	80 to 120	0	20
AW14061	Solids, Dissolved	mg/L	8	25			315	54	40 to 60			0.787	5
AW13176	Chloride, Total	mg/L	0.00	0.25	10.00	10.2	0.00	10.1	9 to 11	102	80 to 120	0	20

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

CC:

Reported: 7/19/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-5 Dup

Laboratory ID Number: AW14062

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005		0.319	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.340	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1		0.441	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		10.15	1.0	5.0		57.2	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0192	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05		0.0847	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	J	0.00244	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		25		320	mg/L
* Chloride, Total	SES	6/8/2016	EPA 300.0		1	0.04	0.25		16.7	mg/L
* Fluoride, Total	SES	6/8/2016	EPA 300.0		1	0.01	0.3	J	0.230	mg/L
* Sulfate, Total	SES	6/8/2016	EPA 300.0		1	0.3	1	J	0.518	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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-5 Dup

Laboratory ID Number: AW14062

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14070	Calcium, Total	mg/L	0.103	0.22	5.00	80.7	80.1	4.93	4.25 to 5.75	86.0	70 to 130	0.746	20
AW14070	Selenium, Total	mg/L	0.0000532	0.0044	0.10	0.0929	0.0995	0.102	0.085 to 0.115	92.9	70 to 130	6.86	20
AW14070	Thallium, Total	mg/L	0.00000531	0.00044	0.10	0.0945	0.0987	0.0946	0.085 to 0.115	94.5	70 to 130	4.32	20
AW14070	Cobalt, Total	mg/L	-0.000000297	0.0044	0.10	0.110	0.116	0.0957	0.085 to 0.115	96.1	70 to 130	5.19	20
AW14070	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00385	0.00378	0.00396	0.0034 to 0.0046	96.2	70 to 130	1.83	20
AW14070	Molybdenum, Total	mg/L	0.0000369	0.0044	0.10	0.0940	0.0982	0.0937	0.085 to 0.115	94.0	70 to 130	4.34	20
AW14070	Cadmium, Total	mg/L	0.00000419	0.00044	0.10	0.0955	0.0987	0.0959	0.085 to 0.115	95.5	70 to 130	3.26	20
AW14070	Lithium, Total	mg/L	0.00406	0.022	0.20	0.239	0.236	0.199	0.17 to 0.23	114	70 to 130	1.26	20
AW14070	Boron, Total	mg/L	0.0178	0.044	1.00	2.47	2.48	0.967	0.85 to 1.15	98.0	70 to 130	0.404	20
AW14070	Chromium, Total	mg/L	0.0000210	0.0044	0.10	0.0955	0.100	0.0954	0.085 to 0.115	95.5	70 to 130	4.89	20
AW14070	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0958	0.0990	0.0999	0.085 to 0.115	95.8	70 to 130	3.29	20
AW14070	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.106	0.117	0.106	0.085 to 0.115	106	70 to 130	10.6	20
AW14070	Lead, Total	mg/L	0.00000409	0.0022	0.10	0.0938	0.0981	0.0944	0.085 to 0.115	93.8	70 to 130	4.43	20
AW14070	Antimony, Total	mg/L	0.000186	0.00132	0.10	0.0884	0.0919	0.0888	0.085 to 0.115	88.4	70 to 130	3.80	20
AW14070	Barium, Total	mg/L	0.00000952	0.0044	0.10	0.191	0.200	0.0903	0.085 to 0.115	86.0	70 to 130	4.67	20

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Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-5 Dup

Laboratory ID Number: AW14062

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW13176	Fluoride, Total	mg/L	0.00	0.3	2.00	2.08	0.00	1.99	1.8 to 2.2	104	80 to 120	0	20
AW13176	Sulfate, Total	mg/L	0.000	1.0	20.00	20.5	0.482	19.6	18 to 22	102	80 to 120	0	20
AW13176	Chloride, Total	mg/L	0.00	0.25	10.00	10.2	0.00	10.1	9 to 11	102	80 to 120	0	20
AW14061	Solids, Dissolved	mg/L	8	25			315	54	40 to 60			0.787	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: 7/19/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AW14063

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005		0.00630	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0907	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1		0.615	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		1.015	0.1	0.5		17.7	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0405	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05		0.0721	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	J	0.00546	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		25		173	mg/L
* Chloride, Total	SES	6/8/2016	EPA 300.0		1	0.04	0.25		19.0	mg/L
* Fluoride, Total	SES	6/8/2016	EPA 300.0		1	0.01	0.3	J	0.134	mg/L
* Sulfate, Total	SES	6/8/2016	EPA 300.0		1	0.3	1		28.1	mg/L

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Calera, AL 35040
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AW14063

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14070	Calcium, Total	mg/L	0.103	0.22	5.00	80.7	80.1	4.93	4.25 to 5.75	86.0	70 to 130	0.746	20
AW14070	Boron, Total	mg/L	0.0178	0.044	1.00	2.47	2.48	0.967	0.85 to 1.15	98.0	70 to 130	0.404	20
AW14070	Chromium, Total	mg/L	0.0000210	0.0044	0.10	0.0955	0.100	0.0954	0.085 to 0.115	95.5	70 to 130	4.89	20
AW14070	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0958	0.0990	0.0999	0.085 to 0.115	95.8	70 to 130	3.29	20
AW14070	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.106	0.117	0.106	0.085 to 0.115	106	70 to 130	10.6	20
AW14070	Lead, Total	mg/L	0.00000409	0.0022	0.10	0.0938	0.0981	0.0944	0.085 to 0.115	93.8	70 to 130	4.43	20
AW14070	Cadmium, Total	mg/L	0.00000419	0.00044	0.10	0.0955	0.0987	0.0959	0.085 to 0.115	95.5	70 to 130	3.26	20
AW14070	Lithium, Total	mg/L	0.00406	0.022	0.20	0.239	0.236	0.199	0.17 to 0.23	114	70 to 130	1.26	20
AW14070	Selenium, Total	mg/L	0.0000532	0.0044	0.10	0.0929	0.0995	0.102	0.085 to 0.115	92.9	70 to 130	6.86	20
AW14070	Thallium, Total	mg/L	0.00000531	0.00044	0.10	0.0945	0.0987	0.0946	0.085 to 0.115	94.5	70 to 130	4.32	20
AW14070	Antimony, Total	mg/L	0.000186	0.00132	0.10	0.0884	0.0919	0.0888	0.085 to 0.115	88.4	70 to 130	3.80	20
AW14070	Barium, Total	mg/L	0.00000952	0.0044	0.10	0.191	0.200	0.0903	0.085 to 0.115	86.0	70 to 130	4.67	20
AW14070	Cobalt, Total	mg/L	-0.000000297	0.0044	0.10	0.110	0.116	0.0957	0.085 to 0.115	96.1	70 to 130	5.19	20
AW14070	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00385	0.00378	0.00396	0.0034 to 0.0046	96.2	70 to 130	1.83	20
AW14070	Molybdenum, Total	mg/L	0.0000369	0.0044	0.10	0.0940	0.0982	0.0937	0.085 to 0.115	94.0	70 to 130	4.34	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

Reported: 7/19/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AW14063

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW13176	Fluoride, Total	mg/L	0.00	0.3	2.00	2.08	0.00	1.99	1.8 to 2.2	104	80 to 120	0	20
AW13176	Sulfate, Total	mg/L	0.000	1.0	20.00	20.5	0.482	19.6	18 to 22	102	80 to 120	0	20
AW14061	Solids, Dissolved	mg/L	8	25			315	54	40 to 60			0.787	5
AW13176	Chloride, Total	mg/L	0.00	0.25	10.00	10.2	0.00	10.1	9 to 11	102	80 to 120	0	20

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CC:

Reported: 7/19/2017
Version: 2.0

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(205) 664-6032 or 6171
FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AW14064

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005		0.0125	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.158	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1		1.26	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		10.15	1.0	5.0		65.9	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0146	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05		0.127	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0106	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		25		333	mg/L
* Chloride, Total	SES	6/8/2016	EPA 300.0		1	0.04	0.25		19.2	mg/L
* Fluoride, Total	SES	6/8/2016	EPA 300.0		1	0.01	0.3	J	0.255	mg/L
* Sulfate, Total	SES	6/8/2016	EPA 300.0		1	0.3	1		10.2	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AW14064

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14070	Calcium, Total	mg/L	0.103	0.22	5.00	80.7	80.1	4.93	4.25 to 5.75	86.0	70 to 130	0.746	20
AW14070	Antimony, Total	mg/L	0.000186	0.00132	0.10	0.0884	0.0919	0.0888	0.085 to 0.115	88.4	70 to 130	3.80	20
AW14070	Barium, Total	mg/L	0.00000952	0.0044	0.10	0.191	0.200	0.0903	0.085 to 0.115	86.0	70 to 130	4.67	20
AW14070	Boron, Total	mg/L	0.0178	0.044	1.00	2.47	2.48	0.967	0.85 to 1.15	98.0	70 to 130	0.404	20
AW14070	Chromium, Total	mg/L	0.0000210	0.0044	0.10	0.0955	0.100	0.0954	0.085 to 0.115	95.5	70 to 130	4.89	20
AW14070	Selenium, Total	mg/L	0.0000532	0.0044	0.10	0.0929	0.0995	0.102	0.085 to 0.115	92.9	70 to 130	6.86	20
AW14070	Thallium, Total	mg/L	0.00000531	0.00044	0.10	0.0945	0.0987	0.0946	0.085 to 0.115	94.5	70 to 130	4.32	20
AW14070	Cadmium, Total	mg/L	0.00000419	0.00044	0.10	0.0955	0.0987	0.0959	0.085 to 0.115	95.5	70 to 130	3.26	20
AW14070	Lithium, Total	mg/L	0.00406	0.022	0.20	0.239	0.236	0.199	0.17 to 0.23	114	70 to 130	1.26	20
AW14070	Cobalt, Total	mg/L	-0.000000297	0.0044	0.10	0.110	0.116	0.0957	0.085 to 0.115	96.1	70 to 130	5.19	20
AW14070	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00385	0.00378	0.00396	0.0034 to 0.0046	96.2	70 to 130	1.83	20
AW14070	Molybdenum, Total	mg/L	0.0000369	0.0044	0.10	0.0940	0.0982	0.0937	0.085 to 0.115	94.0	70 to 130	4.34	20
AW14070	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0958	0.0990	0.0999	0.085 to 0.115	95.8	70 to 130	3.29	20
AW14070	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.106	0.117	0.106	0.085 to 0.115	106	70 to 130	10.6	20
AW14070	Lead, Total	mg/L	0.00000409	0.0022	0.10	0.0938	0.0981	0.0944	0.085 to 0.115	93.8	70 to 130	4.43	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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AW14064

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW13176	Sulfate, Total	mg/L	0.000	1.0	20.00	20.5	0.482	19.6	18 to 22	102	80 to 120	0	20
AW13176	Chloride, Total	mg/L	0.00	0.25	10.00	10.2	0.00	10.1	9 to 11	102	80 to 120	0	20
AW13176	Fluoride, Total	mg/L	0.00	0.3	2.00	2.08	0.00	1.99	1.8 to 2.2	104	80 to 120	0	20
AW14061	Solids, Dissolved	mg/L	8	25			315	54	40 to 60			0.787	5

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CC:

Reported: 7/19/2017
Version: 2.0

Alabama Power General Test Laboratory
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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW14065

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		1.015	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	6/8/2016	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	6/8/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	6/8/2016	EPA 300.0		1	0.3	1	U	Not Detected	mg/L

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Reported: 7/19/2017
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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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW14065

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14070	Calcium, Total	mg/L	0.103	0.22	5.00	80.7	80.1	4.93	4.25 to 5.75	86.0	70 to 130	0.746	20
AW14070	Antimony, Total	mg/L	0.000186	0.00132	0.10	0.0884	0.0919	0.0888	0.085 to 0.115	88.4	70 to 130	3.80	20
AW14070	Barium, Total	mg/L	0.00000952	0.0044	0.10	0.191	0.200	0.0903	0.085 to 0.115	86.0	70 to 130	4.67	20
AW14070	Cobalt, Total	mg/L	-0.000000297	0.0044	0.10	0.110	0.116	0.0957	0.085 to 0.115	96.1	70 to 130	5.19	20
AW14070	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00385	0.00378	0.00396	0.0034 to 0.0046	96.2	70 to 130	1.83	20
AW14070	Molybdenum, Total	mg/L	0.0000369	0.0044	0.10	0.0940	0.0982	0.0937	0.085 to 0.115	94.0	70 to 130	4.34	20
AW14070	Selenium, Total	mg/L	0.0000532	0.0044	0.10	0.0929	0.0995	0.102	0.085 to 0.115	92.9	70 to 130	6.86	20
AW14070	Thallium, Total	mg/L	0.00000531	0.00044	0.10	0.0945	0.0987	0.0946	0.085 to 0.115	94.5	70 to 130	4.32	20
AW14070	Cadmium, Total	mg/L	0.00000419	0.00044	0.10	0.0955	0.0987	0.0959	0.085 to 0.115	95.5	70 to 130	3.26	20
AW14070	Lithium, Total	mg/L	0.00406	0.022	0.20	0.239	0.236	0.199	0.17 to 0.23	114	70 to 130	1.26	20
AW14070	Boron, Total	mg/L	0.0178	0.044	1.00	2.47	2.48	0.967	0.85 to 1.15	98.0	70 to 130	0.404	20
AW14070	Chromium, Total	mg/L	0.0000210	0.0044	0.10	0.0955	0.100	0.0954	0.085 to 0.115	95.5	70 to 130	4.89	20
AW14070	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0958	0.0990	0.0999	0.085 to 0.115	95.8	70 to 130	3.29	20
AW14070	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.106	0.117	0.106	0.085 to 0.115	106	70 to 130	10.6	20
AW14070	Lead, Total	mg/L	0.00000409	0.0022	0.10	0.0938	0.0981	0.0944	0.085 to 0.115	93.8	70 to 130	4.43	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW14065

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW13176	Sulfate, Total	mg/L	0.000	1.0	20.00	20.5	0.482	19.6	18 to 22	102	80 to 120	0	20
AW13176	Chloride, Total	mg/L	0.00	0.25	10.00	10.2	0.00	10.1	9 to 11	102	80 to 120	0	20
AW14061	Solids, Dissolved	mg/L	8	25			315	54	40 to 60			0.787	5
AW13176	Fluoride, Total	mg/L	0.00	0.3	2.00	2.08	0.00	1.99	1.8 to 2.2	104	80 to 120	0	20

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CC:

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Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AW14066

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005		0.0160	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0353	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1		0.200	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		10.15	1.0	5.0		183	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0576	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		100		1440	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		20	0.80	5.00		52.5	mg/L
* Fluoride, Total	SES	6/8/2016	EPA 300.0		1	0.01	0.3	J	0.079	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		20	6.0	20		832	mg/L

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AW14066

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14070	Calcium, Total	mg/L	0.103	0.22	5.00	80.7	80.1	4.93	4.25 to 5.75	86.0	70 to 130	0.746	20
AW14070	Antimony, Total	mg/L	0.000186	0.00132	0.10	0.0884	0.0919	0.0888	0.085 to 0.115	88.4	70 to 130	3.80	20
AW14070	Barium, Total	mg/L	0.00000952	0.0044	0.10	0.191	0.200	0.0903	0.085 to 0.115	86.0	70 to 130	4.67	20
AW14070	Cobalt, Total	mg/L	-0.000000297	0.0044	0.10	0.110	0.116	0.0957	0.085 to 0.115	96.1	70 to 130	5.19	20
AW14070	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00385	0.00378	0.00396	0.0034 to 0.0046	96.2	70 to 130	1.83	20
AW14070	Molybdenum, Total	mg/L	0.0000369	0.0044	0.10	0.0940	0.0982	0.0937	0.085 to 0.115	94.0	70 to 130	4.34	20
AW14070	Selenium, Total	mg/L	0.0000532	0.0044	0.10	0.0929	0.0995	0.102	0.085 to 0.115	92.9	70 to 130	6.86	20
AW14070	Thallium, Total	mg/L	0.00000531	0.00044	0.10	0.0945	0.0987	0.0946	0.085 to 0.115	94.5	70 to 130	4.32	20
AW14070	Cadmium, Total	mg/L	0.00000419	0.00044	0.10	0.0955	0.0987	0.0959	0.085 to 0.115	95.5	70 to 130	3.26	20
AW14070	Lithium, Total	mg/L	0.00406	0.022	0.20	0.239	0.236	0.199	0.17 to 0.23	114	70 to 130	1.26	20
AW14070	Boron, Total	mg/L	0.0178	0.044	1.00	2.47	2.48	0.967	0.85 to 1.15	98.0	70 to 130	0.404	20
AW14070	Chromium, Total	mg/L	0.0000210	0.0044	0.10	0.0955	0.100	0.0954	0.085 to 0.115	95.5	70 to 130	4.89	20
AW14070	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0958	0.0990	0.0999	0.085 to 0.115	95.8	70 to 130	3.29	20
AW14070	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.106	0.117	0.106	0.085 to 0.115	106	70 to 130	10.6	20
AW14070	Lead, Total	mg/L	0.00000409	0.0022	0.10	0.0938	0.0981	0.0944	0.085 to 0.115	93.8	70 to 130	4.43	20

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Reported: 7/19/2017
Version: 2.0

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AW14066

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14074	Fluoride, Total	mg/L	0.00	0.3	2.00	2.08	0.00	1.99	1.8 to 2.2	104	80 to 120	0	20
AW14061	Solids, Dissolved	mg/L	8	25			315	54	40 to 60			0.787	5
AW14074	Sulfate, Total	mg/L	0.480	1.0	20.00	20.4	0.483	19.7	18 to 22	99.6	80 to 120	0.619	20
AW14074	Chloride, Total	mg/L	0.00	0.25	10.00	9.71	0.00	10.0	9 to 11	97.1	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: 7/19/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AW14067

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005		0.00768	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.104	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1	J	0.0279	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		10.15	1.0	5.0		86.1	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	J	0.00372	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		25		381	mg/L
* Chloride, Total	SES	6/8/2016	EPA 300.0		1	0.04	0.25		24.5	mg/L
* Fluoride, Total	SES	6/8/2016	EPA 300.0		1	0.01	0.3	J	0.118	mg/L
* Sulfate, Total	SES	6/8/2016	EPA 300.0		1	0.3	1	J	0.544	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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AW14067

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14070	Calcium, Total	mg/L	0.103	0.22	5.00	80.7	80.1	4.93	4.25 to 5.75	86.0	70 to 130	0.746	20
AW14070	Cadmium, Total	mg/L	0.00000419	0.00044	0.10	0.0955	0.0987	0.0959	0.085 to 0.115	95.5	70 to 130	3.26	20
AW14070	Lithium, Total	mg/L	0.00406	0.022	0.20	0.239	0.236	0.199	0.17 to 0.23	114	70 to 130	1.26	20
AW14070	Selenium, Total	mg/L	0.0000532	0.0044	0.10	0.0929	0.0995	0.102	0.085 to 0.115	92.9	70 to 130	6.86	20
AW14070	Thallium, Total	mg/L	0.00000531	0.00044	0.10	0.0945	0.0987	0.0946	0.085 to 0.115	94.5	70 to 130	4.32	20
AW14070	Boron, Total	mg/L	0.0178	0.044	1.00	2.47	2.48	0.967	0.85 to 1.15	98.0	70 to 130	0.404	20
AW14070	Chromium, Total	mg/L	0.0000210	0.0044	0.10	0.0955	0.100	0.0954	0.085 to 0.115	95.5	70 to 130	4.89	20
AW14070	Cobalt, Total	mg/L	-0.000000297	0.0044	0.10	0.110	0.116	0.0957	0.085 to 0.115	96.1	70 to 130	5.19	20
AW14070	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00385	0.00378	0.00396	0.0034 to 0.0046	96.2	70 to 130	1.83	20
AW14070	Molybdenum, Total	mg/L	0.0000369	0.0044	0.10	0.0940	0.0982	0.0937	0.085 to 0.115	94.0	70 to 130	4.34	20
AW14070	Antimony, Total	mg/L	0.000186	0.00132	0.10	0.0884	0.0919	0.0888	0.085 to 0.115	88.4	70 to 130	3.80	20
AW14070	Barium, Total	mg/L	0.00000952	0.0044	0.10	0.191	0.200	0.0903	0.085 to 0.115	86.0	70 to 130	4.67	20
AW14070	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0958	0.0990	0.0999	0.085 to 0.115	95.8	70 to 130	3.29	20
AW14070	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.106	0.117	0.106	0.085 to 0.115	106	70 to 130	10.6	20
AW14070	Lead, Total	mg/L	0.00000409	0.0022	0.10	0.0938	0.0981	0.0944	0.085 to 0.115	93.8	70 to 130	4.43	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AW14067

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14074	Sulfate, Total	mg/L	0.480	1.0	20.00	20.4	0.483	19.7	18 to 22	99.6	80 to 120	0.619	20
AW14074	Chloride, Total	mg/L	0.00	0.25	10.00	9.71	0.00	10.0	9 to 11	97.1	80 to 120	0	20
AW14061	Solids, Dissolved	mg/L	8	25			315	54	40 to 60			0.787	5
AW14074	Fluoride, Total	mg/L	0.00	0.3	2.00	2.08	0.00	1.99	1.8 to 2.2	104	80 to 120	0	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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

CC:

Reported: 7/19/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AW14068

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005		0.0112	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0290	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1		0.114	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		10.15	1.0	5.0		71.2	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0110	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		50		494	mg/L
* Chloride, Total	SES	6/8/2016	EPA 300.0		1	0.04	0.25		14.6	mg/L
* Fluoride, Total	SES	6/8/2016	EPA 300.0		1	0.01	0.3	J	0.108	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		10	3.0	10		273	mg/L

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Expiration: June 30, 2018

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Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AW14068

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14070	Calcium, Total	mg/L	0.103	0.22	5.00	80.7	80.1	4.93	4.25 to 5.75	86.0	70 to 130	0.746	20
AW14070	Selenium, Total	mg/L	0.0000532	0.0044	0.10	0.0929	0.0995	0.102	0.085 to 0.115	92.9	70 to 130	6.86	20
AW14070	Thallium, Total	mg/L	0.00000531	0.00044	0.10	0.0945	0.0987	0.0946	0.085 to 0.115	94.5	70 to 130	4.32	20
AW14070	Boron, Total	mg/L	0.0178	0.044	1.00	2.47	2.48	0.967	0.85 to 1.15	98.0	70 to 130	0.404	20
AW14070	Chromium, Total	mg/L	0.0000210	0.0044	0.10	0.0955	0.100	0.0954	0.085 to 0.115	95.5	70 to 130	4.89	20
AW14070	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0958	0.0990	0.0999	0.085 to 0.115	95.8	70 to 130	3.29	20
AW14070	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.106	0.117	0.106	0.085 to 0.115	106	70 to 130	10.6	20
AW14070	Lead, Total	mg/L	0.00000409	0.0022	0.10	0.0938	0.0981	0.0944	0.085 to 0.115	93.8	70 to 130	4.43	20
AW14070	Cadmium, Total	mg/L	0.00000419	0.00044	0.10	0.0955	0.0987	0.0959	0.085 to 0.115	95.5	70 to 130	3.26	20
AW14070	Lithium, Total	mg/L	0.00406	0.022	0.20	0.239	0.236	0.199	0.17 to 0.23	114	70 to 130	1.26	20
AW14070	Antimony, Total	mg/L	0.000186	0.00132	0.10	0.0884	0.0919	0.0888	0.085 to 0.115	88.4	70 to 130	3.80	20
AW14070	Barium, Total	mg/L	0.00000952	0.0044	0.10	0.191	0.200	0.0903	0.085 to 0.115	86.0	70 to 130	4.67	20
AW14070	Cobalt, Total	mg/L	-0.000000297	0.0044	0.10	0.110	0.116	0.0957	0.085 to 0.115	96.1	70 to 130	5.19	20
AW14070	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00385	0.00378	0.00396	0.0034 to 0.0046	96.2	70 to 130	1.83	20
AW14070	Molybdenum, Total	mg/L	0.0000369	0.0044	0.10	0.0940	0.0982	0.0937	0.085 to 0.115	94.0	70 to 130	4.34	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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

Reported: 7/19/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AW14068

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14074	Sulfate, Total	mg/L	0.480	1.0	20.00	20.4	0.483	19.7	18 to 22	99.6	80 to 120	0.619	20
AW14074	Chloride, Total	mg/L	0.00	0.25	10.00	9.71	0.00	10.0	9 to 11	97.1	80 to 120	0	20
AW14074	Fluoride, Total	mg/L	0.00	0.3	2.00	2.08	0.00	1.99	1.8 to 2.2	104	80 to 120	0	20
AW14061	Solids, Dissolved	mg/L	8	25			315	54	40 to 60			0.787	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: 7/19/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW14069

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		1.015	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	6/8/2016	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	6/8/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	6/8/2016	EPA 300.0		1	0.3	1	J	0.492	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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

Reported: 7/19/2017
Version: 2.0

Alabama Power General Test Laboratory
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW14069

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14070	Calcium, Total	mg/L	0.103	0.22	5.00	80.7	80.1	4.93	4.25 to 5.75	86.0	70 to 130	0.746	20
AW14070	Boron, Total	mg/L	0.0178	0.044	1.00	2.47	2.48	0.967	0.85 to 1.15	98.0	70 to 130	0.404	20
AW14070	Chromium, Total	mg/L	0.0000210	0.0044	0.10	0.0955	0.100	0.0954	0.085 to 0.115	95.5	70 to 130	4.89	20
AW14070	Antimony, Total	mg/L	0.000186	0.00132	0.10	0.0884	0.0919	0.0888	0.085 to 0.115	88.4	70 to 130	3.80	20
AW14070	Barium, Total	mg/L	0.00000952	0.0044	0.10	0.191	0.200	0.0903	0.085 to 0.115	86.0	70 to 130	4.67	20
AW14070	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0958	0.0990	0.0999	0.085 to 0.115	95.8	70 to 130	3.29	20
AW14070	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.106	0.117	0.106	0.085 to 0.115	106	70 to 130	10.6	20
AW14070	Lead, Total	mg/L	0.00000409	0.0022	0.10	0.0938	0.0981	0.0944	0.085 to 0.115	93.8	70 to 130	4.43	20
AW14070	Cobalt, Total	mg/L	-0.000000297	0.0044	0.10	0.110	0.116	0.0957	0.085 to 0.115	96.1	70 to 130	5.19	20
AW14070	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00385	0.00378	0.00396	0.0034 to 0.0046	96.2	70 to 130	1.83	20
AW14070	Molybdenum, Total	mg/L	0.0000369	0.0044	0.10	0.0940	0.0982	0.0937	0.085 to 0.115	94.0	70 to 130	4.34	20
AW14070	Selenium, Total	mg/L	0.0000532	0.0044	0.10	0.0929	0.0995	0.102	0.085 to 0.115	92.9	70 to 130	6.86	20
AW14070	Thallium, Total	mg/L	0.00000531	0.00044	0.10	0.0945	0.0987	0.0946	0.085 to 0.115	94.5	70 to 130	4.32	20
AW14070	Cadmium, Total	mg/L	0.00000419	0.00044	0.10	0.0955	0.0987	0.0959	0.085 to 0.115	95.5	70 to 130	3.26	20
AW14070	Lithium, Total	mg/L	0.00406	0.022	0.20	0.239	0.236	0.199	0.17 to 0.23	114	70 to 130	1.26	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW14069

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14074	Sulfate, Total	mg/L	0.480	1.0	20.00	20.4	0.483	19.7	18 to 22	99.6	80 to 120	0.619	20
AW14074	Chloride, Total	mg/L	0.00	0.25	10.00	9.71	0.00	10.0	9 to 11	97.1	80 to 120	0	20
AW14061	Solids, Dissolved	mg/L	8	25			315	54	40 to 60			0.787	5
AW14074	Fluoride, Total	mg/L	0.00	0.3	2.00	2.08	0.00	1.99	1.8 to 2.2	104	80 to 120	0	20

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

CC:

Reported: 7/19/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AW14070

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.105	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1		1.49	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		10.15	1.0	5.0		76.4	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0139	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05	J	0.0101	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		50		672	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		10	0.40	2.50		66.3	mg/L
* Fluoride, Total	SES	6/8/2016	EPA 300.0		1	0.01	0.3	J	0.109	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		10	3.0	10		51.2	mg/L

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Reported: 7/19/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AW14070

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14070	Calcium, Total	mg/L	0.103	0.22	5.00	80.7	80.1	4.93	4.25 to 5.75	86.0	70 to 130	0.746	20
AW14070	Antimony, Total	mg/L	0.000186	0.00132	0.10	0.0884	0.0919	0.0888	0.085 to 0.115	88.4	70 to 130	3.80	20
AW14070	Barium, Total	mg/L	0.00000952	0.0044	0.10	0.191	0.200	0.0903	0.085 to 0.115	86.0	70 to 130	4.67	20
AW14070	Boron, Total	mg/L	0.0178	0.044	1.00	2.47	2.48	0.967	0.85 to 1.15	98.0	70 to 130	0.404	20
AW14070	Chromium, Total	mg/L	0.0000210	0.0044	0.10	0.0955	0.100	0.0954	0.085 to 0.115	95.5	70 to 130	4.89	20
AW14070	Selenium, Total	mg/L	0.0000532	0.0044	0.10	0.0929	0.0995	0.102	0.085 to 0.115	92.9	70 to 130	6.86	20
AW14070	Thallium, Total	mg/L	0.00000531	0.00044	0.10	0.0945	0.0987	0.0946	0.085 to 0.115	94.5	70 to 130	4.32	20
AW14070	Cadmium, Total	mg/L	0.00000419	0.00044	0.10	0.0955	0.0987	0.0959	0.085 to 0.115	95.5	70 to 130	3.26	20
AW14070	Lithium, Total	mg/L	0.00406	0.022	0.20	0.239	0.236	0.199	0.17 to 0.23	114	70 to 130	1.26	20
AW14070	Cobalt, Total	mg/L	-0.000000297	0.0044	0.10	0.110	0.116	0.0957	0.085 to 0.115	96.1	70 to 130	5.19	20
AW14070	Mercury, Total by CVAA	mg/L	0.00007	0.0005	0.004	0.00385	0.00378	0.00396	0.0034 to 0.0046	96.2	70 to 130	1.83	20
AW14070	Molybdenum, Total	mg/L	0.0000369	0.0044	0.10	0.0940	0.0982	0.0937	0.085 to 0.115	94.0	70 to 130	4.34	20
AW14070	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0958	0.0990	0.0999	0.085 to 0.115	95.8	70 to 130	3.29	20
AW14070	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.106	0.117	0.106	0.085 to 0.115	106	70 to 130	10.6	20
AW14070	Lead, Total	mg/L	0.00000409	0.0022	0.10	0.0938	0.0981	0.0944	0.085 to 0.115	93.8	70 to 130	4.43	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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AW14070

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14061	Solids, Dissolved	mg/L	8	25			315	54	40 to 60			0.787	5
AW14074	Fluoride, Total	mg/L	0.00	0.3	2.00	2.08	0.00	1.99	1.8 to 2.2	104	80 to 120	0	20
AW14074	Sulfate, Total	mg/L	0.480	1.0	20.00	20.4	0.483	19.7	18 to 22	99.6	80 to 120	0.619	20
AW14074	Chloride, Total	mg/L	0.00	0.25	10.00	9.71	0.00	10.0	9 to 11	97.1	80 to 120	0	20

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CC:

Reported: 7/19/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AW14071

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0823	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1		0.452	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		10.15	1.0	5.0		158	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	J	0.00328	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		100		1100	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		10	0.40	2.50		55.6	mg/L
* Fluoride, Total	SES	6/8/2016	EPA 300.0		1	0.01	0.3	J	0.103	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		10	3.0	10		324	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

Reported: 7/19/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AW14071

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14080	Barium, Total	mg/L	0.00000952	0.0044	0.10	0.114	0.114	0.0903	0.085 to 0.115	91.7	70 to 130	0.182	20
AW14080	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0948	0.0967	0.0999	0.085 to 0.115	94.8	70 to 130	1.99	20
AW14080	Chromium, Total	mg/L	0.0000210	0.0044	0.10	0.0971	0.0976	0.0954	0.085 to 0.115	97.1	70 to 130	0.523	20
AW14080	Calcium, Total	mg/L	-0.00316	0.22	5.00	51.4	50.8	5.03	4.25 to 5.75	110	70 to 130	1.17	20
AW14080	Cobalt, Total	mg/L	-0.000000297	0.0044	0.10	0.110	0.114	0.0957	0.085 to 0.115	96.1	70 to 130	2.73	20
AW14080	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.106	0.109	0.106	0.085 to 0.115	106	70 to 130	3.45	20
AW14080	Cadmium, Total	mg/L	0.00000419	0.00044	0.10	0.0955	0.0967	0.0959	0.085 to 0.115	95.5	70 to 130	1.21	20
AW14080	Mercury, Total by CVAA	mg/L	0.00008	0.0005	0.004	0.00407	0.00402	0.00408	0.0034 to 0.0046	102	70 to 130	1.24	20
AW14080	Molybdenum, Total	mg/L	0.0000369	0.0044	0.10	0.0936	0.0966	0.0937	0.085 to 0.115	93.6	70 to 130	3.14	20
AW14080	Selenium, Total	mg/L	0.0000532	0.0044	0.10	0.0939	0.0966	0.102	0.085 to 0.115	93.9	70 to 130	2.89	20
AW14080	Antimony, Total	mg/L	0.000186	0.00132	0.10	0.0889	0.0897	0.0888	0.085 to 0.115	88.9	70 to 130	0.882	20
AW14080	Boron, Total	mg/L	-0.00293	0.044	1.00	1.42	1.42	0.989	0.85 to 1.15	99.1	70 to 130	0.00	20
AW14080	Lead, Total	mg/L	0.00000409	0.0022	0.10	0.0949	0.0956	0.0944	0.085 to 0.115	94.9	70 to 130	0.719	20
AW14080	Lithium, Total	mg/L	0.000206	0.022	0.20	0.901	0.896	0.203	0.17 to 0.23	82.0	70 to 130	0.556	20
AW14080	Thallium, Total	mg/L	0.00000531	0.00044	0.10	0.0951	0.0963	0.0946	0.085 to 0.115	95.1	70 to 130	1.25	20

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AW14071

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14074	Sulfate, Total	mg/L	0.480	1.0	20.00	20.4	0.483	19.7	18 to 22	99.6	80 to 120	0.619	20
AW14076	Solids, Dissolved	mg/L	8	25			147	54	40 to 60			0.339	5
AW14074	Fluoride, Total	mg/L	0.00	0.3	2.00	2.08	0.00	1.99	1.8 to 2.2	104	80 to 120	0	20
AW14074	Chloride, Total	mg/L	0.00	0.25	10.00	9.71	0.00	10.0	9 to 11	97.1	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: 7/19/2017
Version: 2.0

Alabama Power General Test Laboratory
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AW14072

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0407	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1		1.97	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		10.15	1.0	5.0		118	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	J	0.00389	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		50		626	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		10	0.40	2.50		28.7	mg/L
* Fluoride, Total	SES	6/8/2016	EPA 300.0		1	0.01	0.3	J	0.212	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		10	3.0	10		111	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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AW14072

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14080	Barium, Total	mg/L	0.00000952	0.0044	0.10	0.114	0.114	0.0903	0.085 to 0.115	91.7	70 to 130	0.182	20
AW14080	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0948	0.0967	0.0999	0.085 to 0.115	94.8	70 to 130	1.99	20
AW14080	Chromium, Total	mg/L	0.0000210	0.0044	0.10	0.0971	0.0976	0.0954	0.085 to 0.115	97.1	70 to 130	0.523	20
AW14080	Calcium, Total	mg/L	-0.00316	0.22	5.00	51.4	50.8	5.03	4.25 to 5.75	110	70 to 130	1.17	20
AW14080	Cobalt, Total	mg/L	-0.000000297	0.0044	0.10	0.110	0.114	0.0957	0.085 to 0.115	96.1	70 to 130	2.73	20
AW14080	Antimony, Total	mg/L	0.000186	0.00132	0.10	0.0889	0.0897	0.0888	0.085 to 0.115	88.9	70 to 130	0.882	20
AW14080	Boron, Total	mg/L	-0.00293	0.044	1.00	1.42	1.42	0.989	0.85 to 1.15	99.1	70 to 130	0.00	20
AW14080	Lead, Total	mg/L	0.00000409	0.0022	0.10	0.0949	0.0956	0.0944	0.085 to 0.115	94.9	70 to 130	0.719	20
AW14080	Lithium, Total	mg/L	0.000206	0.022	0.20	0.901	0.896	0.203	0.17 to 0.23	82.0	70 to 130	0.556	20
AW14080	Thallium, Total	mg/L	0.00000531	0.00044	0.10	0.0951	0.0963	0.0946	0.085 to 0.115	95.1	70 to 130	1.25	20
AW14080	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.106	0.109	0.106	0.085 to 0.115	106	70 to 130	3.45	20
AW14080	Cadmium, Total	mg/L	0.00000419	0.00044	0.10	0.0955	0.0967	0.0959	0.085 to 0.115	95.5	70 to 130	1.21	20
AW14080	Mercury, Total by CVAA	mg/L	0.00008	0.0005	0.004	0.00407	0.00402	0.00408	0.0034 to 0.0046	102	70 to 130	1.24	20
AW14080	Molybdenum, Total	mg/L	0.0000369	0.0044	0.10	0.0936	0.0966	0.0937	0.085 to 0.115	93.6	70 to 130	3.14	20
AW14080	Selenium, Total	mg/L	0.0000532	0.0044	0.10	0.0939	0.0966	0.102	0.085 to 0.115	93.9	70 to 130	2.89	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AW14072

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14074	Sulfate, Total	mg/L	0.480	1.0	20.00	20.4	0.483	19.7	18 to 22	99.6	80 to 120	0.619	20
AW14074	Chloride, Total	mg/L	0.00	0.25	10.00	9.71	0.00	10.0	9 to 11	97.1	80 to 120	0	20
AW14074	Fluoride, Total	mg/L	0.00	0.3	2.00	2.08	0.00	1.99	1.8 to 2.2	104	80 to 120	0	20
AW14076	Solids, Dissolved	mg/L	8	25			147	54	40 to 60			0.339	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: 7/19/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AW14073

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0872	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1	J	0.0826	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		1.015	0.1	0.5		9.87	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	J	0.00637	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		25		139	mg/L
* Chloride, Total	SES	6/8/2016	EPA 300.0		1	0.04	0.25		22.3	mg/L
* Fluoride, Total	SES	6/8/2016	EPA 300.0		1	0.01	0.3	J	0.051	mg/L
* Sulfate, Total	SES	6/8/2016	EPA 300.0		1	0.3	1		31.9	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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AW14073

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14080	Barium, Total	mg/L	0.00000952	0.0044	0.10	0.114	0.114	0.0903	0.085 to 0.115	91.7	70 to 130	0.182	20
AW14080	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0948	0.0967	0.0999	0.085 to 0.115	94.8	70 to 130	1.99	20
AW14080	Chromium, Total	mg/L	0.0000210	0.0044	0.10	0.0971	0.0976	0.0954	0.085 to 0.115	97.1	70 to 130	0.523	20
AW14080	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.106	0.109	0.106	0.085 to 0.115	106	70 to 130	3.45	20
AW14080	Cadmium, Total	mg/L	0.00000419	0.00044	0.10	0.0955	0.0967	0.0959	0.085 to 0.115	95.5	70 to 130	1.21	20
AW14080	Mercury, Total by CVAA	mg/L	0.00008	0.0005	0.004	0.00407	0.00402	0.00408	0.0034 to 0.0046	102	70 to 130	1.24	20
AW14080	Molybdenum, Total	mg/L	0.0000369	0.0044	0.10	0.0936	0.0966	0.0937	0.085 to 0.115	93.6	70 to 130	3.14	20
AW14080	Selenium, Total	mg/L	0.0000532	0.0044	0.10	0.0939	0.0966	0.102	0.085 to 0.115	93.9	70 to 130	2.89	20
AW14080	Calcium, Total	mg/L	-0.00316	0.22	5.00	51.4	50.8	5.03	4.25 to 5.75	110	70 to 130	1.17	20
AW14080	Cobalt, Total	mg/L	-0.000000297	0.0044	0.10	0.110	0.114	0.0957	0.085 to 0.115	96.1	70 to 130	2.73	20
AW14080	Antimony, Total	mg/L	0.000186	0.00132	0.10	0.0889	0.0897	0.0888	0.085 to 0.115	88.9	70 to 130	0.882	20
AW14080	Boron, Total	mg/L	-0.00293	0.044	1.00	1.42	1.42	0.989	0.85 to 1.15	99.1	70 to 130	0.00	20
AW14080	Lead, Total	mg/L	0.00000409	0.0022	0.10	0.0949	0.0956	0.0944	0.085 to 0.115	94.9	70 to 130	0.719	20
AW14080	Lithium, Total	mg/L	0.000206	0.022	0.20	0.901	0.896	0.203	0.17 to 0.23	82.0	70 to 130	0.556	20
AW14080	Thallium, Total	mg/L	0.00000531	0.00044	0.10	0.0951	0.0963	0.0946	0.085 to 0.115	95.1	70 to 130	1.25	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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

Reported: 7/19/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AW14073

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14074	Chloride, Total	mg/L	0.00	0.25	10.00	9.71	0.00	10.0	9 to 11	97.1	80 to 120	0	20
AW14074	Fluoride, Total	mg/L	0.00	0.3	2.00	2.08	0.00	1.99	1.8 to 2.2	104	80 to 120	0	20
AW14074	Sulfate, Total	mg/L	0.480	1.0	20.00	20.4	0.483	19.7	18 to 22	99.6	80 to 120	0.619	20
AW14076	Solids, Dissolved	mg/L	8	25			147	54	40 to 60			0.339	5

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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

CC:

Reported: 7/19/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW14074

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		1.015	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	6/8/2016	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	6/8/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	6/8/2016	EPA 300.0		1	0.3	1	J	0.486	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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

Reported: 7/19/2017
Version: 2.0

Alabama Power General Test Laboratory
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW14074

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14080	Barium, Total	mg/L	0.00000952	0.0044	0.10	0.114	0.114	0.0903	0.085 to 0.115	91.7	70 to 130	0.182	20
AW14080	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0948	0.0967	0.0999	0.085 to 0.115	94.8	70 to 130	1.99	20
AW14080	Chromium, Total	mg/L	0.0000210	0.0044	0.10	0.0971	0.0976	0.0954	0.085 to 0.115	97.1	70 to 130	0.523	20
AW14080	Calcium, Total	mg/L	-0.00316	0.22	5.00	51.4	50.8	5.03	4.25 to 5.75	110	70 to 130	1.17	20
AW14080	Cobalt, Total	mg/L	-0.000000297	0.0044	0.10	0.110	0.114	0.0957	0.085 to 0.115	96.1	70 to 130	2.73	20
AW14080	Antimony, Total	mg/L	0.000186	0.00132	0.10	0.0889	0.0897	0.0888	0.085 to 0.115	88.9	70 to 130	0.882	20
AW14080	Boron, Total	mg/L	-0.00293	0.044	1.00	1.42	1.42	0.989	0.85 to 1.15	99.1	70 to 130	0.00	20
AW14080	Lead, Total	mg/L	0.00000409	0.0022	0.10	0.0949	0.0956	0.0944	0.085 to 0.115	94.9	70 to 130	0.719	20
AW14080	Lithium, Total	mg/L	0.000206	0.022	0.20	0.901	0.896	0.203	0.17 to 0.23	82.0	70 to 130	0.556	20
AW14080	Thallium, Total	mg/L	0.00000531	0.00044	0.10	0.0951	0.0963	0.0946	0.085 to 0.115	95.1	70 to 130	1.25	20
AW14080	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.106	0.109	0.106	0.085 to 0.115	106	70 to 130	3.45	20
AW14080	Cadmium, Total	mg/L	0.00000419	0.00044	0.10	0.0955	0.0967	0.0959	0.085 to 0.115	95.5	70 to 130	1.21	20
AW14080	Mercury, Total by CVAA	mg/L	0.00008	0.0005	0.004	0.00407	0.00402	0.00408	0.0034 to 0.0046	102	70 to 130	1.24	20
AW14080	Molybdenum, Total	mg/L	0.0000369	0.0044	0.10	0.0936	0.0966	0.0937	0.085 to 0.115	93.6	70 to 130	3.14	20
AW14080	Selenium, Total	mg/L	0.0000532	0.0044	0.10	0.0939	0.0966	0.102	0.085 to 0.115	93.9	70 to 130	2.89	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW14074

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14074	Sulfate, Total	mg/L	0.480	1.0	20.00	20.4	0.483	19.7	18 to 22	99.6	80 to 120	0.619	20
AW14074	Chloride, Total	mg/L	0.00	0.25	10.00	9.71	0.00	10.0	9 to 11	97.1	80 to 120	0	20
AW14074	Fluoride, Total	mg/L	0.00	0.3	2.00	2.08	0.00	1.99	1.8 to 2.2	104	80 to 120	0	20
AW14076	Solids, Dissolved	mg/L	8	25			147	54	40 to 60			0.339	5

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

CC:

Reported: 7/19/2017
Version: 2.0

Alabama Power General Test Laboratory
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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AW14075

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0254	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1		0.283	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		1.015	0.1	0.5		29.3	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05		0.513	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0565	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		25		231	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		1	0.04	0.25		6.97	mg/L
* Fluoride, Total	SES	6/9/2016	EPA 300.0		1	0.01	0.3	J	0.201	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		10	3.0	10		99.2	mg/L

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

Reported: 7/19/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AW14075

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14080	Barium, Total	mg/L	0.00000952	0.0044	0.10	0.114	0.114	0.0903	0.085 to 0.115	91.7	70 to 130	0.182	20
AW14080	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0948	0.0967	0.0999	0.085 to 0.115	94.8	70 to 130	1.99	20
AW14080	Chromium, Total	mg/L	0.0000210	0.0044	0.10	0.0971	0.0976	0.0954	0.085 to 0.115	97.1	70 to 130	0.523	20
AW14080	Antimony, Total	mg/L	0.000186	0.00132	0.10	0.0889	0.0897	0.0888	0.085 to 0.115	88.9	70 to 130	0.882	20
AW14080	Boron, Total	mg/L	-0.00293	0.044	1.00	1.42	1.42	0.989	0.85 to 1.15	99.1	70 to 130	0.00	20
AW14080	Lead, Total	mg/L	0.00000409	0.0022	0.10	0.0949	0.0956	0.0944	0.085 to 0.115	94.9	70 to 130	0.719	20
AW14080	Lithium, Total	mg/L	0.000206	0.022	0.20	0.901	0.896	0.203	0.17 to 0.23	82.0	70 to 130	0.556	20
AW14080	Thallium, Total	mg/L	0.00000531	0.00044	0.10	0.0951	0.0963	0.0946	0.085 to 0.115	95.1	70 to 130	1.25	20
AW14080	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.106	0.109	0.106	0.085 to 0.115	106	70 to 130	3.45	20
AW14080	Cadmium, Total	mg/L	0.00000419	0.00044	0.10	0.0955	0.0967	0.0959	0.085 to 0.115	95.5	70 to 130	1.21	20
AW14080	Mercury, Total by CVAA	mg/L	0.00008	0.0005	0.004	0.00407	0.00402	0.00408	0.0034 to 0.0046	102	70 to 130	1.24	20
AW14080	Molybdenum, Total	mg/L	0.0000369	0.0044	0.10	0.0936	0.0966	0.0937	0.085 to 0.115	93.6	70 to 130	3.14	20
AW14080	Selenium, Total	mg/L	0.0000532	0.0044	0.10	0.0939	0.0966	0.102	0.085 to 0.115	93.9	70 to 130	2.89	20
AW14080	Calcium, Total	mg/L	-0.00316	0.22	5.00	51.4	50.8	5.03	4.25 to 5.75	110	70 to 130	1.17	20
AW14080	Cobalt, Total	mg/L	-0.000000297	0.0044	0.10	0.110	0.114	0.0957	0.085 to 0.115	96.1	70 to 130	2.73	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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AW14075

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14074	Sulfate, Total	mg/L	0.480	1.0	20.00	20.4	0.483	19.7	18 to 22	99.6	80 to 120	0.619	20
AW14074	Fluoride, Total	mg/L	0.00	0.3	2.00	2.08	0.00	1.99	1.8 to 2.2	104	80 to 120	0	20
AW14076	Solids, Dissolved	mg/L	8	25			147	54	40 to 60			0.339	5
AW14074	Chloride, Total	mg/L	0.00	0.25	10.00	9.71	0.00	10.0	9 to 11	97.1	80 to 120	0	20

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CC:

Reported: 7/19/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AW14076

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0328	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		10.15	1.0	5.0		41.8	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		25		148	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		1	0.04	0.25		1.46	mg/L
* Fluoride, Total	SES	6/9/2016	EPA 300.0		1	0.01	0.3	J	0.101	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		1	0.3	1		20.1	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

Reported: 7/19/2017
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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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AW14076

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14080	Barium, Total	mg/L	0.00000952	0.0044	0.10	0.114	0.114	0.0903	0.085 to 0.115	91.7	70 to 130	0.182	20
AW14080	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0948	0.0967	0.0999	0.085 to 0.115	94.8	70 to 130	1.99	20
AW14080	Chromium, Total	mg/L	0.0000210	0.0044	0.10	0.0971	0.0976	0.0954	0.085 to 0.115	97.1	70 to 130	0.523	20
AW14080	Antimony, Total	mg/L	0.000186	0.00132	0.10	0.0889	0.0897	0.0888	0.085 to 0.115	88.9	70 to 130	0.882	20
AW14080	Boron, Total	mg/L	-0.00293	0.044	1.00	1.42	1.42	0.989	0.85 to 1.15	99.1	70 to 130	0.00	20
AW14080	Lead, Total	mg/L	0.00000409	0.0022	0.10	0.0949	0.0956	0.0944	0.085 to 0.115	94.9	70 to 130	0.719	20
AW14080	Lithium, Total	mg/L	0.000206	0.022	0.20	0.901	0.896	0.203	0.17 to 0.23	82.0	70 to 130	0.556	20
AW14080	Thallium, Total	mg/L	0.00000531	0.00044	0.10	0.0951	0.0963	0.0946	0.085 to 0.115	95.1	70 to 130	1.25	20
AW14080	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.106	0.109	0.106	0.085 to 0.115	106	70 to 130	3.45	20
AW14080	Cadmium, Total	mg/L	0.00000419	0.00044	0.10	0.0955	0.0967	0.0959	0.085 to 0.115	95.5	70 to 130	1.21	20
AW14080	Mercury, Total by CVAA	mg/L	0.00008	0.0005	0.004	0.00407	0.00402	0.00408	0.0034 to 0.0046	102	70 to 130	1.24	20
AW14080	Molybdenum, Total	mg/L	0.0000369	0.0044	0.10	0.0936	0.0966	0.0937	0.085 to 0.115	93.6	70 to 130	3.14	20
AW14080	Selenium, Total	mg/L	0.0000532	0.0044	0.10	0.0939	0.0966	0.102	0.085 to 0.115	93.9	70 to 130	2.89	20
AW14080	Calcium, Total	mg/L	-0.00316	0.22	5.00	51.4	50.8	5.03	4.25 to 5.75	110	70 to 130	1.17	20
AW14080	Cobalt, Total	mg/L	-0.000000297	0.0044	0.10	0.110	0.114	0.0957	0.085 to 0.115	96.1	70 to 130	2.73	20

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Reported: 7/19/2017
Version: 2.0

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AW14076

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14084	Chloride, Total	mg/L	0.00	0.25	10.00	31.2	22.0	10.1	9 to 11	92.0	80 to 120	0.00	20
AW14084	Fluoride, Total	mg/L	0.00	0.3	2.00	2.20	0.176	2.00	1.8 to 2.2	101	80 to 120	1.13	20
AW14076	Solids, Dissolved	mg/L	8	25			147	54	40 to 60			0.339	5
AW14084	Sulfate, Total	mg/L	0.481	1.0	100	162	61.1	19.7	18 to 22	101	80 to 120	0.490	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: 7/19/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-23 Dup

Laboratory ID Number: AW14077

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0325	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		10.15	1.0	5.0		41.2	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		25		153	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		1	0.04	0.25		1.46	mg/L
* Fluoride, Total	SES	6/9/2016	EPA 300.0		1	0.01	0.3	J	0.10	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		1	0.3	1		20.1	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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-23 Dup

Laboratory ID Number: AW14077

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14080	Barium, Total	mg/L	0.00000952	0.0044	0.10	0.114	0.114	0.0903	0.085 to 0.115	91.7	70 to 130	0.182	20
AW14080	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0948	0.0967	0.0999	0.085 to 0.115	94.8	70 to 130	1.99	20
AW14080	Chromium, Total	mg/L	0.0000210	0.0044	0.10	0.0971	0.0976	0.0954	0.085 to 0.115	97.1	70 to 130	0.523	20
AW14080	Calcium, Total	mg/L	-0.00316	0.22	5.00	51.4	50.8	5.03	4.25 to 5.75	110	70 to 130	1.17	20
AW14080	Cobalt, Total	mg/L	-0.000000297	0.0044	0.10	0.110	0.114	0.0957	0.085 to 0.115	96.1	70 to 130	2.73	20
AW14080	Antimony, Total	mg/L	0.000186	0.00132	0.10	0.0889	0.0897	0.0888	0.085 to 0.115	88.9	70 to 130	0.882	20
AW14080	Boron, Total	mg/L	-0.00293	0.044	1.00	1.42	1.42	0.989	0.85 to 1.15	99.1	70 to 130	0.00	20
AW14080	Lead, Total	mg/L	0.00000409	0.0022	0.10	0.0949	0.0956	0.0944	0.085 to 0.115	94.9	70 to 130	0.719	20
AW14080	Lithium, Total	mg/L	0.000206	0.022	0.20	0.901	0.896	0.203	0.17 to 0.23	82.0	70 to 130	0.556	20
AW14080	Thallium, Total	mg/L	0.00000531	0.00044	0.10	0.0951	0.0963	0.0946	0.085 to 0.115	95.1	70 to 130	1.25	20
AW14080	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.106	0.109	0.106	0.085 to 0.115	106	70 to 130	3.45	20
AW14080	Cadmium, Total	mg/L	0.00000419	0.00044	0.10	0.0955	0.0967	0.0959	0.085 to 0.115	95.5	70 to 130	1.21	20
AW14080	Mercury, Total by CVAA	mg/L	0.00008	0.0005	0.004	0.00407	0.00402	0.00408	0.0034 to 0.0046	102	70 to 130	1.24	20
AW14080	Molybdenum, Total	mg/L	0.0000369	0.0044	0.10	0.0936	0.0966	0.0937	0.085 to 0.115	93.6	70 to 130	3.14	20
AW14080	Selenium, Total	mg/L	0.0000532	0.0044	0.10	0.0939	0.0966	0.102	0.085 to 0.115	93.9	70 to 130	2.89	20

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Expiration: June 30, 2018

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Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-23 Dup

Laboratory ID Number: AW14077

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14084	Chloride, Total	mg/L	0.00	0.25	10.00	31.2	22.0	10.1	9 to 11	92.0	80 to 120	0.00	20
AW14084	Fluoride, Total	mg/L	0.00	0.3	2.00	2.20	0.176	2.00	1.8 to 2.2	101	80 to 120	1.13	20
AW14084	Sulfate, Total	mg/L	0.481	1.0	100	162	61.1	19.7	18 to 22	101	80 to 120	0.490	20
AW14083	Solids, Dissolved	mg/L	-10.0	25			211	53	40 to 60			1.20	5

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

CC:

Reported: 7/19/2017
Version: 2.0

Alabama Power General Test Laboratory
744 County Road 87, GSC#8
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(205) 664-6032 or 6171
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AW14078

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0298	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		1.015	0.1	0.5		5.70	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		25		46.0	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		1	0.04	0.25		3.55	mg/L
* Fluoride, Total	SES	6/9/2016	EPA 300.0		1	0.01	0.3	J	0.057	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		1	0.3	1		10.4	mg/L

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Expiration: June 30, 2018

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Reported: 7/19/2017
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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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AW14078

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14080	Barium, Total	mg/L	0.00000952	0.0044	0.10	0.114	0.114	0.0903	0.085 to 0.115	91.7	70 to 130	0.182	20
AW14080	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0948	0.0967	0.0999	0.085 to 0.115	94.8	70 to 130	1.99	20
AW14080	Chromium, Total	mg/L	0.0000210	0.0044	0.10	0.0971	0.0976	0.0954	0.085 to 0.115	97.1	70 to 130	0.523	20
AW14080	Calcium, Total	mg/L	-0.00316	0.22	5.00	51.4	50.8	5.03	4.25 to 5.75	110	70 to 130	1.17	20
AW14080	Cobalt, Total	mg/L	-0.000000297	0.0044	0.10	0.110	0.114	0.0957	0.085 to 0.115	96.1	70 to 130	2.73	20
AW14080	Antimony, Total	mg/L	0.000186	0.00132	0.10	0.0889	0.0897	0.0888	0.085 to 0.115	88.9	70 to 130	0.882	20
AW14080	Boron, Total	mg/L	-0.00293	0.044	1.00	1.42	1.42	0.989	0.85 to 1.15	99.1	70 to 130	0.00	20
AW14080	Lead, Total	mg/L	0.00000409	0.0022	0.10	0.0949	0.0956	0.0944	0.085 to 0.115	94.9	70 to 130	0.719	20
AW14080	Lithium, Total	mg/L	0.000206	0.022	0.20	0.901	0.896	0.203	0.17 to 0.23	82.0	70 to 130	0.556	20
AW14080	Thallium, Total	mg/L	0.00000531	0.00044	0.10	0.0951	0.0963	0.0946	0.085 to 0.115	95.1	70 to 130	1.25	20
AW14080	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.106	0.109	0.106	0.085 to 0.115	106	70 to 130	3.45	20
AW14080	Cadmium, Total	mg/L	0.00000419	0.00044	0.10	0.0955	0.0967	0.0959	0.085 to 0.115	95.5	70 to 130	1.21	20
AW14080	Mercury, Total by CVAA	mg/L	0.00008	0.0005	0.004	0.00407	0.00402	0.00408	0.0034 to 0.0046	102	70 to 130	1.24	20
AW14080	Molybdenum, Total	mg/L	0.0000369	0.0044	0.10	0.0936	0.0966	0.0937	0.085 to 0.115	93.6	70 to 130	3.14	20
AW14080	Selenium, Total	mg/L	0.0000532	0.0044	0.10	0.0939	0.0966	0.102	0.085 to 0.115	93.9	70 to 130	2.89	20

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Expiration: June 30, 2018

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Reported: 7/19/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AW14078

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14083	Solids, Dissolved	mg/L	-10.0	25			211	53	40 to 60			1.20	5
AW14084	Fluoride, Total	mg/L	0.00	0.3	2.00	2.20	0.176	2.00	1.8 to 2.2	101	80 to 120	1.13	20
AW14084	Sulfate, Total	mg/L	0.481	1.0	100	162	61.1	19.7	18 to 22	101	80 to 120	0.490	20
AW14084	Chloride, Total	mg/L	0.00	0.25	10.00	31.2	22.0	10.1	9 to 11	92.0	80 to 120	0.00	20

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Expiration: June 30, 2018

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

CC:

Reported: 7/19/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AW14079

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0224	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1		0.424	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		10.15	1.0	5.0		45.3	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0140	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05		0.735	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		25		351	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		1	0.04	0.25		12.9	mg/L
* Fluoride, Total	SES	6/9/2016	EPA 300.0		1	0.01	0.3	J	0.145	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		10	3.0	10		183	mg/L

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AW14079

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14080	Barium, Total	mg/L	0.00000952	0.0044	0.10	0.114	0.114	0.0903	0.085 to 0.115	91.7	70 to 130	0.182	20
AW14080	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0948	0.0967	0.0999	0.085 to 0.115	94.8	70 to 130	1.99	20
AW14080	Chromium, Total	mg/L	0.0000210	0.0044	0.10	0.0971	0.0976	0.0954	0.085 to 0.115	97.1	70 to 130	0.523	20
AW14080	Calcium, Total	mg/L	-0.00316	0.22	5.00	51.4	50.8	5.03	4.25 to 5.75	110	70 to 130	1.17	20
AW14080	Cobalt, Total	mg/L	-0.000000297	0.0044	0.10	0.110	0.114	0.0957	0.085 to 0.115	96.1	70 to 130	2.73	20
AW14080	Antimony, Total	mg/L	0.000186	0.00132	0.10	0.0889	0.0897	0.0888	0.085 to 0.115	88.9	70 to 130	0.882	20
AW14080	Boron, Total	mg/L	-0.00293	0.044	1.00	1.42	1.42	0.989	0.85 to 1.15	99.1	70 to 130	0.00	20
AW14080	Lead, Total	mg/L	0.00000409	0.0022	0.10	0.0949	0.0956	0.0944	0.085 to 0.115	94.9	70 to 130	0.719	20
AW14080	Lithium, Total	mg/L	0.000206	0.022	0.20	0.901	0.896	0.203	0.17 to 0.23	82.0	70 to 130	0.556	20
AW14080	Thallium, Total	mg/L	0.00000531	0.00044	0.10	0.0951	0.0963	0.0946	0.085 to 0.115	95.1	70 to 130	1.25	20
AW14080	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.106	0.109	0.106	0.085 to 0.115	106	70 to 130	3.45	20
AW14080	Cadmium, Total	mg/L	0.00000419	0.00044	0.10	0.0955	0.0967	0.0959	0.085 to 0.115	95.5	70 to 130	1.21	20
AW14080	Mercury, Total by CVAA	mg/L	0.00008	0.0005	0.004	0.00407	0.00402	0.00408	0.0034 to 0.0046	102	70 to 130	1.24	20
AW14080	Molybdenum, Total	mg/L	0.0000369	0.0044	0.10	0.0936	0.0966	0.0937	0.085 to 0.115	93.6	70 to 130	3.14	20
AW14080	Selenium, Total	mg/L	0.0000532	0.0044	0.10	0.0939	0.0966	0.102	0.085 to 0.115	93.9	70 to 130	2.89	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: 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: 7/19/2017
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: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AW14079

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14083	Solids, Dissolved	mg/L	-10.0	25			211	53	40 to 60			1.20	5
AW14084	Chloride, Total	mg/L	0.00	0.25	10.00	31.2	22.0	10.1	9 to 11	92.0	80 to 120	0.00	20
AW14084	Sulfate, Total	mg/L	0.481	1.0	100	162	61.1	19.7	18 to 22	101	80 to 120	0.490	20
AW14084	Fluoride, Total	mg/L	0.00	0.3	2.00	2.20	0.176	2.00	1.8 to 2.2	101	80 to 120	1.13	20

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CC:

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Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-15 Dup

Laboratory ID Number: AW14080

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0223	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1		0.429	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		10.15	1.0	5.0		45.9	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0139	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05		0.737	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		25		335	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		1	0.04	0.25		12.8	mg/L
* Fluoride, Total	SES	6/9/2016	EPA 300.0		1	0.01	0.3	J	0.140	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		10	3.0	10		183	mg/L

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Expiration: June 30, 2018

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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 3/17/17

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-15 Dup

Laboratory ID Number: AW14080

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14080	Barium, Total	mg/L	0.00000952	0.0044	0.10	0.114	0.114	0.0903	0.085 to 0.115	91.7	70 to 130	0.182	20
AW14080	Calcium, Total	mg/L	-0.00316	0.22	5.00	51.4	50.8	5.03	4.25 to 5.75	110	70 to 130	1.17	20
AW14080	Cobalt, Total	mg/L	-0.000000297	0.0044	0.10	0.110	0.114	0.0957	0.085 to 0.115	96.1	70 to 130	2.73	20
AW14080	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0948	0.0967	0.0999	0.085 to 0.115	94.8	70 to 130	1.99	20
AW14080	Chromium, Total	mg/L	0.0000210	0.0044	0.10	0.0971	0.0976	0.0954	0.085 to 0.115	97.1	70 to 130	0.523	20
AW14080	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.106	0.109	0.106	0.085 to 0.115	106	70 to 130	3.45	20
AW14080	Cadmium, Total	mg/L	0.00000419	0.00044	0.10	0.0955	0.0967	0.0959	0.085 to 0.115	95.5	70 to 130	1.21	20
AW14080	Mercury, Total by CVAA	mg/L	0.00008	0.0005	0.004	0.00407	0.00402	0.00408	0.0034 to 0.0046	102	70 to 130	1.24	20
AW14080	Molybdenum, Total	mg/L	0.0000369	0.0044	0.10	0.0936	0.0966	0.0937	0.085 to 0.115	93.6	70 to 130	3.14	20
AW14080	Selenium, Total	mg/L	0.0000532	0.0044	0.10	0.0939	0.0966	0.102	0.085 to 0.115	93.9	70 to 130	2.89	20
AW14080	Antimony, Total	mg/L	0.000186	0.00132	0.10	0.0889	0.0897	0.0888	0.085 to 0.115	88.9	70 to 130	0.882	20
AW14080	Boron, Total	mg/L	-0.00293	0.044	1.00	1.42	1.42	0.989	0.85 to 1.15	99.1	70 to 130	0.00	20
AW14080	Lead, Total	mg/L	0.00000409	0.0022	0.10	0.0949	0.0956	0.0944	0.085 to 0.115	94.9	70 to 130	0.719	20
AW14080	Lithium, Total	mg/L	0.000206	0.022	0.20	0.901	0.896	0.203	0.17 to 0.23	82.0	70 to 130	0.556	20
AW14080	Thallium, Total	mg/L	0.00000531	0.00044	0.10	0.0951	0.0963	0.0946	0.085 to 0.115	95.1	70 to 130	1.25	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-15 Dup

Laboratory ID Number: AW14080

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14083	Solids, Dissolved	mg/L	-10.0	25			211	53	40 to 60			1.20	5
AW14084	Fluoride, Total	mg/L	0.00	0.3	2.00	2.20	0.176	2.00	1.8 to 2.2	101	80 to 120	1.13	20
AW14084	Chloride, Total	mg/L	0.00	0.25	10.00	31.2	22.0	10.1	9 to 11	92.0	80 to 120	0.00	20
AW14084	Sulfate, Total	mg/L	0.481	1.0	100	162	61.1	19.7	18 to 22	101	80 to 120	0.490	20

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CC:

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AW14081

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	J	0.000620	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005		0.0156	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0383	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1		0.603	mg/L
* Calcium, Total	HRG	6/24/2016	EPA 200.7		10.15	1.0	5.0		43.0	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	J	0.00712	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05		0.613	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	J	0.00877	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		25		309	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		1	0.04	0.25		13.6	mg/L
* Fluoride, Total	SES	6/9/2016	EPA 300.0		1	0.01	0.3	J	0.149	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		10	3.0	10		114	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AW14081

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14088	Calcium, Total	mg/L	-0.00367	0.22	5.00	5.24	4.97	4.79	4.25 to 5.75	105	70 to 130	5.29	20
AW14088	Selenium, Total	mg/L	0.0000369	0.0044	0.10	0.0926	0.0943	0.0970	0.085 to 0.115	92.6	70 to 130	1.84	20
AW14088	Antimony, Total	mg/L	0.000184	0.00132	0.10	0.0881	0.0893	0.0883	0.085 to 0.115	88.1	70 to 130	1.35	20
AW14088	Molybdenum, Total	mg/L	0.0000332	0.0044	0.10	0.0948	0.0956	0.0949	0.085 to 0.115	94.8	70 to 130	0.896	20
AW14088	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.103	0.108	0.105	0.085 to 0.115	103	70 to 130	4.40	20
AW14088	Cadmium, Total	mg/L	0.00000271	0.00044	0.10	0.0960	0.100	0.0961	0.085 to 0.115	96.0	70 to 130	4.21	20
AW14088	Arsenic, Total	mg/L	0.0000109	0.0022	0.10	0.0948	0.0951	0.0937	0.085 to 0.115	94.8	70 to 130	0.271	20
AW14088	Lead, Total	mg/L	0.00000460	0.0022	0.10	0.0947	0.0960	0.0955	0.085 to 0.115	94.7	70 to 130	1.42	20
AW14088	Barium, Total	mg/L	0.00000546	0.0044	0.10	0.0904	0.0923	0.0907	0.085 to 0.115	90.4	70 to 130	2.08	20
AW14088	Chromium, Total	mg/L	0.00000506	0.0044	0.10	0.0975	0.0986	0.0950	0.085 to 0.115	97.5	70 to 130	1.07	20
AW14088	Lithium, Total	mg/L	0.0000841	0.022	0.20	0.203	0.191	0.194	0.17 to 0.23	102	70 to 130	6.09	20
AW14088	Thallium, Total	mg/L	0.00000465	0.00044	0.10	0.0951	0.0966	0.0952	0.085 to 0.115	95.1	70 to 130	1.55	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
AW14088	Boron, Total	mg/L	-0.00219	0.044	1.00	0.964	0.967	0.981	0.85 to 1.15	96.4	70 to 130	0.311	20
AW14088	Cobalt, Total	mg/L	-0.000000010(	0.0044	0.10	0.0976	0.0990	0.0999	0.085 to 0.115	97.6	70 to 130	1.41	20

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AW14081

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14084	Sulfate, Total	mg/L	0.481	1.0	100	162	61.1	19.7	18 to 22	101	80 to 120	0.490	20
AW14084	Chloride, Total	mg/L	0.00	0.25	10.00	31.2	22.0	10.1	9 to 11	92.0	80 to 120	0.00	20
AW14084	Fluoride, Total	mg/L	0.00	0.3	2.00	2.20	0.176	2.00	1.8 to 2.2	101	80 to 120	1.13	20
AW14083	Solids, Dissolved	mg/L	-10.0	25			211	53	40 to 60			1.20	5

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CC:

Reported: 7/19/2017
Version: 2.0

Alabama Power General Test Laboratory
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AW14082

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	J	0.000869	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005		0.00984	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0963	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1		0.318	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		1.015	0.1	0.5		25.9	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05		0.454	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0481	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0129	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000212	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		25		189	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		1	0.04	0.25		10.8	mg/L
* Fluoride, Total	SES	6/9/2016	EPA 300.0		1	0.01	0.3	J	0.132	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		5	1.5	5		83.1	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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AW14082

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14088	Calcium, Total	mg/L	-0.00367	0.22	5.00	5.24	4.97	4.79	4.25 to 5.75	105	70 to 130	5.29	20
AW14088	Selenium, Total	mg/L	0.0000369	0.0044	0.10	0.0926	0.0943	0.0970	0.085 to 0.115	92.6	70 to 130	1.84	20
AW14088	Arsenic, Total	mg/L	0.0000109	0.0022	0.10	0.0948	0.0951	0.0937	0.085 to 0.115	94.8	70 to 130	0.271	20
AW14088	Lead, Total	mg/L	0.00000460	0.0022	0.10	0.0947	0.0960	0.0955	0.085 to 0.115	94.7	70 to 130	1.42	20
AW14088	Boron, Total	mg/L	-0.00219	0.044	1.00	0.964	0.967	0.981	0.85 to 1.15	96.4	70 to 130	0.311	20
AW14088	Cobalt, Total	mg/L	-0.000000010(	0.0044	0.10	0.0976	0.0990	0.0999	0.085 to 0.115	97.6	70 to 130	1.41	20
AW14088	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.103	0.108	0.105	0.085 to 0.115	103	70 to 130	4.40	20
AW14088	Cadmium, Total	mg/L	0.00000271	0.00044	0.10	0.0960	0.100	0.0961	0.085 to 0.115	96.0	70 to 130	4.21	20
AW14088	Antimony, Total	mg/L	0.000184	0.00132	0.10	0.0881	0.0893	0.0883	0.085 to 0.115	88.1	70 to 130	1.35	20
AW14088	Molybdenum, Total	mg/L	0.0000332	0.0044	0.10	0.0948	0.0956	0.0949	0.085 to 0.115	94.8	70 to 130	0.896	20
AW14088	Barium, Total	mg/L	0.00000546	0.0044	0.10	0.0904	0.0923	0.0907	0.085 to 0.115	90.4	70 to 130	2.08	20
AW14088	Chromium, Total	mg/L	0.00000506	0.0044	0.10	0.0975	0.0986	0.0950	0.085 to 0.115	97.5	70 to 130	1.07	20
AW14088	Lithium, Total	mg/L	0.0000841	0.022	0.20	0.203	0.191	0.194	0.17 to 0.23	102	70 to 130	6.09	20
AW14088	Thallium, Total	mg/L	0.00000465	0.00044	0.10	0.0951	0.0966	0.0952	0.085 to 0.115	95.1	70 to 130	1.55	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

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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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AW14082

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14084	Sulfate, Total	mg/L	0.481	1.0	100	162	61.1	19.7	18 to 22	101	80 to 120	0.490	20
AW14084	Chloride, Total	mg/L	0.00	0.25	10.00	31.2	22.0	10.1	9 to 11	92.0	80 to 120	0.00	20
AW14083	Solids, Dissolved	mg/L	-10.0	25			211	53	40 to 60			1.20	5
AW14084	Fluoride, Total	mg/L	0.00	0.3	2.00	2.20	0.176	2.00	1.8 to 2.2	101	80 to 120	1.13	20

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CC:

Reported: 7/19/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AW14083

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	J	0.000834	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0175	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1		0.291	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		1.015	0.1	0.5		28.8	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05		0.470	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0915	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		25		206	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		1	0.04	0.25		7.74	mg/L
* Fluoride, Total	SES	6/9/2016	EPA 300.0		1	0.01	0.3	J	0.190	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		5	1.5	5		94.3	mg/L

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AW14083

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14088	Selenium, Total	mg/L	0.0000369	0.0044	0.10	0.0926	0.0943	0.0970	0.085 to 0.115	92.6	70 to 130	1.84	20
AW14088	Calcium, Total	mg/L	-0.00367	0.22	5.00	5.24	4.97	4.79	4.25 to 5.75	105	70 to 130	5.29	20
AW14088	Arsenic, Total	mg/L	0.0000109	0.0022	0.10	0.0948	0.0951	0.0937	0.085 to 0.115	94.8	70 to 130	0.271	20
AW14088	Lead, Total	mg/L	0.00000460	0.0022	0.10	0.0947	0.0960	0.0955	0.085 to 0.115	94.7	70 to 130	1.42	20
AW14088	Antimony, Total	mg/L	0.000184	0.00132	0.10	0.0881	0.0893	0.0883	0.085 to 0.115	88.1	70 to 130	1.35	20
AW14088	Molybdenum, Total	mg/L	0.0000332	0.0044	0.10	0.0948	0.0956	0.0949	0.085 to 0.115	94.8	70 to 130	0.896	20
AW14088	Boron, Total	mg/L	-0.00219	0.044	1.00	0.964	0.967	0.981	0.85 to 1.15	96.4	70 to 130	0.311	20
AW14088	Cobalt, Total	mg/L	-0.000000010(	0.0044	0.10	0.0976	0.0990	0.0999	0.085 to 0.115	97.6	70 to 130	1.41	20
AW14088	Barium, Total	mg/L	0.00000546	0.0044	0.10	0.0904	0.0923	0.0907	0.085 to 0.115	90.4	70 to 130	2.08	20
AW14088	Chromium, Total	mg/L	0.00000506	0.0044	0.10	0.0975	0.0986	0.0950	0.085 to 0.115	97.5	70 to 130	1.07	20
AW14088	Lithium, Total	mg/L	0.0000841	0.022	0.20	0.203	0.191	0.194	0.17 to 0.23	102	70 to 130	6.09	20
AW14088	Thallium, Total	mg/L	0.00000465	0.00044	0.10	0.0951	0.0966	0.0952	0.085 to 0.115	95.1	70 to 130	1.55	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
AW14088	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.103	0.108	0.105	0.085 to 0.115	103	70 to 130	4.40	20
AW14088	Cadmium, Total	mg/L	0.00000271	0.00044	0.10	0.0960	0.100	0.0961	0.085 to 0.115	96.0	70 to 130	4.21	20

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Calera, AL 35040
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-May-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AW14083

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14084	Fluoride, Total	mg/L	0.00	0.3	2.00	2.20	0.176	2.00	1.8 to 2.2	101	80 to 120	1.13	20
AW14084	Sulfate, Total	mg/L	0.481	1.0	100	162	61.1	19.7	18 to 22	101	80 to 120	0.490	20
AW14084	Chloride, Total	mg/L	0.00	0.25	10.00	31.2	22.0	10.1	9 to 11	92.0	80 to 120	0.00	20
AW14083	Solids, Dissolved	mg/L	-10.0	25			211	53	40 to 60			1.20	5

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

CC:

Reported: 7/19/2017
Version: 2.0

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AW14084

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005		0.110	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.114	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1		1.74	mg/L
* Calcium, Total	HRG	6/24/2016	EPA 200.7		10.15	1.0	5.0		90.2	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0200	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05		0.666	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		50		468	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		1	0.04	0.25		22.0	mg/L
* Fluoride, Total	SES	6/9/2016	EPA 300.0		1	0.01	0.3	J	0.178	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		5	1.5	5		61.4	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AW14084

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14088	Selenium, Total	mg/L	0.0000369	0.0044	0.10	0.0926	0.0943	0.0970	0.085 to 0.115	92.6	70 to 130	1.84	20
AW14088	Calcium, Total	mg/L	-0.00367	0.22	5.00	5.24	4.97	4.79	4.25 to 5.75	105	70 to 130	5.29	20
AW14088	Arsenic, Total	mg/L	0.0000109	0.0022	0.10	0.0948	0.0951	0.0937	0.085 to 0.115	94.8	70 to 130	0.271	20
AW14088	Lead, Total	mg/L	0.00000460	0.0022	0.10	0.0947	0.0960	0.0955	0.085 to 0.115	94.7	70 to 130	1.42	20
AW14088	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.103	0.108	0.105	0.085 to 0.115	103	70 to 130	4.40	20
AW14088	Cadmium, Total	mg/L	0.00000271	0.00044	0.10	0.0960	0.100	0.0961	0.085 to 0.115	96.0	70 to 130	4.21	20
AW14088	Boron, Total	mg/L	-0.00219	0.044	1.00	0.964	0.967	0.981	0.85 to 1.15	96.4	70 to 130	0.311	20
AW14088	Cobalt, Total	mg/L	-0.000000010(	0.0044	0.10	0.0976	0.0990	0.0999	0.085 to 0.115	97.6	70 to 130	1.41	20
AW14088	Barium, Total	mg/L	0.00000546	0.0044	0.10	0.0904	0.0923	0.0907	0.085 to 0.115	90.4	70 to 130	2.08	20
AW14088	Chromium, Total	mg/L	0.00000506	0.0044	0.10	0.0975	0.0986	0.0950	0.085 to 0.115	97.5	70 to 130	1.07	20
AW14088	Lithium, Total	mg/L	0.0000841	0.022	0.20	0.203	0.191	0.194	0.17 to 0.23	102	70 to 130	6.09	20
AW14088	Thallium, Total	mg/L	0.00000465	0.00044	0.10	0.0951	0.0966	0.0952	0.085 to 0.115	95.1	70 to 130	1.55	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
AW14088	Antimony, Total	mg/L	0.000184	0.00132	0.10	0.0881	0.0893	0.0883	0.085 to 0.115	88.1	70 to 130	1.35	20
AW14088	Molybdenum, Total	mg/L	0.0000332	0.0044	0.10	0.0948	0.0956	0.0949	0.085 to 0.115	94.8	70 to 130	0.896	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: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AW14084

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14084	Fluoride, Total	mg/L	0.00	0.3	2.00	2.20	0.176	2.00	1.8 to 2.2	101	80 to 120	1.13	20
AW14084	Sulfate, Total	mg/L	0.481	1.0	100	162	61.1	19.7	18 to 22	101	80 to 120	0.490	20
AW14087	Solids, Dissolved	mg/L	-10.0	25			226	53	40 to 60			0.444	5
AW14084	Chloride, Total	mg/L	0.00	0.25	10.00	31.2	22.0	10.1	9 to 11	92.0	80 to 120	0.00	20

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CC:

Reported: 7/19/2017
Version: 2.0

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AW14085

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005		0.251	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0786	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1		1.66	mg/L
* Calcium, Total	HRG	6/24/2016	EPA 200.7		10.15	1.0	5.0		47.7	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0134	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05		0.675	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0835	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		50		442	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		1	0.04	0.25		15.9	mg/L
* Fluoride, Total	SES	6/9/2016	EPA 300.0		1	0.01	0.30		0.376	mg/L
* Sulfate, Total	SES	6/10/2016	EPA 300.0		10	3.0	10		144	mg/L

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Alabama Power General Test Laboratory
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AW14085

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14088	Calcium, Total	mg/L	-0.00367	0.22	5.00	5.24	4.97	4.79	4.25 to 5.75	105	70 to 130	5.29	20
AW14088	Selenium, Total	mg/L	0.0000369	0.0044	0.10	0.0926	0.0943	0.0970	0.085 to 0.115	92.6	70 to 130	1.84	20
AW14088	Boron, Total	mg/L	-0.00219	0.044	1.00	0.964	0.967	0.981	0.85 to 1.15	96.4	70 to 130	0.311	20
AW14088	Cobalt, Total	mg/L	-0.000000010(	0.0044	0.10	0.0976	0.0990	0.0999	0.085 to 0.115	97.6	70 to 130	1.41	20
AW14088	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.103	0.108	0.105	0.085 to 0.115	103	70 to 130	4.40	20
AW14088	Cadmium, Total	mg/L	0.00000271	0.00044	0.10	0.0960	0.100	0.0961	0.085 to 0.115	96.0	70 to 130	4.21	20
AW14088	Arsenic, Total	mg/L	0.0000109	0.0022	0.10	0.0948	0.0951	0.0937	0.085 to 0.115	94.8	70 to 130	0.271	20
AW14088	Lead, Total	mg/L	0.00000460	0.0022	0.10	0.0947	0.0960	0.0955	0.085 to 0.115	94.7	70 to 130	1.42	20
AW14088	Barium, Total	mg/L	0.00000546	0.0044	0.10	0.0904	0.0923	0.0907	0.085 to 0.115	90.4	70 to 130	2.08	20
AW14088	Chromium, Total	mg/L	0.00000506	0.0044	0.10	0.0975	0.0986	0.0950	0.085 to 0.115	97.5	70 to 130	1.07	20
AW14088	Lithium, Total	mg/L	0.0000841	0.022	0.20	0.203	0.191	0.194	0.17 to 0.23	102	70 to 130	6.09	20
AW14088	Thallium, Total	mg/L	0.00000465	0.00044	0.10	0.0951	0.0966	0.0952	0.085 to 0.115	95.1	70 to 130	1.55	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
AW14088	Antimony, Total	mg/L	0.000184	0.00132	0.10	0.0881	0.0893	0.0883	0.085 to 0.115	88.1	70 to 130	1.35	20
AW14088	Molybdenum, Total	mg/L	0.0000332	0.0044	0.10	0.0948	0.0956	0.0949	0.085 to 0.115	94.8	70 to 130	0.896	20

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Expiration: June 30, 2018

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Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AW14085

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14087	Solids, Dissolved	mg/L	-10.0	25			226	53	40 to 60			0.444	5
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
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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Version: 2.0

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(205) 664-6032 or 6171
FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AW14086

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005		0.292	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0357	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1		1.22	mg/L
* Calcium, Total	HRG	6/24/2016	EPA 200.7		10.15	1.0	5.0		54.4	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0117	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05		0.556	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000272	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		25		360	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		1	0.04	0.25		14.2	mg/L
* Fluoride, Total	SES	6/9/2016	EPA 300.0		1	0.01	0.30	J	0.253	mg/L
* Sulfate, Total	SES	6/10/2016	EPA 300.0		10	3.0	10		111	mg/L

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Calera, AL 35040
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AW14086

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14088	Selenium, Total	mg/L	0.0000369	0.0044	0.10	0.0926	0.0943	0.0970	0.085 to 0.115	92.6	70 to 130	1.84	20
AW14088	Calcium, Total	mg/L	-0.00367	0.22	5.00	5.24	4.97	4.79	4.25 to 5.75	105	70 to 130	5.29	20
AW14088	Boron, Total	mg/L	-0.00219	0.044	1.00	0.964	0.967	0.981	0.85 to 1.15	96.4	70 to 130	0.311	20
AW14088	Cobalt, Total	mg/L	-0.000000010(	0.0044	0.10	0.0976	0.0990	0.0999	0.085 to 0.115	97.6	70 to 130	1.41	20
AW14088	Arsenic, Total	mg/L	0.0000109	0.0022	0.10	0.0948	0.0951	0.0937	0.085 to 0.115	94.8	70 to 130	0.271	20
AW14088	Lead, Total	mg/L	0.00000460	0.0022	0.10	0.0947	0.0960	0.0955	0.085 to 0.115	94.7	70 to 130	1.42	20
AW14088	Antimony, Total	mg/L	0.000184	0.00132	0.10	0.0881	0.0893	0.0883	0.085 to 0.115	88.1	70 to 130	1.35	20
AW14088	Molybdenum, Total	mg/L	0.0000332	0.0044	0.10	0.0948	0.0956	0.0949	0.085 to 0.115	94.8	70 to 130	0.896	20
AW14088	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.103	0.108	0.105	0.085 to 0.115	103	70 to 130	4.40	20
AW14088	Cadmium, Total	mg/L	0.00000271	0.00044	0.10	0.0960	0.100	0.0961	0.085 to 0.115	96.0	70 to 130	4.21	20
AW14088	Barium, Total	mg/L	0.00000546	0.0044	0.10	0.0904	0.0923	0.0907	0.085 to 0.115	90.4	70 to 130	2.08	20
AW14088	Chromium, Total	mg/L	0.00000506	0.0044	0.10	0.0975	0.0986	0.0950	0.085 to 0.115	97.5	70 to 130	1.07	20
AW14088	Lithium, Total	mg/L	0.0000841	0.022	0.20	0.203	0.191	0.194	0.17 to 0.23	102	70 to 130	6.09	20
AW14088	Thallium, Total	mg/L	0.00000465	0.00044	0.10	0.0951	0.0966	0.0952	0.085 to 0.115	95.1	70 to 130	1.55	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

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AW14086

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	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
AW14087	Solids, Dissolved	mg/L	-10.0	25			226	53	40 to 60			0.444	5
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

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CC:

Reported: 7/19/2017
Version: 2.0

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AW14087

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005		0.00625	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01		0.0555	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1		0.338	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		1.015	0.1	0.5		33.9	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	J	0.00976	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05	J	0.0296	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		25		224	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		1	0.04	0.25		12.6	mg/L
* Fluoride, Total	SES	6/9/2016	EPA 300.0		1	0.01	0.3	J	0.190	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		1	0.3	1		32.0	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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AW14087

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14088	Calcium, Total	mg/L	-0.00367	0.22	5.00	5.24	4.97	4.79	4.25 to 5.75	105	70 to 130	5.29	20
AW14088	Selenium, Total	mg/L	0.0000369	0.0044	0.10	0.0926	0.0943	0.0970	0.085 to 0.115	92.6	70 to 130	1.84	20
AW14088	Boron, Total	mg/L	-0.00219	0.044	1.00	0.964	0.967	0.981	0.85 to 1.15	96.4	70 to 130	0.311	20
AW14088	Cobalt, Total	mg/L	-0.000000010(	0.0044	0.10	0.0976	0.0990	0.0999	0.085 to 0.115	97.6	70 to 130	1.41	20
AW14088	Arsenic, Total	mg/L	0.0000109	0.0022	0.10	0.0948	0.0951	0.0937	0.085 to 0.115	94.8	70 to 130	0.271	20
AW14088	Lead, Total	mg/L	0.00000460	0.0022	0.10	0.0947	0.0960	0.0955	0.085 to 0.115	94.7	70 to 130	1.42	20
AW14088	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.103	0.108	0.105	0.085 to 0.115	103	70 to 130	4.40	20
AW14088	Cadmium, Total	mg/L	0.00000271	0.00044	0.10	0.0960	0.100	0.0961	0.085 to 0.115	96.0	70 to 130	4.21	20
AW14088	Barium, Total	mg/L	0.00000546	0.0044	0.10	0.0904	0.0923	0.0907	0.085 to 0.115	90.4	70 to 130	2.08	20
AW14088	Chromium, Total	mg/L	0.00000506	0.0044	0.10	0.0975	0.0986	0.0950	0.085 to 0.115	97.5	70 to 130	1.07	20
AW14088	Lithium, Total	mg/L	0.0000841	0.022	0.20	0.203	0.191	0.194	0.17 to 0.23	102	70 to 130	6.09	20
AW14088	Thallium, Total	mg/L	0.00000465	0.00044	0.10	0.0951	0.0966	0.0952	0.085 to 0.115	95.1	70 to 130	1.55	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
AW14088	Antimony, Total	mg/L	0.000184	0.00132	0.10	0.0881	0.0893	0.0883	0.085 to 0.115	88.1	70 to 130	1.35	20
AW14088	Molybdenum, Total	mg/L	0.0000332	0.0044	0.10	0.0948	0.0956	0.0949	0.085 to 0.115	94.8	70 to 130	0.896	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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AW14087

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14087	Solids, Dissolved	mg/L	-10.0	25			226	53	40 to 60			0.444	5
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
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

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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: 7/19/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW14088

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	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/23/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/23/2016	EPA 200.7		1.015	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	ABB	6/15/2016	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	6/23/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	ABB	6/15/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	ABB	6/15/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	6/6/2016	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	6/9/2016	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	6/9/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	6/9/2016	EPA 300.0		1	0.3	1	J	0.490	mg/L

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

Reported: 7/19/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW14088

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14088	Selenium, Total	mg/L	0.0000369	0.0044	0.10	0.0926	0.0943	0.0970	0.085 to 0.115	92.6	70 to 130	1.84	20
AW14088	Calcium, Total	mg/L	-0.00367	0.22	5.00	5.24	4.97	4.79	4.25 to 5.75	105	70 to 130	5.29	20
AW14088	Boron, Total	mg/L	-0.00219	0.044	1.00	0.964	0.967	0.981	0.85 to 1.15	96.4	70 to 130	0.311	20
AW14088	Cobalt, Total	mg/L	-0.000000010(	0.0044	0.10	0.0976	0.0990	0.0999	0.085 to 0.115	97.6	70 to 130	1.41	20
AW14088	Arsenic, Total	mg/L	0.0000109	0.0022	0.10	0.0948	0.0951	0.0937	0.085 to 0.115	94.8	70 to 130	0.271	20
AW14088	Lead, Total	mg/L	0.00000460	0.0022	0.10	0.0947	0.0960	0.0955	0.085 to 0.115	94.7	70 to 130	1.42	20
AW14088	Beryllium, Total	mg/L	0.00	0.00132	0.10	0.103	0.108	0.105	0.085 to 0.115	103	70 to 130	4.40	20
AW14088	Cadmium, Total	mg/L	0.00000271	0.00044	0.10	0.0960	0.100	0.0961	0.085 to 0.115	96.0	70 to 130	4.21	20
AW14088	Antimony, Total	mg/L	0.000184	0.00132	0.10	0.0881	0.0893	0.0883	0.085 to 0.115	88.1	70 to 130	1.35	20
AW14088	Molybdenum, Total	mg/L	0.0000332	0.0044	0.10	0.0948	0.0956	0.0949	0.085 to 0.115	94.8	70 to 130	0.896	20
AW14088	Barium, Total	mg/L	0.00000546	0.0044	0.10	0.0904	0.0923	0.0907	0.085 to 0.115	90.4	70 to 130	2.08	20
AW14088	Chromium, Total	mg/L	0.00000506	0.0044	0.10	0.0975	0.0986	0.0950	0.085 to 0.115	97.5	70 to 130	1.07	20
AW14088	Lithium, Total	mg/L	0.0000841	0.022	0.20	0.203	0.191	0.194	0.17 to 0.23	102	70 to 130	6.09	20
AW14088	Thallium, Total	mg/L	0.00000465	0.00044	0.10	0.0951	0.0966	0.0952	0.085 to 0.115	95.1	70 to 130	1.55	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

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

Reported: 7/19/2017
Version: 2.0

Alabama Power General Test Laboratory
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Calera, AL 35040
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 01-Jun-16
Customer ID:
Delivery Date: 02-Jun-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW14088

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW14087	Solids, Dissolved	mg/L	-10.0	25			226	53	40 to 60			0.444	5
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
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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Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/17/17

CC:

Reported: 7/19/2017
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

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: 06/02/2016 09:10

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Clarence Specht	Location	Greene Ash Pond

Analysis Requested	Bottle 3: Metals and Hg (1) 500 mL bottle, Bottle 4: TDS and Anions (1) 500 mL bottle, Bottles 1&2: Radiological (2) 2 L bottles
Comments	RD-4 taken with MW-18 Added 3.0mL HNO3 to AW14085 (bottle 1) and AW14087 (bottle 2). 6/2/16 SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-15	05/31/2016	13:30	4	Groundwater		AW14079
MW-15-Dup	05/31/2016	13:30	4	Groundwater		AW14080
MW-14	05/31/2016	14:34	4	Groundwater		AW14081
MW-13	05/31/2016	15:40	4	Groundwater		AW14082
MW-12	05/31/2016	16:32	4	Groundwater		AW14083
MW-18	06/01/2016	10:27	6	Groundwater		AW14084
MW-17	06/01/2016	11:43	4	Groundwater		AW14085
MW-16	06/01/2016	12:54	4	Groundwater		AW14086
MW-9	06/01/2016	14:13	4	Groundwater		AW14087
FB-3	06/01/2016	14:29	4	Field Blank		AW14088

Relinquished By	Received By	Date/Time
C. [signature]	Sarah Copeland Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US Date: 2016.06.02 11:21:10 -05'00'	06/02/2016 10:45

SmarTroll ID	4696-23451-4-3	All metals and radiological bottles have pH < 2	☐
Turbidity ID	3901-20009-2-1	Cooler Temp	1.4
		Thermometer ID	1506-3968-4-4
		pH Strip ID	4831-24375-20-2

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

☑ Field Complete
☑ Lab Complete

Lab ETA: 06/02/2016 11:00

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Nick Pitts	Location	Greene 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-7

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-7	05/31/2016	15:10	6	Groundwater		AW14071
MW-6	05/31/2016	16:36	4	Groundwater		AW14072
MW-25	06/01/2016	09:35	4	Groundwater		AW14073
FB-2	06/01/2016	10:00	4	Field Blank		AW14074
MW-21	06/01/2016	10:55	4	Groundwater		AW14075
MW-23	06/01/2016	12:20	4	Groundwater		AW14076
MW-23 Dup	06/01/2016	12:20	4	Sample Duplicate		AW14077
MW-24	06/01/2016	13:25	4	Groundwater		AW14078

Relinquished By	Received By	Date/Time
[signature]	Sarah Copeland Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US Date: 2016.06.02 16:00:23 -05'00'	06/02/2016 11:00

SmarTroll ID	4696-23443-3-2	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	1.4
		Thermometer ID	1506-3968-4-4
		pH Strip ID	4831-24375-20-2

4.0

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

✔ Field Complete
✔ Lab Complete

Lab ETA: 06/02/2016 10:30

Requested Complete Date	Routine	Results To	Dustin Brooks
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Jason Rouss	Location	Greene Ash Pond

Analysis Requested	Bottle 3: Metals and Hg (1) 500 mL bottle, Bottle 4: TDS and Anions (1) 500 mL bottle, Bottles 1&2: Radiological (2) 2 L bottles
Comments	Added 3.0 mL HNO3 to AW14062 (bottle 2) and AW14065 (bottle 2). 6/2/16 SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-5	05/31/2016	12:40	4	Groundwater		AW14061
MW-5 Dup	05/31/2016	12:40	4	Groundwater		AW14062
MW-11	05/31/2016	14:00	6	Groundwater		AW14063
MW-10	05/31/2016	16:15	4	Groundwater		AW14064
FB-1	05/31/2016	16:30	4	Groundwater		AW14065
MW-1	06/01/2016	10:18	6	Groundwater		AW14066
MW-3	06/01/2016	11:40	4	Groundwater		AW14067
MW-2	06/01/2016	12:55	4	Groundwater		AW14068
EB-1	06/01/2016	13:15	4	Groundwater		AW14069
MW-8	06/01/2016	14:58	4	Groundwater		AW14070

Relinquished By	Received By	Date/Time
	Sarah Copeland Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US Date: 2016.06.02 11:23:12 -05'00'	06/02/2016 11:00

SmarTroll ID	4696-23444-3-3
Turbidity ID	LaMotte 112-3410

All metals and radiological bottles have pH < 2 ☐

Cooler Temp	1.4
Thermometer ID	1506-3968-4-4
pH Strip ID	4831-24375-20-2

4.0

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: 400-123619-1
TestAmerica SDG: Greene County Ash Pond (3)
Client Project/Site: CCR Plant Greene

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

Attn: Sarah Copeland

Cheyenne Whitmire

Authorized for release by:
8/9/2016 11:10:40 AM

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

LINKS

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

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

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

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Job ID: 400-123619-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-123619-1

RAD

Method(s) PrecSep_0: Radium-228 prep batch 160-259369: The following sample arrived with limited volume. The sample was weighed at a reduced aliquot of 750 mL versus the normal aliquot of 1000 mL. The reduced aliquot should not affect the RL. AW14061 MW-5 (400-123619-1)

Method(s) PrecSep_0: Radium-228 Prep Batch 160-260722: The following sample was run at a reduced aliquot due to limited sample available: AW14073 MW-25 (400-123619-13).

Method(s) PrecSep-21: Radium-226 prep batch 160-259366: The following sample arrived with limited volume. The sample was weighed at 750 mL versus the normal aliquot of 1000 mL. The reduced aliquot should not affect the RL. AW14061 MW-5 (400-123619-1)

Method(s) PrecSep-21: Radium-226 Prep Batch 160-260719: The following sample was run at a reduced aliquot due to limited sample available: AW14073 MW-25 (400-123619-13).

Method Summary

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

TestAmerica Job ID: 400-123619-1
SDG: Greene County 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 Greene

TestAmerica Job ID: 400-123619-1
SDG: Greene County Ash Pond (3)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-123619-1	AW14061 MW-5	Water	05/31/16 12:40	06/28/16 15:43
400-123619-2	AW14062 MW-5 DUP	Water	05/31/16 12:40	06/28/16 15:43
400-123619-3	AW14063 MW-11	Water	05/31/16 14:00	06/28/16 15:43
400-123619-4	AW14064 MW-10	Water	05/31/16 16:15	06/28/16 15:43
400-123619-5	AW14065 FB-1	Water	05/31/16 16:30	06/28/16 15:43
400-123619-6	AW14066 MW-1	Water	06/01/16 10:18	06/28/16 15:43
400-123619-7	AW14067 MW-3	Water	06/01/16 11:40	06/28/16 15:43
400-123619-8	AW14068 MW-2	Water	06/01/16 12:55	06/28/16 15:43
400-123619-9	AW14069 EB-1	Water	06/01/16 13:15	06/28/16 15:43
400-123619-10	AW14070 MW-8	Water	06/01/16 14:58	06/28/16 15:43
400-123619-11	AW14071 MW-7	Water	05/31/16 15:10	06/28/16 15:43
400-123619-12	AW14072 MW-6	Water	05/31/16 16:35	06/28/16 15:43
400-123619-13	AW14073 MW-25	Water	06/01/16 09:35	06/28/16 15:43
400-123619-14	AW14074 FB-2	Water	06/01/16 10:00	06/28/16 15:43
400-123619-15	AW14075 MW-21	Water	06/01/16 10:55	06/28/16 15:43
400-123619-16	AW14076 MW-23	Water	06/01/16 12:20	06/28/16 15:43
400-123619-17	AW14077 MW-23 DUP	Water	06/01/16 12:20	06/28/16 15:43
400-123619-18	AW14078 MW-24	Water	06/01/16 13:25	06/28/16 15:43
400-123619-19	AW14079 MW-15	Water	05/31/16 13:30	06/28/16 15:43
400-123619-20	AW14080 MW-15 DUP	Water	05/31/16 13:30	06/28/16 15:43
400-123619-21	AW14081 MW-14	Water	05/31/16 14:34	06/28/16 15:43
400-123619-22	AW14082 MW-13	Water	05/31/16 15:40	06/28/16 15:43
400-123619-23	AW14083 MW-12	Water	05/31/16 16:32	06/28/16 15:43
400-123619-24	AW14084 MW-18	Water	06/01/16 10:27	06/28/16 15:43
400-123619-25	AW14085 MW-17	Water	06/01/16 11:43	06/28/16 15:43
400-123619-26	AW14086 MW-16	Water	06/01/16 12:54	06/28/16 15:43
400-123619-27	AW14087 MW-9	Water	06/01/16 14:13	06/28/16 15:43
400-123619-28	AW14088 FB-3	Water	06/01/16 14:29	06/28/16 15:43

Client Sample ID: AW14061 MW-5

Date Collected: 05/31/16 12:40
Date Received: 06/28/16 15:43

Lab Sample ID: 400-123619-1
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	1.22		0.241	0.264	1.00	0.215	pCi/L	07/06/16 10:52	07/29/16 06:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*40 - 110*	*07/06/16 10:52*	*07/29/16 06:59*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.896		0.424	0.432	1.00	0.625	pCi/L	07/06/16 10:52	07/26/16 13:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:32*	*1*
Y Carrier	*90.1*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:32*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.11		0.487	0.506	5.00	0.625	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14062 MW-5 DUP

Date Collected: 05/31/16 12:40
Date Received: 06/28/16 15:43

Lab Sample ID: 400-123619-2
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	1.33		0.195	0.229	1.00	0.107	pCi/L	07/06/16 10:52	07/29/16 06:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.2*		*40 - 110*	*07/06/16 10:52*	*07/29/16 06:59*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.310	U	0.235	0.237	1.00	0.367	pCi/L	07/06/16 10:52	07/26/16 13:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.2*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:32*	*1*
Y Carrier	*89.3*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:32*	*1*

Client Sample ID: AW14062 MW-5 DUP

Lab Sample ID: 400-123619-2
Date Collected: 05/31/16 12:40
Matrix: Water
Date Received: 06/28/16 15:43

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.64		0.306	0.329	5.00	0.367	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14063 MW-11

Lab Sample ID: 400-123619-3
Date Collected: 05/31/16 14:00
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.189		0.109	0.110	1.00	0.155	pCi/L	07/06/16 10:52	07/29/16 07:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.5*		*40 - 110*	*07/06/16 10:52*	*07/29/16 07:00*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0437	U	0.209	0.209	1.00	0.388	pCi/L	07/06/16 10:52	07/26/16 13:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.5*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:32*	*1*
Y Carrier	*89.3*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:32*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.145	U	0.235	0.236	5.00	0.388	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14064 MW-10

Lab Sample ID: 400-123619-4
Date Collected: 05/31/16 16:15
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.505		0.131	0.139	1.00	0.113	pCi/L	07/06/16 10:52	07/29/16 07:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.9*		*40 - 110*	*07/06/16 10:52*	*07/29/16 07:00*	*1*

Client Sample ID: AW14064 MW-10

Lab Sample ID: 400-123619-4

Date Collected: 05/31/16 16:15
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.394	U	0.260	0.262	1.00	0.399	pCi/L	07/06/16 10:52	07/26/16 13:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.9*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:32*	*1*
Y Carrier	*91.6*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:32*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.899**		0.291	0.297	5.00	0.399	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14065 FB-1

Lab Sample ID: 400-123619-5

Date Collected: 05/31/16 16:30
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.0295	U	0.0732	0.0733	1.00	0.150	pCi/L	07/06/16 10:52	07/29/16 07:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.2*		*40 - 110*	*07/06/16 10:52*	*07/29/16 07:00*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.244	U	0.197	0.198	1.00	0.405	pCi/L	07/06/16 10:52	07/26/16 13:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.2*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:32*	*1*
Y Carrier	*90.8*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:32*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.274	U	0.210	0.211	5.00	0.405	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14066 MW-1

Lab Sample ID: 400-123619-6

Date Collected: 06/01/16 10:18

Matrix: Water

Date Received: 06/28/16 15:43

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		0.159	0.168	1.00	0.169	pCi/L	07/06/16 10:52	07/29/16 07:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.3*		*40 - 110*	*07/06/16 10:52*	*07/29/16 07:08*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.839		0.339	0.347	1.00	0.468	pCi/L	07/06/16 10:52	07/26/16 13:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*78.3*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:32*	*1*
Y Carrier	*85.2*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:32*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.43		0.374	0.386	5.00	0.468	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14067 MW-3

Lab Sample ID: 400-123619-7

Date Collected: 06/01/16 11:40

Matrix: Water

Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.594		0.142	0.151	1.00	0.116	pCi/L	07/06/16 10:52	07/29/16 07:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.2*		*40 - 110*	*07/06/16 10:52*	*07/29/16 07:08*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.463	U	0.323	0.326	1.00	0.505	pCi/L	07/06/16 10:52	07/26/16 13:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.2*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:33*	*1*
Y Carrier	*89.0*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:33*	*1*

Client Sample ID: AW14067 MW-3

Lab Sample ID: 400-123619-7
Date Collected: 06/01/16 11:40
Matrix: Water
Date Received: 06/28/16 15:43

Method: Ra226_Ra228 - Combined Radium-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		0.353	0.360	5.00	0.505	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14068 MW-2

Lab Sample ID: 400-123619-8
Date Collected: 06/01/16 12:55
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.371		0.118	0.123	1.00	0.124	pCi/L	07/06/16 10:52	07/29/16 07:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.0*		*40 - 110*	*07/06/16 10:52*	*07/29/16 07:08*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.387	U	0.274	0.277	1.00	0.428	pCi/L	07/06/16 10:52	07/26/16 13:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.0*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:33*	*1*
Y Carrier	*90.1*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:33*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.758		0.299	0.303	5.00	0.428	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14069 EB-1

Lab Sample ID: 400-123619-9
Date Collected: 06/01/16 13:15
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0207	U	0.0489	0.0490	1.00	0.0910	pCi/L	07/06/16 10:52	07/29/16 07:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.0*		*40 - 110*	*07/06/16 10:52*	*07/29/16 07:08*	*1*

Client Sample ID: AW14069 EB-1

Lab Sample ID: 400-123619-9

Date Collected: 06/01/16 13:15
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.134	U	0.261	0.261	1.00	0.445	pCi/L	07/06/16 10:52	07/26/16 13:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.0*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:33*	*1*
Y Carrier	*89.0*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:33*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.155	U	0.265	0.266	5.00	0.445	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14070 MW-8

Lab Sample ID: 400-123619-10

Date Collected: 06/01/16 14:58
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.491**		0.131	0.138	1.00	0.134	pCi/L	07/06/16 10:52	07/29/16 07:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*40 - 110*	*07/06/16 10:52*	*07/29/16 07:10*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.393	U	0.278	0.281	1.00	0.433	pCi/L	07/06/16 10:52	07/26/16 13:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:33*	*1*
Y Carrier	*89.0*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:33*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.884**		0.308	0.313	5.00	0.433	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14071 MW-7

Lab Sample ID: 400-123619-11

Date Collected: 05/31/16 15:10

Matrix: Water

Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.429		0.130	0.136	1.00	0.142	pCi/L	07/06/16 10:52	07/29/16 07:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.9*		*40 - 110*	*07/06/16 10:52*	*07/29/16 07:10*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.229	U	0.262	0.263	1.00	0.432	pCi/L	07/06/16 10:52	07/26/16 13:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.9*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:33*	*1*
Y Carrier	*91.2*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:33*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.658		0.293	0.296	5.00	0.432	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14072 MW-6

Lab Sample ID: 400-123619-12

Date Collected: 05/31/16 16:35

Matrix: Water

Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.188		0.0944	0.0959	1.00	0.125	pCi/L	07/06/16 10:52	07/29/16 07:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*40 - 110*	*07/06/16 10:52*	*07/29/16 07:10*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.265	U	0.281	0.282	1.00	0.459	pCi/L	07/06/16 10:52	07/26/16 13:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:34*	*1*
Y Carrier	*90.8*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:34*	*1*

Client Sample ID: AW14072 MW-6

Lab Sample ID: 400-123619-12
Date Collected: 05/31/16 16:35
Matrix: Water
Date Received: 06/28/16 15:43

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.453	U	0.296	0.297	5.00	0.459	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14073 MW-25

Lab Sample ID: 400-123619-13
Date Collected: 06/01/16 09:35
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0152	U	0.197	0.197	1.00	0.366	pCi/L	07/15/16 14:14	08/08/16 07:37	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.2*		*40 - 110*	*07/15/16 14:14*	*08/08/16 07:37*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0848	U G	0.639	0.639	1.00	1.13	pCi/L	07/15/16 14:40	08/03/16 12:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.2*		*40 - 110*	*07/15/16 14:40*	*08/03/16 12:34*	*1*
Y Carrier	*89.0*		*40 - 110*	*07/15/16 14:40*	*08/03/16 12:34*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.100	U	0.668	0.668	5.00	1.13	pCi/L		08/09/16 04:55	1

Client Sample ID: AW14074 FB-2

Lab Sample ID: 400-123619-14
Date Collected: 06/01/16 10:00
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0860	U	0.0958	0.0961	1.00	0.156	pCi/L	07/06/16 10:52	07/29/16 07:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*74.6*		*40 - 110*	*07/06/16 10:52*	*07/29/16 07:11*	*1*

Client Sample ID: AW14074 FB-2

Lab Sample ID: 400-123619-14
Date Collected: 06/01/16 10:00
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0346	U	0.280	0.280	1.00	0.510	pCi/L	07/06/16 10:52	07/26/16 13:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*74.6*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:34*	*1*
Y Carrier	*89.3*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:34*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0513	U	0.296	0.296	5.00	0.510	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14075 MW-21

Lab Sample ID: 400-123619-15
Date Collected: 06/01/16 10:55
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0400	U	0.0787	0.0788	1.00	0.138	pCi/L	07/06/16 10:52	07/29/16 07:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.9*		*40 - 110*	*07/06/16 10:52*	*07/29/16 07:11*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0859	U	0.236	0.236	1.00	0.410	pCi/L	07/06/16 10:52	07/26/16 13:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.9*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:34*	*1*
Y Carrier	*88.6*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:34*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.126	U	0.249	0.249	5.00	0.410	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14076 MW-23

Lab Sample ID: 400-123619-16

Date Collected: 06/01/16 12:20

Matrix: Water

Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.108	U	0.0780	0.0786	1.00	0.113	pCi/L	07/06/16 10:52	07/29/16 07:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.5*		*40 - 110*	*07/06/16 10:52*	*07/29/16 07:11*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0638	U	0.231	0.232	1.00	0.427	pCi/L	07/06/16 10:52	07/26/16 13:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.5*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:34*	*1*
Y Carrier	*90.1*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:34*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0440	U	0.244	0.245	5.00	0.427	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14077 MW-23 DUP

Lab Sample ID: 400-123619-17

Date Collected: 06/01/16 12:20

Matrix: Water

Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.194		0.0945	0.0961	1.00	0.121	pCi/L	07/06/16 10:52	07/29/16 07:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.7*		*40 - 110*	*07/06/16 10:52*	*07/29/16 07:11*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0384	U	0.255	0.255	1.00	0.450	pCi/L	07/06/16 10:52	07/26/16 13:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.7*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:34*	*1*
Y Carrier	*91.2*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:34*	*1*

Client Sample ID: AW14077 MW-23 DUP

Lab Sample ID: 400-123619-17
Date Collected: 06/01/16 12:20
Matrix: Water
Date Received: 06/28/16 15:43

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.232	U	0.272	0.273	5.00	0.450	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14078 MW-24

Lab Sample ID: 400-123619-18
Date Collected: 06/01/16 13:25
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.170**		0.0972	0.0984	1.00	0.134	pCi/L	07/06/16 10:52	07/29/16 07:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.0*		*40 - 110*	*07/06/16 10:52*	*07/29/16 07:12*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.237	U	0.230	0.231	1.00	0.372	pCi/L	07/06/16 10:52	07/26/16 13:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.0*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:34*	*1*
Y Carrier	*91.6*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:34*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.407**		0.250	0.251	5.00	0.372	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14079 MW-15

Lab Sample ID: 400-123619-19
Date Collected: 05/31/16 13:30
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0657	U	0.0793	0.0795	1.00	0.131	pCi/L	07/06/16 10:52	07/29/16 07:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*71.5*		*40 - 110*	*07/06/16 10:52*	*07/29/16 07:12*	*1*

Client Sample ID: AW14079 MW-15

Lab Sample ID: 400-123619-19

Date Collected: 05/31/16 13:30
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.344	U	0.306	0.308	1.00	0.491	pCi/L	07/06/16 10:52	07/26/16 13:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*71.5*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:34*	*1*
Y Carrier	*92.0*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:34*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.410	U	0.317	0.318	5.00	0.491	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14080 MW-15 DUP

Lab Sample ID: 400-123619-20

Date Collected: 05/31/16 13:30
Matrix: Water
Date Received: 06/28/16 15:43

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**		0.0696	0.0702	1.00	0.0960	pCi/L	07/06/16 10:52	07/29/16 07:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.0*		*40 - 110*	*07/06/16 10:52*	*07/29/16 07:12*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.141	U	0.239	0.240	1.00	0.406	pCi/L	07/06/16 10:52	07/26/16 13:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.0*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:34*	*1*
Y Carrier	*90.5*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:34*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.243	U	0.249	0.250	5.00	0.406	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14081 MW-14

Lab Sample ID: 400-123619-21

Date Collected: 05/31/16 14:34
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.311		0.0848	0.0893	1.00	0.0700	pCi/L	07/01/16 13:26	07/26/16 17:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.0*		*40 - 110*	*07/01/16 13:26*	*07/26/16 17:32*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.313	U	0.238	0.239	1.00	0.373	pCi/L	07/01/16 13:51	07/21/16 12:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.2*		*40 - 110*	*07/01/16 13:51*	*07/21/16 12:56*	*1*
Y Carrier	*84.9*		*40 - 110*	*07/01/16 13:51*	*07/21/16 12:56*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.624		0.252	0.256	5.00	0.373	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14082 MW-13

Lab Sample ID: 400-123619-22

Date Collected: 05/31/16 15:40
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.151		0.0825	0.0836	1.00	0.117	pCi/L	07/01/16 13:26	07/26/16 17:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.3*		*40 - 110*	*07/01/16 13:26*	*07/26/16 17:32*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.162	U	0.225	0.225	1.00	0.375	pCi/L	07/01/16 13:51	07/21/16 12:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.3*		*40 - 110*	*07/01/16 13:51*	*07/21/16 12:56*	*1*
Y Carrier	*80.4*		*40 - 110*	*07/01/16 13:51*	*07/21/16 12:56*	*1*

Client Sample ID: AW14082 MW-13

Lab Sample ID: 400-123619-22

Date Collected: 05/31/16 15:40
Matrix: Water
Date Received: 06/28/16 15:43

Method: Ra226_Ra228 - Combined Radium-226 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	0.239	0.240	5.00	0.375	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14083 MW-12

Lab Sample ID: 400-123619-23

Date Collected: 05/31/16 16:32
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0182	U	0.0486	0.0486	1.00	0.0882	pCi/L	07/01/16 13:26	07/26/16 17:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.7*		*40 - 110*	*07/01/16 13:26*	*07/26/16 17:32*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.192	U	0.214	0.215	1.00	0.351	pCi/L	07/01/16 13:51	07/21/16 12:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.7*		*40 - 110*	*07/01/16 13:51*	*07/21/16 12:56*	*1*
Y Carrier	*86.4*		*40 - 110*	*07/01/16 13:51*	*07/21/16 12:56*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.210	U	0.219	0.220	5.00	0.351	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14084 MW-18

Lab Sample ID: 400-123619-24

Date Collected: 06/01/16 10:27
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	**0.677**		0.121	0.135	1.00	0.0797	pCi/L	07/01/16 13:26	07/26/16 17:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.9*		*40 - 110*	*07/01/16 13:26*	*07/26/16 17:33*	*1*

Client Sample ID: AW14084 MW-18

Lab Sample ID: 400-123619-24

Date Collected: 06/01/16 10:27
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.872		0.285	0.296	1.00	0.378	pCi/L	07/01/16 13:51	07/21/16 12:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.9*		*40 - 110*	*07/01/16 13:51*	*07/21/16 12:57*	*1*
Y Carrier	*84.1*		*40 - 110*	*07/01/16 13:51*	*07/21/16 12:57*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.55		0.309	0.325	5.00	0.378	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14085 MW-17

Lab Sample ID: 400-123619-25

Date Collected: 06/01/16 11:43
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.419		0.0981	0.105	1.00	0.0830	pCi/L	07/01/16 13:26	07/26/16 17:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.9*		*40 - 110*	*07/01/16 13:26*	*07/26/16 17:33*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.553		0.263	0.268	1.00	0.382	pCi/L	07/01/16 13:51	07/21/16 12:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.9*		*40 - 110*	*07/01/16 13:51*	*07/21/16 12:57*	*1*
Y Carrier	*83.4*		*40 - 110*	*07/01/16 13:51*	*07/21/16 12:57*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.972		0.280	0.288	5.00	0.382	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14086 MW-16

Lab Sample ID: 400-123619-26

Date Collected: 06/01/16 12:54
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.180		0.0692	0.0711	1.00	0.0749	pCi/L	07/01/16 13:26	07/26/16 17:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.7*		*40 - 110*	*07/01/16 13:26*	*07/26/16 17:33*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.335	U	0.228	0.230	1.00	0.351	pCi/L	07/01/16 13:51	07/21/16 12:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.7*		*40 - 110*	*07/01/16 13:51*	*07/21/16 12:57*	*1*
Y Carrier	*84.1*		*40 - 110*	*07/01/16 13:51*	*07/21/16 12:57*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.515		0.238	0.241	5.00	0.351	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14087 MW-9

Lab Sample ID: 400-123619-27

Date Collected: 06/01/16 14:13
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.323		0.0883	0.0930	1.00	0.0823	pCi/L	07/01/16 13:26	07/26/16 17:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.9*		*40 - 110*	*07/01/16 13:26*	*07/26/16 17:33*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.208	U	0.252	0.253	1.00	0.416	pCi/L	07/01/16 13:51	07/21/16 12:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.9*		*40 - 110*	*07/01/16 13:51*	*07/21/16 12:57*	*1*
Y Carrier	*83.0*		*40 - 110*	*07/01/16 13:51*	*07/21/16 12:57*	*1*

Client Sample ID: AW14087 MW-9

Lab Sample ID: 400-123619-27

Date Collected: 06/01/16 14:13
Matrix: Water
Date Received: 06/28/16 15:43

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.532		0.267	0.269	5.00	0.416	pCi/L		07/30/16 00:23	1

Client Sample ID: AW14088 FB-3

Lab Sample ID: 400-123619-28

Date Collected: 06/01/16 14:29
Matrix: Water
Date Received: 06/28/16 15:43

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0305	U	0.0488	0.0489	1.00	0.0841	pCi/L	07/01/16 13:26	07/26/16 17:33	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.6*		*40 - 110*	*07/01/16 13:26*	*07/26/16 17:33*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.112	U	0.200	0.200	1.00	0.381	pCi/L	07/01/16 13:51	07/21/16 12:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.6*		*40 - 110*	*07/01/16 13:51*	*07/21/16 12:57*	*1*
Y Carrier	*85.6*		*40 - 110*	*07/01/16 13:51*	*07/21/16 12:57*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0816	U	0.206	0.206	5.00	0.381	pCi/L		07/30/16 00:23	1

Qualifiers

Rad

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	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 Greene

TestAmerica Job ID: 400-123619-1
SDG: Greene County Ash Pond (3)

Client Sample ID: AW14061 MW-5

Lab Sample ID: 400-123619-1
Matrix: Water
Date Collected: 05/31/16 12:40
Date Received: 06/28/16 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259366	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9315		1	262632	07/29/16 06:59	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259369	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 13:32	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14062 MW-5 DUP

Lab Sample ID: 400-123619-2
Matrix: Water
Date Collected: 05/31/16 12:40
Date Received: 06/28/16 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259366	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9315		1	262632	07/29/16 06:59	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259369	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 13:32	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14063 MW-11

Lab Sample ID: 400-123619-3
Matrix: Water
Date Collected: 05/31/16 14:00
Date Received: 06/28/16 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259366	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9315		1	262632	07/29/16 07:00	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259369	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 13:32	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14064 MW-10

Lab Sample ID: 400-123619-4
Matrix: Water
Date Collected: 05/31/16 16:15
Date Received: 06/28/16 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259366	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9315		1	262632	07/29/16 07:00	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259369	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 13:32	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-123619-1
SDG: Greene County Ash Pond (3)

Client Sample ID: AW14065 FB-1

Date Collected: 05/31/16 16:30
Date Received: 06/28/16 15:43

Lab Sample ID: 400-123619-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259366	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9315		1	262632	07/29/16 07:00	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259369	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 13:32	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14066 MW-1

Date Collected: 06/01/16 10:18
Date Received: 06/28/16 15:43

Lab Sample ID: 400-123619-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259366	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9315		1	262649	07/29/16 07:08	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259369	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 13:32	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14067 MW-3

Date Collected: 06/01/16 11:40
Date Received: 06/28/16 15:43

Lab Sample ID: 400-123619-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259366	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9315		1	262649	07/29/16 07:08	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259369	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 13:33	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14068 MW-2

Date Collected: 06/01/16 12:55
Date Received: 06/28/16 15:43

Lab Sample ID: 400-123619-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259366	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9315		1	262649	07/29/16 07:08	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259369	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 13:33	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14069 EB-1

Lab Sample ID: 400-123619-9

Date Collected: 06/01/16 13:15
Matrix: Water
Date Received: 06/28/16 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259366	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9315		1	262649	07/29/16 07:08	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259369	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 13:33	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14070 MW-8

Lab Sample ID: 400-123619-10

Date Collected: 06/01/16 14:58
Matrix: Water
Date Received: 06/28/16 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259366	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9315		1	262648	07/29/16 07:10	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259369	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 13:33	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14071 MW-7

Lab Sample ID: 400-123619-11

Date Collected: 05/31/16 15:10
Matrix: Water
Date Received: 06/28/16 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259366	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9315		1	262648	07/29/16 07:10	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259369	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 13:33	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14072 MW-6

Lab Sample ID: 400-123619-12

Date Collected: 05/31/16 16:35
Matrix: Water
Date Received: 06/28/16 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259366	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9315		1	262648	07/29/16 07:10	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259369	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 13:34	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14073 MW-25

Lab Sample ID: 400-123619-13
Date Collected: 06/01/16 09:35
Matrix: Water
Date Received: 06/28/16 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			260719	07/15/16 14:14	MCJ	TAL SL
Total/NA	Analysis	9315		1	263917	08/08/16 07:37	ALS	TAL SL
Total/NA	Prep	PrecSep_0			260722	07/15/16 14:40	MCJ	TAL SL
Total/NA	Analysis	9320		1	263350	08/03/16 12:34	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	264000	08/09/16 04:55	ALS	TAL SL

Client Sample ID: AW14074 FB-2

Lab Sample ID: 400-123619-14
Date Collected: 06/01/16 10:00
Matrix: Water
Date Received: 06/28/16 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259366	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9315		1	262648	07/29/16 07:11	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259369	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 13:34	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14075 MW-21

Lab Sample ID: 400-123619-15
Date Collected: 06/01/16 10:55
Matrix: Water
Date Received: 06/28/16 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259366	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9315		1	262648	07/29/16 07:11	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259369	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 13:34	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14076 MW-23

Lab Sample ID: 400-123619-16
Date Collected: 06/01/16 12:20
Matrix: Water
Date Received: 06/28/16 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259366	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9315		1	262648	07/29/16 07:11	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259369	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 13:34	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14077 MW-23 DUP

Lab Sample ID: 400-123619-17

Date Collected: 06/01/16 12:20

Matrix: Water

Date Received: 06/28/16 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259366	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9315		1	262648	07/29/16 07:11	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259369	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 13:34	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14078 MW-24

Lab Sample ID: 400-123619-18

Date Collected: 06/01/16 13:25

Matrix: Water

Date Received: 06/28/16 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259366	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9315		1	262648	07/29/16 07:12	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259369	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 13:34	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14079 MW-15

Lab Sample ID: 400-123619-19

Date Collected: 05/31/16 13:30

Matrix: Water

Date Received: 06/28/16 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259366	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9315		1	262648	07/29/16 07:12	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259369	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 13:34	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14080 MW-15 DUP

Lab Sample ID: 400-123619-20

Date Collected: 05/31/16 13:30

Matrix: Water

Date Received: 06/28/16 15:43

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			259366	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9315		1	262648	07/29/16 07:12	RTM	TAL SL
Total/NA	Prep	PrecSep_0			259369	07/06/16 10:52	SCB	TAL SL
Total/NA	Analysis	9320		1	262074	07/26/16 13:34	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14081 MW-14

Lab Sample ID: 400-123619-21
Date Collected: 05/31/16 14:34
Matrix: Water
Date Received: 06/28/16 15:43

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	262071	07/26/16 17:32	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 12:56	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14082 MW-13

Lab Sample ID: 400-123619-22
Date Collected: 05/31/16 15:40
Matrix: Water
Date Received: 06/28/16 15:43

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	262071	07/26/16 17:32	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 12:56	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14083 MW-12

Lab Sample ID: 400-123619-23
Date Collected: 05/31/16 16:32
Matrix: Water
Date Received: 06/28/16 15:43

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	262071	07/26/16 17:32	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 12:56	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14084 MW-18

Lab Sample ID: 400-123619-24
Date Collected: 06/01/16 10:27
Matrix: Water
Date Received: 06/28/16 15:43

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	262071	07/26/16 17:33	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 12:57	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14085 MW-17

Lab Sample ID: 400-123619-25

Date Collected: 06/01/16 11:43
Matrix: Water
Date Received: 06/28/16 15:43

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	262071	07/26/16 17:33	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 12:57	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14086 MW-16

Lab Sample ID: 400-123619-26

Date Collected: 06/01/16 12:54
Matrix: Water
Date Received: 06/28/16 15:43

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	262071	07/26/16 17:33	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 12:57	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14087 MW-9

Lab Sample ID: 400-123619-27

Date Collected: 06/01/16 14:13
Matrix: Water
Date Received: 06/28/16 15:43

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	262071	07/26/16 17:33	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 12:57	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Client Sample ID: AW14088 FB-3

Lab Sample ID: 400-123619-28

Date Collected: 06/01/16 14:29
Matrix: Water
Date Received: 06/28/16 15:43

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	262071	07/26/16 17:33	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 12:57	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	262766	07/30/16 00:23	RTM	TAL SL

Laboratory References:

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

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Prep Batch: 258920

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123619-21	AW14081 MW-14	Total/NA	Water	PrecSep-21	
400-123619-22	AW14082 MW-13	Total/NA	Water	PrecSep-21	
400-123619-23	AW14083 MW-12	Total/NA	Water	PrecSep-21	
400-123619-24	AW14084 MW-18	Total/NA	Water	PrecSep-21	
400-123619-25	AW14085 MW-17	Total/NA	Water	PrecSep-21	
400-123619-26	AW14086 MW-16	Total/NA	Water	PrecSep-21	
400-123619-27	AW14087 MW-9	Total/NA	Water	PrecSep-21	
400-123619-28	AW14088 FB-3	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	
400-123619-24 DU	AW14084 MW-18	Total/NA	Water	PrecSep-21	

Prep Batch: 258924

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123619-21	AW14081 MW-14	Total/NA	Water	PrecSep_0	
400-123619-22	AW14082 MW-13	Total/NA	Water	PrecSep_0	
400-123619-23	AW14083 MW-12	Total/NA	Water	PrecSep_0	
400-123619-24	AW14084 MW-18	Total/NA	Water	PrecSep_0	
400-123619-25	AW14085 MW-17	Total/NA	Water	PrecSep_0	
400-123619-26	AW14086 MW-16	Total/NA	Water	PrecSep_0	
400-123619-27	AW14087 MW-9	Total/NA	Water	PrecSep_0	
400-123619-28	AW14088 FB-3	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	
400-123619-24 DU	AW14084 MW-18	Total/NA	Water	PrecSep_0	

Prep Batch: 259366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123619-1	AW14061 MW-5	Total/NA	Water	PrecSep-21	
400-123619-2	AW14062 MW-5 DUP	Total/NA	Water	PrecSep-21	
400-123619-3	AW14063 MW-11	Total/NA	Water	PrecSep-21	
400-123619-4	AW14064 MW-10	Total/NA	Water	PrecSep-21	
400-123619-5	AW14065 FB-1	Total/NA	Water	PrecSep-21	
400-123619-6	AW14066 MW-1	Total/NA	Water	PrecSep-21	
400-123619-7	AW14067 MW-3	Total/NA	Water	PrecSep-21	
400-123619-8	AW14068 MW-2	Total/NA	Water	PrecSep-21	
400-123619-9	AW14069 EB-1	Total/NA	Water	PrecSep-21	
400-123619-10	AW14070 MW-8	Total/NA	Water	PrecSep-21	
400-123619-11	AW14071 MW-7	Total/NA	Water	PrecSep-21	
400-123619-12	AW14072 MW-6	Total/NA	Water	PrecSep-21	
400-123619-14	AW14074 FB-2	Total/NA	Water	PrecSep-21	
400-123619-15	AW14075 MW-21	Total/NA	Water	PrecSep-21	
400-123619-16	AW14076 MW-23	Total/NA	Water	PrecSep-21	
400-123619-17	AW14077 MW-23 DUP	Total/NA	Water	PrecSep-21	
400-123619-18	AW14078 MW-24	Total/NA	Water	PrecSep-21	
400-123619-19	AW14079 MW-15	Total/NA	Water	PrecSep-21	
400-123619-20	AW14080 MW-15 DUP	Total/NA	Water	PrecSep-21	
MB 160-259366/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-259366/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-123619-3 DU	AW14063 MW-11	Total/NA	Water	PrecSep-21	

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Prep Batch: 259369

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123619-1	AW14061 MW-5	Total/NA	Water	PrecSep_0	
400-123619-2	AW14062 MW-5 DUP	Total/NA	Water	PrecSep_0	
400-123619-3	AW14063 MW-11	Total/NA	Water	PrecSep_0	
400-123619-4	AW14064 MW-10	Total/NA	Water	PrecSep_0	
400-123619-5	AW14065 FB-1	Total/NA	Water	PrecSep_0	
400-123619-6	AW14066 MW-1	Total/NA	Water	PrecSep_0	
400-123619-7	AW14067 MW-3	Total/NA	Water	PrecSep_0	
400-123619-8	AW14068 MW-2	Total/NA	Water	PrecSep_0	
400-123619-9	AW14069 EB-1	Total/NA	Water	PrecSep_0	
400-123619-10	AW14070 MW-8	Total/NA	Water	PrecSep_0	
400-123619-11	AW14071 MW-7	Total/NA	Water	PrecSep_0	
400-123619-12	AW14072 MW-6	Total/NA	Water	PrecSep_0	
400-123619-14	AW14074 FB-2	Total/NA	Water	PrecSep_0	
400-123619-15	AW14075 MW-21	Total/NA	Water	PrecSep_0	
400-123619-16	AW14076 MW-23	Total/NA	Water	PrecSep_0	
400-123619-17	AW14077 MW-23 DUP	Total/NA	Water	PrecSep_0	
400-123619-18	AW14078 MW-24	Total/NA	Water	PrecSep_0	
400-123619-19	AW14079 MW-15	Total/NA	Water	PrecSep_0	
400-123619-20	AW14080 MW-15 DUP	Total/NA	Water	PrecSep_0	
MB 160-259369/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-259369/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-123619-3 DU	AW14063 MW-11	Total/NA	Water	PrecSep_0	

Prep Batch: 260719

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123619-13	AW14073 MW-25	Total/NA	Water	PrecSep-21	
MB 160-260719/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-260719/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
600-133762-A-4-B MS	Matrix Spike	Total/NA	Water	PrecSep-21	
600-133762-B-4-A MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 260722

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-123619-13	AW14073 MW-25	Total/NA	Water	PrecSep_0	
MB 160-260722/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-260722/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
600-133762-A-4-D MS	Matrix Spike	Total/NA	Water	PrecSep_0	
600-133762-B-4-B MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	

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: 400-123619-24 DU
Matrix: Water
Analysis Batch: 262071

Client Sample ID: AW14084 MW-18
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*

Lab Sample ID: MB 160-259366/1-A
Matrix: Water
Analysis Batch: 262632

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 259366

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.05194	U	0.0648	0.0650	1.00	0.107	pCi/L	07/06/16 10:52	07/29/16 06:59	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*40 - 110*	*07/06/16 10:52*	*07/29/16 06:59*	*1*

Lab Sample ID: LCS 160-259366/2-A
Matrix: Water
Analysis Batch: 262632

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 259366

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.2	14.24		1.43	1.00	0.149	pCi/L	128	68 - 137		

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

Lab Sample ID: LCS 160-259366/2-A
Matrix: Water
Analysis Batch: 262632

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 259366

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	90.6		40 - 110

Lab Sample ID: 400-123619-3 DU
Matrix: Water
Analysis Batch: 262632

Client Sample ID: AW14063 MW-11
Prep Type: Total/NA
Prep Batch: 259366

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.189			0.1653		0.112	1.00	0.165	pCi/L			0.11	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	85.5		40 - 110

Lab Sample ID: MB 160-260719/1-A
Matrix: Water
Analysis Batch: 263917

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260719

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.03782	U	0.0612	0.0613	1.00	0.106	pCi/L	07/15/16 14:14	08/08/16 07:37	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	73.5		40 - 110	07/15/16 14:14	08/08/16 07:37	1

Lab Sample ID: LCS 160-260719/2-A
Matrix: Water
Analysis Batch: 263917

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260719

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.2	14.08		1.39	1.00	0.0880	pCi/L	126	68 - 137		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	81.8		40 - 110

Lab Sample ID: 600-133762-A-4-B MS
Matrix: Water
Analysis Batch: 263917

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 260719

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.330		11.2	12.64		1.25	1.00	0.0883	pCi/L	110	75 - 138		

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	89.7		40 - 110

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

Lab Sample ID: 600-133762-B-4-A MSD
Matrix: Water
Analysis Batch: 263917

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 260719

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	0.330		11.2	12.81		1.27	1.00	0.114	pCi/L	112	75 - 138	0.07	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*90.3*		*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*

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: 400-123619-24 DU
Matrix: Water
Analysis Batch: 261534

Client Sample ID: AW14084 MW-18
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*

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

Lab Sample ID: MB 160-259369/1-A
Matrix: Water
Analysis Batch: 262074

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 259369

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1175	U	0.233	0.233	1.00	0.399	pCi/L	07/06/16 10:52	07/26/16 13:31	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:31*	*1*
Y Carrier	*89.0*		*40 - 110*	*07/06/16 10:52*	*07/26/16 13:31*	*1*

Lab Sample ID: LCS 160-259369/2-A
Matrix: Water
Analysis Batch: 262074

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 259369

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			14.8	15.61		1.69	1.00	0.379	pCi/L	105	56 - 140		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*90.6*		*40 - 110*
Y Carrier	*89.0*		*40 - 110*

Lab Sample ID: 400-123619-3 DU
Matrix: Water
Analysis Batch: 262074

Client Sample ID: AW14063 MW-11
Prep Type: Total/NA
Prep Batch: 259369

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	-0.0437	U		0.2874	U	0.271	1.00	0.435	pCi/L			0.69	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*85.5*		*40 - 110*
Y Carrier	*87.1*		*40 - 110*

Lab Sample ID: MB 160-260722/1-A
Matrix: Water
Analysis Batch: 263350

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260722

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.2281	U	0.258	0.258	1.00	0.496	pCi/L	07/15/16 14:40	08/03/16 12:34	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.5*		*40 - 110*	*07/15/16 14:40*	*08/03/16 12:34*	*1*
Y Carrier	*90.8*		*40 - 110*	*07/15/16 14:40*	*08/03/16 12:34*	*1*

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

Lab Sample ID: LCS 160-260722/2-A
Matrix: Water
Analysis Batch: 263350

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260722

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			14.8	15.71		1.70	1.00	0.447	pCi/L	106	56 - 140		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*81.8*		*40 - 110*
Y Carrier	*89.0*		*40 - 110*

Lab Sample ID: 600-133762-A-4-D MS
Matrix: Water
Analysis Batch: 263350

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 260722

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	0.134	U	14.8	15.02		1.61	1.00	0.390	pCi/L	102	45 - 150		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*89.7*		*40 - 110*
Y Carrier	*87.9*		*40 - 110*

Lab Sample ID: 600-133762-B-4-B MSD
Matrix: Water
Analysis Batch: 263350

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 260722

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	0.134	U	14.8	15.24		1.63	1.00	0.387	pCi/L	103	45 - 150	0.07	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*90.3*		*40 - 110*
Y Carrier	*88.6*		*40 - 110*

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Jason Rouss	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Sarah Copeland	Phone: 205-664-6121	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 1 of 3
Company: Alabama Power General Test Laboratory		Analysis Requested		Job #: 400-123619

Address: 744 County Rd 87 GSC #8	Due Date Requested:	Preservation Codes:
City: Calera	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, 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)
State, Zip: AL, 35040		
Phone: 205-664-6121(Tel)	PO #:	Other:
Email: sgcopela@southernco.com	WO #:	
Project Name: CCR	Project #: 40007143	
Site: Greene County Ash Pond (3)	SSOW#:	

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D		
AW14061	5/31/16	1240	G	Water			X	2	MW-5
AW14062	5/31/16	1240	G	Water			X	2	MW-5 Dup (Sample Duplicate)
AW14063	5/31/16	1400	G	Water		Y	X	4	MW-11
AW14064	5/31/16	1615	G	Water			X	2	MW-10
AW14065	5/31/16	1630	G	Water			X	2	FB-1 (Field Blank
AW14066	6/1/16	1018	G	Water		Y	X	4	MW-1
AW14067	6/1/16	1140	G	Water			X	2	MW-3
AW14068	6/1/16	1255	G	Water			X	2	MW-2
AW14069	6/1/16	1315	G	Water			X	2	EB-1 (Equipment Blank)
AW14070	6/1/16	1458	G	Water			X	2	MW-8

400-123619 COC

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Sarah Copeland	Date/Time: 6/27/16; 1300	Company APC	Received by:	Date/Time:	Company
Relinquished by:	Date/Time: 6/28/16 1543	Company APC	Received by:	Date/Time: 6/28/16 15:43	Company TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

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8/9/2016

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: Nick Pitts	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Sarah Copeland	Phone: 205-664-6121	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 2 of 3
Company: Alabama Power General Test Laboratory		Analysis Requested		Job #:
Address: 744 County Rd 87 GSC #8	Due Date Requested:			Preservation Codes:
City: Calera	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, 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)
State, Zip: AL, 35040	PO #:			Other:
Phone: 205-664-6121(Tel)	WO #:			
Email: sgcopela@southernco.com	Project #: 40007143			
Project Name: CCR	SSOW#:			
Site: Greene County Ash Pond (3)				

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D		
AW14071	5/31/16	1510	G	Water		Y	X	4	MW-7
AW14072	5/31/16	1635	G	Water			X	2	MW-6
AW14073	6/1/16	0935	G	Water			X	2	MW-25
AW14074	6/1/16	1000	G	Water			X	2	FB-2 (Field Blank)
AW14075	6/1/16	1055	G	Water			X	2	MW-21
AW14076	6/1/16	1220	G	Water			X	2	MW-23
AW14077	6/1/16	1220	G	Water			X	2	MW-23 Dup (Sample Duplicate)
AW14078	6/1/16	1325	G	Water			X	2	MW-24

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time	Company	Received by:	Date/Time:	Company
Relinquished by: Sarah Copeland	Date/Time: 6/27/16; 1300	Company APC			
Relinquished by: Chad Fite	Date/Time: 6/28/16 1543	Company APC	Received by: Tyler Kelley	Date/Time: 6/28/16 15:43	Company TA
Relinquished by:	Date/Time:	Company	Received 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	Sampler: Clarence Specht	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Sarah Copeland	Phone: 205-664-6121	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 3 of 3
Company: Alabama Power General Test Laboratory				Job #:

Address: 744 County Rd 87 GSC #8	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Calera	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, 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)
State, Zip: AL, 35040			
Phone: 205-664-6121(Tel)	PO #:		Other:
Email: sgcopela@southernco.com	WO #:		
Project Name: CCR	Project #: 40007143		
Site: Greene County Ash Pond (3)	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D		
AW14079	5/31/16	1330	G	Water			X	2	MW-15
AW14080	5/31/16	1330	G	Water			X	2	MW-15 Dup (Sample Duplicate)
AW14081	5/31/16	1434	G	Water			X	2	MW-14
AW14082	5/31/16	1540	G	Water			X	2	MW-13
AW14083	5/31/16	1632	G	Water			X	2	MW-12
AW14084	6/1/16	1027	G	Water		Y	X	4	MW-18
AW14085	6/1/16	1143	G	Water			X	2	MW-17
AW14086	6/1/16	1254	G	Water			X	2	MW-16
AW14087	6/1/16	1413	G	Water			X	2	MW-9
AW14088	6/1/16	1429	G	Water			X	2	FB-3 (Field Blank)

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Sarah Copeland	Date/Time: 6/27/16; 1300	Company APC	Received by:	Date/Time:	Company
Relinquished by: [signature]	Date/Time: 5/28/16 1543	Company APC	Received by: [signature]	Date/Time: 6/28/16 15:43	Company TA
Relinquished by:	Date/Time:	Company	Received 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: 400-123619-1
SDG Number: Greene County Ash Pond (3)

Login Number: 123619
List Number: 1
Creator: Siddoway, Benjamin

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

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

TestAmerica Job ID: 400-123619-1
SDG: Greene County Ash Pond (3)

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-16
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16 *
Kansas	NELAP	7	E-10253	10-31-16
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-16
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16 *
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	08-31-16

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	MO00054	06-30-17
California	State Program	9	2886	03-31-18
Connecticut	State Program	1	PH-0241	03-31-17
Florida	NELAP	4	E87689	06-30-17
Illinois	NELAP	5	003757	11-30-16
Iowa	State Program	7	373	12-01-16
Kansas	NELAP	7	E-10236	07-31-16 *
Kentucky (DW)	State Program	4	90125	12-31-16
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-17
Louisiana (DW)	NELAP	6	LA160008	12-31-16
Maryland	State Program	3	310	09-30-17
Missouri	State Program	7	780	06-30-17
Nevada	State Program	9	MO000542016-1	07-31-17
New Jersey	NELAP	2	MO002	06-30-17
New York	NELAP	2	11616	03-31-17
North Dakota	State Program	8	R207	06-30-17
NRC	NRC		24-24817-01	12-31-22

* Certification renewal pending - certification considered valid.

Certification Summary

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

TestAmerica Job ID: 400-123619-1
SDG: Greene County Ash Pond (3)

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Oklahoma	State Program	6	9997	08-31-16 *
Pennsylvania	NELAP	3	68-00540	02-28-17 *
South Carolina	State Program	4	85002001	06-30-16 *
Texas	NELAP	6	T104704193-15-9	07-31-17
USDA	Federal		P330-07-00122	01-09-17
Utah	NELAP	8	MO000542015-7	07-31-16 *
Virginia	NELAP	3	460230	06-14-17
Washington	State Program	10	C592	08-30-16 *
West Virginia DEP	State Program	3	381	08-31-16 *

* Certification renewal pending - certification considered valid.

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

Analytical Report

Alabama Power

Lab & Field SERVICES

Sample Group : WMWGREAP_35

Project/Site : Greene County Ash Pond
Demopolis, AL 36732

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

Alabama Power

Lab & Field SERVICES

Anions

Greene County Ash Pond

WMWGREAP_35

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

Sample ID	Chloride Batch ID	Fluoride Batch ID	Sulfate Batch ID	Project ID
AW20849	573131	573132	573133	WMWGREAP_35
AW20850	573131	573132	573133	WMWGREAP_35
AW20851	573131	573132	573133	WMWGREAP_35
AW20852	573131	573132	573133	WMWGREAP_35
AW20853	573131	573132	573133	WMWGREAP_35
AW20854	573131	573132	573133	WMWGREAP_35
AW20855	573131	573132	573133	WMWGREAP_35
AW20856	573131	573132	573133	WMWGREAP_35
AW20857	573131	573132	573133	WMWGREAP_35
AW20858	573137	573140	573143	WMWGREAP_35
AW20859	573137	573140	573143	WMWGREAP_35
AW20860	573137	573140	573143	WMWGREAP_35
AW20861	573137	573140	573143	WMWGREAP_35
AW20862	573137	573140	573143	WMWGREAP_35
AW20863	573137	573140	573143	WMWGREAP_35
AW20864	573137	573140	573143	WMWGREAP_35
AW20865	573137	573140	573143	WMWGREAP_35
AW20866	573137	573140	573143	WMWGREAP_35
AW20867	573137	573140	573143	WMWGREAP_35
AW20868	573138	573141	573144	WMWGREAP_35
AW20869	573138	573141	573144	WMWGREAP_35
AW20870	573138	573141	573144	WMWGREAP_35
AW20871	573138	573141	573144	WMWGREAP_35
AW20872	573138	573141	573144	WMWGREAP_35
AW20873	573138	573141	573144	WMWGREAP_35
AW20874	573138	573141	573144	WMWGREAP_35
AW20875	573138	573141	573144	WMWGREAP_35
AW20876	573138	573141	573144	WMWGREAP_35
AW20877	573138	573141	573144	WMWGREAP_35
AW20878	573139	573142	573145	WMWGREAP_35
AW20879	573139	573142	573145	WMWGREAP_35
AW20880	573139	573142	573145	WMWGREAP_35

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

AW20881	573139	573142	573145	WMWGREAP_35
AW20882	573139	573142	573145	WMWGREAP_35
AW20883	573139	573142	573145	WMWGREAP_35
AW20884	573139	573142	573145	WMWGREAP_35

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 573133 presented a concentration above the MDL of 0.3, at 0.318 mg/L. Four associated batch samples, AW20849, AW20850, AW20852 and AW20853, presented sulfate concentrations above 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 573143 presented a concentration above the MDL of 0.3, at 0.304 mg/L. Two batch samples, AW20858 and AW20864 presented sulfate concentrations above 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 573144 presented a concentration above the MDL of 0.3, at 0.301 mg/L. Five batch samples, AW20869, AW20870, AW20874, AW20875 and AW20876, 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, with the following exceptions:
    1. No closing LFB was listed or run for the dilution re-analyses for chloride or sulfate in batches 573131 and 573133, respectively. Due to absence of a closing LFB, results for the following sample dilution re-analyses are qualified as quantitatively estimated with indeterminate bias direction and magnitude: for chloride, AW20855 and AW20856; for sulfate, AW20855, AW20856 and AW20857.
    2. No closing LFB was listed or run for the dilution re-analyses for chloride or sulfate in batches 573137 and 573143, respectively. Due to absence of a closing LFB, results for the following sample dilution re-analyses are qualified as quantitatively estimated with indeterminate bias direction and magnitude: for chloride, AW20867; for sulfate, AW20867.
    3. No closing LFB was listed or run for the dilution re-analysis for sulfate in batch 573144. Due to absence of a closing LFB, the result for the following sample dilution re-analysis for sulfate is qualified as quantitatively estimated with indeterminate bias direction and magnitude: AW20873.

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4. No closing LFB was listed or run for the dilution re-analyses for chloride or sulfate in batches 573139 and 573145, respectively. Due to absence of a closing LFB, results for the following sample dilution re-analyses are qualified as quantitatively estimated with indeterminate bias direction and magnitude: for chloride, AW20881 and AW20882; for sulfate, AW20882 and AW20883.

- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

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

- A laboratory fortified matrix (LFM) sample was analyzed with each batch. All acceptance criteria for accuracy were met. It is noted that the LFM for the sample dilution sequence for sulfate in batches 573133 and 573143 were diluted 10x prior to spiking, and the diluted LFM samples spiked at 10x normal concentration, with acceptable recovery.
- A sample duplicate and/or laboratory fortified matrix duplicate were analyzed with each batch. All acceptance criteria for precision were met. It is noted that separate and distinct criteria for duplicate precision calculations, based on sample and duplicate anion concentrations, are used to assess precision compliance. These are as follow: if the sample and duplicate are both greater than 5x anion Reporting Limit (RL) concentration, the precision is calculated and reported as relative percent difference (RPD), with an acceptance range of 0 - 20%; if either the sample or duplicate are less than 5x anion RL, the precision is calculated and reported as the absolute value of the difference between the two concentrations, with an acceptance range of less than or equal to the anion RL value.

7. Samples AW20855, AW20856, AW20867, and AW20882 were reanalyzed for chloride and for sulfate at a 10x dilution, sample AW20881 was re-analyzed for chloride at a 10x dilution, and samples AW20857, AW20873, and AW20883 were re-analyzed for sulfate at a 10x dilution, due to the undiluted results exceeding the calibrated range of the detector. The dilution results for chloride and sulfate for these respective samples should be used; reporting limit (RL) values are adjusted upward to reflect the dilution factor applied.

Sample ID		Analyte		Dilution Factor
AW20855		Chloride, Sulfate		10X
AW20856		Chloride, Sulfate		10X
AW20857		Sulfate		10X
AW20867		Chloride, Sulfate		10X
AW20873		Sulfate		10X
AW20881		Chloride		10X

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AW20882		Chloride, Sulfate		10X
AW20883		Sulfate		10X

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

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Metals ICP

Greene County Ash Pond

WMWGREAP_35

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

Sample ID	Batch ID	Project ID
AW20849	20160830	WMWGREAP_35
AW20850	20160830	WMWGREAP_35
AW20851	20160830	WMWGREAP_35
AW20852	20160830	WMWGREAP_35
AW20853	20160830	WMWGREAP_35
AW20854	20160830	WMWGREAP_35
AW20855	20160830	WMWGREAP_35
AW20856	20160830	WMWGREAP_35
AW20857	20160830	WMWGREAP_35
AW20858	20160830	WMWGREAP_35
AW20859	20160830A	WMWGREAP_35
AW20860	20160830A	WMWGREAP_35
AW20861	20160830A	WMWGREAP_35
AW20862	20160830A	WMWGREAP_35
AW20863	20160830A	WMWGREAP_35
AW20864	20160830A	WMWGREAP_35
AW20865	20160830A	WMWGREAP_35
AW20866	20160830A	WMWGREAP_35
AW20867	20160830A	WMWGREAP_35
AW20868	20160830A	WMWGREAP_35
AW20869	20160907	WMWGREAP_35
AW20870	20160907	WMWGREAP_35
AW20871	20160907	WMWGREAP_35
AW20872	20160907	WMWGREAP_35
AW20873	20160907	WMWGREAP_35
AW20874	20160907	WMWGREAP_35
AW20875	20160907	WMWGREAP_35
AW20876	20160907	WMWGREAP_35
AW20877	20160907	WMWGREAP_35
AW20878	20160907	WMWGREAP_35
AW20879	20160907C_20160908	WMWGREAP_35
AW20880	20160907C_20160908	WMWGREAP_35

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AW20881	20160907C_20160908	WMWGREAP_35
AW20882	20160907C_20160908	WMWGREAP_35
AW20883	20160907C_20160908	WMWGREAP_35
AW20884	20160907C_20160908	WMWGREAP_35

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

Analyte	Sample ID
Calcium	AW20858

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

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- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

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

Sample ID	Analyte	Dilution Factor
AW20855	Calcium	10.15X
AW20856	Calcium	10.15X
AW20857	Calcium	10.15X
AW20858	Calcium	10.15X
AW20858MS	Calcium	10.15X
AW20858MSD	Calcium	10.15X
AW20865	Calcium	10.15X
AW20867	Calcium	10.15X
AW20868	Calcium	10.15X
AW20868MS	Calcium	10.15X
AW20868MSD	Calcium	10.15X
AW20871	Calcium	10.15X
AW20872	Calcium	10.15X
AW20873	Calcium	10.15X
AW20878MS	Calcium	10.15X
AW20878MSD	Calcium	10.15X
AW20880	Calcium	10.15X
AW20881	Calcium	10.15X
AW20882	Calcium	10.15X
AW20883	Calcium	10.15X

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

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Metals ICPMS

Greene County Ash Pond

WMWGREAP_35

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

Sample ID	Batch ID	Project ID
AW20849	474379	WMWGREAP_35
AW20850	474379	WMWGREAP_35
AW20851	474379	WMWGREAP_35
AW20852	474379	WMWGREAP_35
AW20853	474379	WMWGREAP_35
AW20854	474379	WMWGREAP_35
AW20855	474379	WMWGREAP_35
AW20856	474379	WMWGREAP_35
AW20857	474379	WMWGREAP_35
AW20858	474379	WMWGREAP_35
AW20859	474380	WMWGREAP_35
AW20860	474380	WMWGREAP_35
AW20861	474380	WMWGREAP_35
AW20862	474380	WMWGREAP_35
AW20863	474380	WMWGREAP_35
AW20864	474380	WMWGREAP_35
AW20865	474380	WMWGREAP_35
AW20866	474380	WMWGREAP_35
AW20867	474380	WMWGREAP_35
AW20868	474380	WMWGREAP_35
AW20869	474381	WMWGREAP_35
AW20870	474381	WMWGREAP_35
AW20871	474381	WMWGREAP_35
AW20872	474381	WMWGREAP_35
AW20873	474381	WMWGREAP_35
AW20874	474381	WMWGREAP_35
AW20875	474381	WMWGREAP_35
AW20876	474381	WMWGREAP_35
AW20877	474381	WMWGREAP_35
AW20878	474381	WMWGREAP_35
AW20879	474382	WMWGREAP_35
AW20880	474382	WMWGREAP_35

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AW20881	474382	WMWGREAP_35
AW20882	474382	WMWGREAP_35
AW20883	474382	WMWGREAP_35
AW20884	474382	WMWGREAP_35

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. Samples AW20849, AW20850, AW20853, AW20854, and AW20883 are 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.

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Mercury

Greene County Ash Pond

WMWGREAP_35

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

Sample ID	Batch ID	Project ID
AW20849	573221	WMWGREAP_35
AW20850	573221	WMWGREAP_35
AW20851	573221	WMWGREAP_35
AW20852	573221	WMWGREAP_35
AW20853	574099	WMWGREAP_35
AW20854	574099	WMWGREAP_35
AW20855	574099	WMWGREAP_35
AW20856	574099	WMWGREAP_35
AW20857	574099	WMWGREAP_35
AW20858	574099	WMWGREAP_35
AW20859	574099	WMWGREAP_35
AW20860	574099	WMWGREAP_35
AW20861	574099	WMWGREAP_35
AW20862	574099	WMWGREAP_35
AW20863	574100	WMWGREAP_35
AW20864	574100	WMWGREAP_35
AW20865	574100	WMWGREAP_35
AW20866	574100	WMWGREAP_35
AW20867	574100	WMWGREAP_35
AW20868	574100	WMWGREAP_35
AW20869	574100	WMWGREAP_35
AW20870	574100	WMWGREAP_35
AW20871	574100	WMWGREAP_35
AW20872	574100	WMWGREAP_35
AW20873	574101	WMWGREAP_35
AW20874	574101	WMWGREAP_35
AW20875	574101	WMWGREAP_35
AW20876	574101	WMWGREAP_35
AW20877	574101	WMWGREAP_35
AW20878	574101	WMWGREAP_35
AW20879	574101	WMWGREAP_35
AW20880	574101	WMWGREAP_35

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AW20881	574101	WMWGREAP_35
AW20882	574101	WMWGREAP_35
AW20883	574284	WMWGREAP_35
AW20884	574284	WMWGREAP_35

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

General Quality Control Procedures:

- Prior to sample analysis, an initial calibration verification (ICV) was analyzed and all criteria were met.
- Following the ICV, an initial calibration blank (ICB) was analyzed and was below the method detection limit for the requested analyte.
- All continued calibration verification (CCV) were within the acceptance criteria for the requested analyte.
- All continued calibration blanks (CCB) were below the limit of quantitation for the requested analyte.
- A preparation method blank and laboratory control sample were digested and analyzed with the samples in each digestion batch.
- All laboratory control sample criteria were met.
- The method blank associated with each digestion batch was below the limit of quantitation for the requested analyte.
- All calibration met criteria for the requested analyte.
- All response signals were satisfactory, with the following exceptions:
    1. The LCS for samples AW20863-AW20872 was still rising during the read time.
    2. The method blank in batch 574284 had a drop in signal, but the highest point was still below the limit of quantitation for the requested analyte.

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution.
8. The raw data results are shown with dilution factors included.

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TDS

Greene County Ash Pond

WMWGREAP_35

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

Sample ID	Batch ID	Project ID
AW20849	573205	WMWGREAP_35
AW20850	573205	WMWGREAP_35
AW20851	573203	WMWGREAP_35
AW20852	573203	WMWGREAP_35
AW20853	573203	WMWGREAP_35
AW20854	573203	WMWGREAP_35
AW20855	573205	WMWGREAP_35
AW20856	573205	WMWGREAP_35
AW20857	573205	WMWGREAP_35
AW20858	573205	WMWGREAP_35
AW20859	573205	WMWGREAP_35
AW20860	573205	WMWGREAP_35
AW20861	573205	WMWGREAP_35
AW20862	573205	WMWGREAP_35
AW20863	573206	WMWGREAP_35
AW20864	573206	WMWGREAP_35
AW20865	573206	WMWGREAP_35
AW20866	573203	WMWGREAP_35
AW20867	573203	WMWGREAP_35
AW20868	573203	WMWGREAP_35
AW20869	573203	WMWGREAP_35
AW20870	573203	WMWGREAP_35
AW20871	573206	WMWGREAP_35
AW20872	573206	WMWGREAP_35
AW20873	573206	WMWGREAP_35
AW20874	573206	WMWGREAP_35
AW20875	573206	WMWGREAP_35
AW20876	573206	WMWGREAP_35
AW20877	573206	WMWGREAP_35
AW20878	573203	WMWGREAP_35
AW20879	573204	WMWGREAP_35
AW20880	573204	WMWGREAP_35

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AW20881	573204	WMWGREAP_35
AW20882	573204	WMWGREAP_35
AW20883	573204	WMWGREAP_35
AW20884	573204	WMWGREAP_35

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 2.5 mg/L. It has been correct based on filter volume and project limits. Samples AW20849 and AW20870 are now reported as Not Detected.

General Quality Control Procedures:

- A blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5 mg of the previous weight.
- A sample duplicate was analyzed with each batch. RPD/2 was less than 5%.
- A laboratory control sample was analyzed with each batch. All criteria were met.
- All samples were between 2.5 mg and 200 mg residue with the exception of AW20864, AW20869, AW20870 and AW20874 which were <2.5mg.

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Certificate Of Analysis

Alabama Power

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Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AW20849

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0376	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	8/30/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.1	0.5		1.24	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	J	0.00548	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/22/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	8/18/2016	EPA 300.0		1	0.04	0.25		2.54	mg/L
* Fluoride, Total	SES	8/18/2016	EPA 300.0		1	0.01	0.3	J	0.036	mg/L
* Sulfate, Total	SES	8/18/2016	EPA 300.0		1	0.3	1	J	0.702	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. The result for TDS has been correctly changed to Not Detected.

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

Reported: 7/19/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AW20849

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20858	Lithium, Total	mg/L	0.0000296	0.022	0.20	0.232	0.227	0.214	0.17 to 0.23	116	70 to 130	2.18	20
AW20858	Boron, Total	mg/L	0.0174	0.044	1.00	1.04	1.05	1.02	0.85 to 1.15	101	70 to 130	0.957	20
AW20858	Thallium, Total	mg/L	0.00000245	0.00044	0.10	0.102	0.0989	0.100	0.085 to 0.115	102	70 to 130	3.24	20
AW20858	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.0998	0.0947	0.100	0.085 to 0.115	99.8	70 to 130	5.22	20
AW20858	Calcium, Total	mg/L	-0.00283	0.22	5.00	94.0	92.7	4.84	4.25 to 5.75	86.0	70 to 130	1.39	20
AW20858	Cobalt, Total	mg/L	0.00000335	0.0044	0.10	0.106	0.103	0.104	0.085 to 0.115	102	70 to 130	3.12	20
AW20852	Mercury, Total by CVAA	mg/L	0.000115	0.0005	0.004	0.00408	0.00400	0.00403	0.0034 to 0.0046	102	70 to 130	1.96	20
AW20858	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.105	0.101	0.102	0.085 to 0.115	97.0	70 to 130	4.06	20
AW20858	Lead, Total	mg/L	0.00000439	0.0022	0.10	0.102	0.0991	0.102	0.085 to 0.115	102	70 to 130	2.98	20
AW20858	Antimony, Total	mg/L	0.0000708	0.00132	0.10	0.0904	0.0868	0.0955	0.085 to 0.115	90.4	70 to 130	4.11	20
AW20858	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.195	0.188	0.0962	0.085 to 0.115	93.0	70 to 130	3.77	20
AW20858	Beryllium, Total	mg/L	0.00000829	0.00132	0.10	0.103	0.101	0.106	0.085 to 0.115	103	70 to 130	1.92	20
AW20858	Cadmium, Total	mg/L	0.00000606	0.00044	0.10	0.0954	0.0907	0.101	0.085 to 0.115	95.4	70 to 130	5.02	20
AW20858	Chromium, Total	mg/L	0.00000833	0.0044	0.10	0.100	0.0966	0.102	0.085 to 0.115	100	70 to 130	3.69	20
AW20858	Selenium, Total	mg/L	0.0000118	0.0044	0.10	0.0983	0.0927	0.104	0.085 to 0.115	98.3	70 to 130	5.88	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. The result for TDS has been correctly changed to Not Detected.

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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AW20849

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20862	Solids, Dissolved	mg/L	0.0	25			184	54	40 to 60			0.822	5
AW20857	Chloride, Total	mg/L	0.00	0.25	10.00	24.3	14.7	9.91	9 to 11	96.0	80 to 120	0.00	20
AW20857	Sulfate, Total	mg/L	0.318	1.0	200	474	273	19.7	18 to 22	99.5	80 to 120	0.730	20
AW20857	Fluoride, Total	mg/L	0.00	0.3	2.00	2.11	0.105	2.00	1.8 to 2.2	100	80 to 120	0.00	20

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CC:

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AW20850

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	J	0.00199	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0527	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	8/30/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.1	0.5		2.02	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0122	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/22/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25		41.3	mg/L
* Chloride, Total	SES	8/18/2016	EPA 300.0		1	0.04	0.25		2.21	mg/L
* Fluoride, Total	SES	8/18/2016	EPA 300.0		1	0.01	0.3	J	0.050	mg/L
* Sulfate, Total	SES	8/18/2016	EPA 300.0		1	0.3	1	J	0.894	mg/L

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Reported: 7/19/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AW20850

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20858	Lithium, Total	mg/L	0.0000296	0.022	0.20	0.232	0.227	0.214	0.17 to 0.23	116	70 to 130	2.18	20
AW20858	Boron, Total	mg/L	0.0174	0.044	1.00	1.04	1.05	1.02	0.85 to 1.15	101	70 to 130	0.957	20
AW20858	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.0998	0.0947	0.100	0.085 to 0.115	99.8	70 to 130	5.22	20
AW20858	Thallium, Total	mg/L	0.00000245	0.00044	0.10	0.102	0.0989	0.100	0.085 to 0.115	102	70 to 130	3.24	20
AW20858	Calcium, Total	mg/L	-0.00283	0.22	5.00	94.0	92.7	4.84	4.25 to 5.75	86.0	70 to 130	1.39	20
AW20858	Cobalt, Total	mg/L	0.00000335	0.0044	0.10	0.106	0.103	0.104	0.085 to 0.115	102	70 to 130	3.12	20
AW20852	Mercury, Total by CVAA	mg/L	0.000115	0.0005	0.004	0.00408	0.00400	0.00403	0.0034 to 0.0046	102	70 to 130	1.96	20
AW20858	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.105	0.101	0.102	0.085 to 0.115	97.0	70 to 130	4.06	20
AW20858	Lead, Total	mg/L	0.00000439	0.0022	0.10	0.102	0.0991	0.102	0.085 to 0.115	102	70 to 130	2.98	20
AW20858	Antimony, Total	mg/L	0.0000708	0.00132	0.10	0.0904	0.0868	0.0955	0.085 to 0.115	90.4	70 to 130	4.11	20
AW20858	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.195	0.188	0.0962	0.085 to 0.115	93.0	70 to 130	3.77	20
AW20858	Beryllium, Total	mg/L	0.00000829	0.00132	0.10	0.103	0.101	0.106	0.085 to 0.115	103	70 to 130	1.92	20
AW20858	Cadmium, Total	mg/L	0.00000606	0.00044	0.10	0.0954	0.0907	0.101	0.085 to 0.115	95.4	70 to 130	5.02	20
AW20858	Chromium, Total	mg/L	0.00000833	0.0044	0.10	0.100	0.0966	0.102	0.085 to 0.115	100	70 to 130	3.69	20
AW20858	Selenium, Total	mg/L	0.0000118	0.0044	0.10	0.0983	0.0927	0.104	0.085 to 0.115	98.3	70 to 130	5.88	20

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Expiration: June 30, 2018

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Version: 2.0

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Calera, AL 35040
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AW20850

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20857	Fluoride, Total	mg/L	0.00	0.3	2.00	2.11	0.105	2.00	1.8 to 2.2	100	80 to 120	0.00	20
AW20857	Sulfate, Total	mg/L	0.318	1.0	200	474	273	19.7	18 to 22	99.5	80 to 120	0.730	20
AW20857	Chloride, Total	mg/L	0.00	0.25	10.00	24.3	14.7	9.91	9 to 11	96.0	80 to 120	0.00	20
AW20862	Solids, Dissolved	mg/L	0.0	25			184	54	40 to 60			0.822	5

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AW20851

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.336	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	8/30/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.1	0.5		7.74	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000742	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	J	0.00599	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/22/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25		65.3	mg/L
* Chloride, Total	SES	8/18/2016	EPA 300.0		1	0.04	0.25		1.77	mg/L
* Fluoride, Total	SES	8/18/2016	EPA 300.0		1	0.01	0.3	J	0.055	mg/L
* Sulfate, Total	SES	8/18/2016	EPA 300.0		1	0.3	1		6.46	mg/L

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AW20851

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20858	Thallium, Total	mg/L	0.00000245	0.00044	0.10	0.102	0.0989	0.100	0.085 to 0.115	102	70 to 130	3.24	20
AW20858	Lithium, Total	mg/L	0.0000296	0.022	0.20	0.232	0.227	0.214	0.17 to 0.23	116	70 to 130	2.18	20
AW20858	Boron, Total	mg/L	0.0174	0.044	1.00	1.04	1.05	1.02	0.85 to 1.15	101	70 to 130	0.957	20
AW20858	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.0998	0.0947	0.100	0.085 to 0.115	99.8	70 to 130	5.22	20
AW20858	Calcium, Total	mg/L	-0.00283	0.22	5.00	94.0	92.7	4.84	4.25 to 5.75	86.0	70 to 130	1.39	20
AW20858	Cobalt, Total	mg/L	0.00000335	0.0044	0.10	0.106	0.103	0.104	0.085 to 0.115	102	70 to 130	3.12	20
AW20852	Mercury, Total by CVAA	mg/L	0.000115	0.0005	0.004	0.00408	0.00400	0.00403	0.0034 to 0.0046	102	70 to 130	1.96	20
AW20858	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.105	0.101	0.102	0.085 to 0.115	97.0	70 to 130	4.06	20
AW20858	Lead, Total	mg/L	0.00000439	0.0022	0.10	0.102	0.0991	0.102	0.085 to 0.115	102	70 to 130	2.98	20
AW20858	Antimony, Total	mg/L	0.0000708	0.00132	0.10	0.0904	0.0868	0.0955	0.085 to 0.115	90.4	70 to 130	4.11	20
AW20858	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.195	0.188	0.0962	0.085 to 0.115	93.0	70 to 130	3.77	20
AW20858	Beryllium, Total	mg/L	0.00000829	0.00132	0.10	0.103	0.101	0.106	0.085 to 0.115	103	70 to 130	1.92	20
AW20858	Cadmium, Total	mg/L	0.00000606	0.00044	0.10	0.0954	0.0907	0.101	0.085 to 0.115	95.4	70 to 130	5.02	20
AW20858	Chromium, Total	mg/L	0.00000833	0.0044	0.10	0.100	0.0966	0.102	0.085 to 0.115	100	70 to 130	3.69	20
AW20858	Selenium, Total	mg/L	0.0000118	0.0044	0.10	0.0983	0.0927	0.104	0.085 to 0.115	98.3	70 to 130	5.88	20

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Lab & Field SERVICES

Corrected Copy

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Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AW20851

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20857	Chloride, Total	mg/L	0.00	0.25	10.00	24.3	14.7	9.91	9 to 11	96.0	80 to 120	0.00	20
AW20878	Solids, Dissolved	mg/L	17.0	25			132	60	40 to 60			3.65	5
AW20857	Fluoride, Total	mg/L	0.00	0.3	2.00	2.11	0.105	2.00	1.8 to 2.2	100	80 to 120	0.00	20
AW20857	Sulfate, Total	mg/L	0.318	1.0	200	474	273	19.7	18 to 22	99.5	80 to 120	0.730	20

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Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

CC:

Reported: 7/19/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AW20852

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0803	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	8/30/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.1	0.5		1.10	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000211	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	J	0.00692	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/22/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25		36.7	mg/L
* Chloride, Total	SES	8/18/2016	EPA 300.0		1	0.04	0.25		1.78	mg/L
* Fluoride, Total	SES	8/18/2016	EPA 300.0		1	0.01	0.3	J	0.039	mg/L
* Sulfate, Total	SES	8/18/2016	EPA 300.0		1	0.3	1	J	0.928	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
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AW20852

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20858	Lithium, Total	mg/L	0.0000296	0.022	0.20	0.232	0.227	0.214	0.17 to 0.23	116	70 to 130	2.18	20
AW20858	Thallium, Total	mg/L	0.00000245	0.00044	0.10	0.102	0.0989	0.100	0.085 to 0.115	102	70 to 130	3.24	20
AW20858	Boron, Total	mg/L	0.0174	0.044	1.00	1.04	1.05	1.02	0.85 to 1.15	101	70 to 130	0.957	20
AW20858	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.0998	0.0947	0.100	0.085 to 0.115	99.8	70 to 130	5.22	20
AW20858	Antimony, Total	mg/L	0.0000708	0.00132	0.10	0.0904	0.0868	0.0955	0.085 to 0.115	90.4	70 to 130	4.11	20
AW20858	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.195	0.188	0.0962	0.085 to 0.115	93.0	70 to 130	3.77	20
AW20858	Beryllium, Total	mg/L	0.00000829	0.00132	0.10	0.103	0.101	0.106	0.085 to 0.115	103	70 to 130	1.92	20
AW20858	Cadmium, Total	mg/L	0.00000606	0.00044	0.10	0.0954	0.0907	0.101	0.085 to 0.115	95.4	70 to 130	5.02	20
AW20858	Calcium, Total	mg/L	-0.00283	0.22	5.00	94.0	92.7	4.84	4.25 to 5.75	86.0	70 to 130	1.39	20
AW20858	Cobalt, Total	mg/L	0.00000335	0.0044	0.10	0.106	0.103	0.104	0.085 to 0.115	102	70 to 130	3.12	20
AW20852	Mercury, Total by CVAA	mg/L	0.000115	0.0005	0.004	0.00408	0.00400	0.00403	0.0034 to 0.0046	102	70 to 130	1.96	20
AW20858	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.105	0.101	0.102	0.085 to 0.115	97.0	70 to 130	4.06	20
AW20858	Lead, Total	mg/L	0.00000439	0.0022	0.10	0.102	0.0991	0.102	0.085 to 0.115	102	70 to 130	2.98	20
AW20858	Chromium, Total	mg/L	0.00000833	0.0044	0.10	0.100	0.0966	0.102	0.085 to 0.115	100	70 to 130	3.69	20
AW20858	Selenium, Total	mg/L	0.0000118	0.0044	0.10	0.0983	0.0927	0.104	0.085 to 0.115	98.3	70 to 130	5.88	20

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AW20852

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20878	Solids, Dissolved	mg/L	17.0	25			132	60	40 to 60			3.65	5
AW20857	Sulfate, Total	mg/L	0.318	1.0	200	474	273	19.7	18 to 22	99.5	80 to 120	0.730	20
AW20857	Chloride, Total	mg/L	0.00	0.25	10.00	24.3	14.7	9.91	9 to 11	96.0	80 to 120	0.00	20
AW20857	Fluoride, Total	mg/L	0.00	0.3	2.00	2.11	0.105	2.00	1.8 to 2.2	100	80 to 120	0.00	20

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To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-27 Dup

Laboratory ID Number: AW20853

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0793	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	8/30/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.1	0.5		1.11	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	J	0.00686	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25		37.3	mg/L
* Chloride, Total	SES	8/18/2016	EPA 300.0		1	0.04	0.25		1.79	mg/L
* Fluoride, Total	SES	8/18/2016	EPA 300.0		1	0.01	0.3	J	0.039	mg/L
* Sulfate, Total	SES	8/18/2016	EPA 300.0		1	0.3	1	J	0.939	mg/L

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Reported: 7/19/2017
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Alabama Power General Test Laboratory
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Calera, AL 35040
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-27 Dup

Laboratory ID Number: AW20853

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20858	Thallium, Total	mg/L	0.00000245	0.00044	0.10	0.102	0.0989	0.100	0.085 to 0.115	102	70 to 130	3.24	20
AW20858	Lithium, Total	mg/L	0.0000296	0.022	0.20	0.232	0.227	0.214	0.17 to 0.23	116	70 to 130	2.18	20
AW20858	Boron, Total	mg/L	0.0174	0.044	1.00	1.04	1.05	1.02	0.85 to 1.15	101	70 to 130	0.957	20
AW20858	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.0998	0.0947	0.100	0.085 to 0.115	99.8	70 to 130	5.22	20
AW20858	Calcium, Total	mg/L	-0.00283	0.22	5.00	94.0	92.7	4.84	4.25 to 5.75	86.0	70 to 130	1.39	20
AW20858	Cobalt, Total	mg/L	0.00000335	0.0044	0.10	0.106	0.103	0.104	0.085 to 0.115	102	70 to 130	3.12	20
AW20858	Chromium, Total	mg/L	0.00000833	0.0044	0.10	0.100	0.0966	0.102	0.085 to 0.115	100	70 to 130	3.69	20
AW20858	Selenium, Total	mg/L	0.0000118	0.0044	0.10	0.0983	0.0927	0.104	0.085 to 0.115	98.3	70 to 130	5.88	20
AW20858	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.105	0.101	0.102	0.085 to 0.115	97.0	70 to 130	4.06	20
AW20858	Lead, Total	mg/L	0.00000439	0.0022	0.10	0.102	0.0991	0.102	0.085 to 0.115	102	70 to 130	2.98	20
AW20858	Antimony, Total	mg/L	0.0000708	0.00132	0.10	0.0904	0.0868	0.0955	0.085 to 0.115	90.4	70 to 130	4.11	20
AW20858	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.195	0.188	0.0962	0.085 to 0.115	93.0	70 to 130	3.77	20
AW20858	Beryllium, Total	mg/L	0.00000829	0.00132	0.10	0.103	0.101	0.106	0.085 to 0.115	103	70 to 130	1.92	20
AW20858	Cadmium, Total	mg/L	0.00000606	0.00044	0.10	0.0954	0.0907	0.101	0.085 to 0.115	95.4	70 to 130	5.02	20
AW20861	Mercury, Total by CVAA	mg/L	0.000103	0.0005	0.004	0.00391	0.00392	0.00393	0.0034 to 0.0046	97.8	70 to 130	0.293	20

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Expiration: June 30, 2018

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Reported: 7/19/2017
Version: 2.0

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Batch QC Summary

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To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-27 Dup

Laboratory ID Number: AW20853

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20857	Sulfate, Total	mg/L	0.318	1.0	200	474	273	19.7	18 to 22	99.5	80 to 120	0.730	20
AW20857	Chloride, Total	mg/L	0.00	0.25	10.00	24.3	14.7	9.91	9 to 11	96.0	80 to 120	0.00	20
AW20857	Fluoride, Total	mg/L	0.00	0.3	2.00	2.11	0.105	2.00	1.8 to 2.2	100	80 to 120	0.00	20
AW20878	Solids, Dissolved	mg/L	17.0	25			132	60	40 to 60			3.65	5

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CC:

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Lab & Field SERVICES

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To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AW20854

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	J	0.00170	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0476	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	J	0.00161	mg/L
* Boron, Total	HRG	8/30/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.1	0.5		5.88	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0167	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25		64.0	mg/L
* Chloride, Total	SES	8/18/2016	EPA 300.0		1	0.04	0.25		2.44	mg/L
* Fluoride, Total	SES	8/18/2016	EPA 300.0		1	0.01	0.3	J	0.159	mg/L
* Sulfate, Total	SES	8/18/2016	EPA 300.0		1	0.3	1		16.2	mg/L

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Expiration: June 30, 2018

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Reported: 7/19/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AW20854

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20858	Thallium, Total	mg/L	0.00000245	0.00044	0.10	0.102	0.0989	0.100	0.085 to 0.115	102	70 to 130	3.24	20
AW20858	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.0998	0.0947	0.100	0.085 to 0.115	99.8	70 to 130	5.22	20
AW20858	Lithium, Total	mg/L	0.0000296	0.022	0.20	0.232	0.227	0.214	0.17 to 0.23	116	70 to 130	2.18	20
AW20858	Boron, Total	mg/L	0.0174	0.044	1.00	1.04	1.05	1.02	0.85 to 1.15	101	70 to 130	0.957	20
AW20858	Calcium, Total	mg/L	-0.00283	0.22	5.00	94.0	92.7	4.84	4.25 to 5.75	86.0	70 to 130	1.39	20
AW20858	Cobalt, Total	mg/L	0.00000335	0.0044	0.10	0.106	0.103	0.104	0.085 to 0.115	102	70 to 130	3.12	20
AW20858	Chromium, Total	mg/L	0.00000833	0.0044	0.10	0.100	0.0966	0.102	0.085 to 0.115	100	70 to 130	3.69	20
AW20858	Selenium, Total	mg/L	0.0000118	0.0044	0.10	0.0983	0.0927	0.104	0.085 to 0.115	98.3	70 to 130	5.88	20
AW20858	Antimony, Total	mg/L	0.0000708	0.00132	0.10	0.0904	0.0868	0.0955	0.085 to 0.115	90.4	70 to 130	4.11	20
AW20858	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.195	0.188	0.0962	0.085 to 0.115	93.0	70 to 130	3.77	20
AW20858	Beryllium, Total	mg/L	0.00000829	0.00132	0.10	0.103	0.101	0.106	0.085 to 0.115	103	70 to 130	1.92	20
AW20858	Cadmium, Total	mg/L	0.00000606	0.00044	0.10	0.0954	0.0907	0.101	0.085 to 0.115	95.4	70 to 130	5.02	20
AW20861	Mercury, Total by CVAA	mg/L	0.000103	0.0005	0.004	0.00391	0.00392	0.00393	0.0034 to 0.0046	97.8	70 to 130	0.293	20
AW20858	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.105	0.101	0.102	0.085 to 0.115	97.0	70 to 130	4.06	20
AW20858	Lead, Total	mg/L	0.00000439	0.0022	0.10	0.102	0.0991	0.102	0.085 to 0.115	102	70 to 130	2.98	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. The result for Cd has been correctly changed to Not Detected. SGC 3/20/17

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AW20854

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20857	Chloride, Total	mg/L	0.00	0.25	10.00	24.3	14.7	9.91	9 to 11	96.0	80 to 120	0.00	20
AW20857	Fluoride, Total	mg/L	0.00	0.3	2.00	2.11	0.105	2.00	1.8 to 2.2	100	80 to 120	0.00	20
AW20857	Sulfate, Total	mg/L	0.318	1.0	200	474	273	19.7	18 to 22	99.5	80 to 120	0.730	20
AW20878	Solids, Dissolved	mg/L	17.0	25			132	60	40 to 60			3.65	5

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected.
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: 7/19/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AW20855

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005		0.0182	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0395	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	8/30/2016	EPA 200.7		1.015	0.02	0.1		0.211	mg/L
* Calcium, Total	HRG	8/30/2016	EPA 200.7		10.15	1.0	5.0		197	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0573	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		100		1420	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		10	0.40	2.50		33.3	mg/L
* Fluoride, Total	SES	8/18/2016	EPA 300.0		1	0.01	0.3	J	0.081	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		10	3.0	10		862	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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AW20855

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20858	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.0998	0.0947	0.100	0.085 to 0.115	99.8	70 to 130	5.22	20
AW20858	Thallium, Total	mg/L	0.00000245	0.00044	0.10	0.102	0.0989	0.100	0.085 to 0.115	102	70 to 130	3.24	20
AW20858	Boron, Total	mg/L	0.0174	0.044	1.00	1.04	1.05	1.02	0.85 to 1.15	101	70 to 130	0.957	20
AW20858	Lithium, Total	mg/L	0.0000296	0.022	0.20	0.232	0.227	0.214	0.17 to 0.23	116	70 to 130	2.18	20
AW20858	Calcium, Total	mg/L	-0.00283	0.22	5.00	94.0	92.7	4.84	4.25 to 5.75	86.0	70 to 130	1.39	20
AW20858	Cobalt, Total	mg/L	0.00000335	0.0044	0.10	0.106	0.103	0.104	0.085 to 0.115	102	70 to 130	3.12	20
AW20858	Chromium, Total	mg/L	0.00000833	0.0044	0.10	0.100	0.0966	0.102	0.085 to 0.115	100	70 to 130	3.69	20
AW20858	Selenium, Total	mg/L	0.0000118	0.0044	0.10	0.0983	0.0927	0.104	0.085 to 0.115	98.3	70 to 130	5.88	20
AW20858	Antimony, Total	mg/L	0.0000708	0.00132	0.10	0.0904	0.0868	0.0955	0.085 to 0.115	90.4	70 to 130	4.11	20
AW20858	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.195	0.188	0.0962	0.085 to 0.115	93.0	70 to 130	3.77	20
AW20858	Beryllium, Total	mg/L	0.00000829	0.00132	0.10	0.103	0.101	0.106	0.085 to 0.115	103	70 to 130	1.92	20
AW20858	Cadmium, Total	mg/L	0.00000606	0.00044	0.10	0.0954	0.0907	0.101	0.085 to 0.115	95.4	70 to 130	5.02	20
AW20861	Mercury, Total by CVAA	mg/L	0.000103	0.0005	0.004	0.00391	0.00392	0.00393	0.0034 to 0.0046	97.8	70 to 130	0.293	20
AW20858	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.105	0.101	0.102	0.085 to 0.115	97.0	70 to 130	4.06	20
AW20858	Lead, Total	mg/L	0.00000439	0.0022	0.10	0.102	0.0991	0.102	0.085 to 0.115	102	70 to 130	2.98	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected.
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AW20855

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20857	Sulfate, Total	mg/L	0.318	1.0	200	474	273	19.7	18 to 22	99.5	80 to 120	0.730	20
AW20862	Solids, Dissolved	mg/L	0.0	25			184	54	40 to 60			0.822	5
AW20857	Chloride, Total	mg/L	0.00	0.25	10.00	24.3	14.7	9.91	9 to 11	96.0	80 to 120	0.00	20
AW20857	Fluoride, Total	mg/L	0.00	0.3	2.00	2.11	0.105	2.00	1.8 to 2.2	100	80 to 120	0.00	20

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Expiration: June 30, 2018

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Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

CC:

Reported: 7/19/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-1 Dup

Laboratory ID Number: AW20856

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005		0.0172	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0381	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	8/30/2016	EPA 200.7		1.015	0.02	0.1		0.215	mg/L
* Calcium, Total	HRG	8/30/2016	EPA 200.7		10.15	1.0	5.0		192	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0570	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.01	0.05	J	0.0116	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		100		1440	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		10	0.40	2.50		33.5	mg/L
* Fluoride, Total	SES	8/18/2016	EPA 300.0		1	0.01	0.3	J	0.082	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		10	3.0	10		864	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 3/20/17

Reported: 7/19/2017
Version: 2.0

Alabama Power General Test Laboratory
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-1 Dup

Laboratory ID Number: AW20856

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20858	Thallium, Total	mg/L	0.00000245	0.00044	0.10	0.102	0.0989	0.100	0.085 to 0.115	102	70 to 130	3.24	20
AW20858	Lithium, Total	mg/L	0.0000296	0.022	0.20	0.232	0.227	0.214	0.17 to 0.23	116	70 to 130	2.18	20
AW20858	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.0998	0.0947	0.100	0.085 to 0.115	99.8	70 to 130	5.22	20
AW20858	Boron, Total	mg/L	0.0174	0.044	1.00	1.04	1.05	1.02	0.85 to 1.15	101	70 to 130	0.957	20
AW20858	Calcium, Total	mg/L	-0.00283	0.22	5.00	94.0	92.7	4.84	4.25 to 5.75	86.0	70 to 130	1.39	20
AW20858	Cobalt, Total	mg/L	0.00000335	0.0044	0.10	0.106	0.103	0.104	0.085 to 0.115	102	70 to 130	3.12	20
AW20858	Chromium, Total	mg/L	0.00000833	0.0044	0.10	0.100	0.0966	0.102	0.085 to 0.115	100	70 to 130	3.69	20
AW20858	Selenium, Total	mg/L	0.0000118	0.0044	0.10	0.0983	0.0927	0.104	0.085 to 0.115	98.3	70 to 130	5.88	20
AW20858	Antimony, Total	mg/L	0.0000708	0.00132	0.10	0.0904	0.0868	0.0955	0.085 to 0.115	90.4	70 to 130	4.11	20
AW20858	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.195	0.188	0.0962	0.085 to 0.115	93.0	70 to 130	3.77	20
AW20858	Beryllium, Total	mg/L	0.00000829	0.00132	0.10	0.103	0.101	0.106	0.085 to 0.115	103	70 to 130	1.92	20
AW20858	Cadmium, Total	mg/L	0.00000606	0.00044	0.10	0.0954	0.0907	0.101	0.085 to 0.115	95.4	70 to 130	5.02	20
AW20861	Mercury, Total by CVAA	mg/L	0.000103	0.0005	0.004	0.00391	0.00392	0.00393	0.0034 to 0.0046	97.8	70 to 130	0.293	20
AW20858	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.105	0.101	0.102	0.085 to 0.115	97.0	70 to 130	4.06	20
AW20858	Lead, Total	mg/L	0.00000439	0.0022	0.10	0.102	0.0991	0.102	0.085 to 0.115	102	70 to 130	2.98	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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Reported: 7/19/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-1 Dup

Laboratory ID Number: AW20856

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20862	Solids, Dissolved	mg/L	0.0	25			184	54	40 to 60			0.822	5
AW20857	Fluoride, Total	mg/L	0.00	0.3	2.00	2.11	0.105	2.00	1.8 to 2.2	100	80 to 120	0.00	20
AW20857	Sulfate, Total	mg/L	0.318	1.0	200	474	273	19.7	18 to 22	99.5	80 to 120	0.730	20
AW20857	Chloride, Total	mg/L	0.00	0.25	10.00	24.3	14.7	9.91	9 to 11	96.0	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: 7/19/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AW20857

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005		0.0154	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0317	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	8/30/2016	EPA 200.7		1.015	0.02	0.1		0.128	mg/L
* Calcium, Total	HRG	8/30/2016	EPA 200.7		10.15	1.0	5.0		72.2	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0117	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	J	0.00104	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		50		476	mg/L
* Chloride, Total	SES	8/18/2016	EPA 300.0		1	0.04	0.25		14.7	mg/L
* Fluoride, Total	SES	8/18/2016	EPA 300.0		1	0.01	0.3	J	0.105	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		10	3.0	10		275	mg/L

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report
Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected.
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AW20857

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20858	Lithium, Total	mg/L	0.0000296	0.022	0.20	0.232	0.227	0.214	0.17 to 0.23	116	70 to 130	2.18	20
AW20858	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.0998	0.0947	0.100	0.085 to 0.115	99.8	70 to 130	5.22	20
AW20858	Thallium, Total	mg/L	0.00000245	0.00044	0.10	0.102	0.0989	0.100	0.085 to 0.115	102	70 to 130	3.24	20
AW20858	Boron, Total	mg/L	0.0174	0.044	1.00	1.04	1.05	1.02	0.85 to 1.15	101	70 to 130	0.957	20
AW20858	Calcium, Total	mg/L	-0.00283	0.22	5.00	94.0	92.7	4.84	4.25 to 5.75	86.0	70 to 130	1.39	20
AW20858	Cobalt, Total	mg/L	0.00000335	0.0044	0.10	0.106	0.103	0.104	0.085 to 0.115	102	70 to 130	3.12	20
AW20858	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.105	0.101	0.102	0.085 to 0.115	97.0	70 to 130	4.06	20
AW20858	Lead, Total	mg/L	0.00000439	0.0022	0.10	0.102	0.0991	0.102	0.085 to 0.115	102	70 to 130	2.98	20
AW20858	Antimony, Total	mg/L	0.0000708	0.00132	0.10	0.0904	0.0868	0.0955	0.085 to 0.115	90.4	70 to 130	4.11	20
AW20858	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.195	0.188	0.0962	0.085 to 0.115	93.0	70 to 130	3.77	20
AW20858	Beryllium, Total	mg/L	0.00000829	0.00132	0.10	0.103	0.101	0.106	0.085 to 0.115	103	70 to 130	1.92	20
AW20858	Cadmium, Total	mg/L	0.00000606	0.00044	0.10	0.0954	0.0907	0.101	0.085 to 0.115	95.4	70 to 130	5.02	20
AW20861	Mercury, Total by CVAA	mg/L	0.000103	0.0005	0.004	0.00391	0.00392	0.00393	0.0034 to 0.0046	97.8	70 to 130	0.293	20
AW20858	Chromium, Total	mg/L	0.00000833	0.0044	0.10	0.100	0.0966	0.102	0.085 to 0.115	100	70 to 130	3.69	20
AW20858	Selenium, Total	mg/L	0.0000118	0.0044	0.10	0.0983	0.0927	0.104	0.085 to 0.115	98.3	70 to 130	5.88	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.
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AW20857

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20857	Fluoride, Total	mg/L	0.00	0.3	2.00	2.11	0.105	2.00	1.8 to 2.2	100	80 to 120	0.00	20
AW20862	Solids, Dissolved	mg/L	0.0	25			184	54	40 to 60			0.822	5
AW20857	Chloride, Total	mg/L	0.00	0.25	10.00	24.3	14.7	9.91	9 to 11	96.0	80 to 120	0.00	20
AW20857	Sulfate, Total	mg/L	0.318	1.0	200	474	273	19.7	18 to 22	99.5	80 to 120	0.730	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: 7/19/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AW20858

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005		0.00798	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.102	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	8/30/2016	EPA 200.7		1.015	0.02	0.1	J	0.0332	mg/L
* Calcium, Total	HRG	8/30/2016	EPA 200.7		10.15	1.0	5.0		89.7	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	J	0.00390	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		50		348	mg/L
* Chloride, Total	SES	8/18/2016	EPA 300.0		1	0.04	0.25		24.2	mg/L
* Fluoride, Total	SES	8/18/2016	EPA 300.0		1	0.01	0.3	J	0.109	mg/L
* Sulfate, Total	SES	8/18/2016	EPA 300.0		1	0.3	1	J	0.332	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
Recovery for Calcium is out of range.
The spike amount is less than 30% of the sample amount, therefore will not be qualified. SGC 11/29/16

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AW20858

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20858	Thallium, Total	mg/L	0.00000245	0.00044	0.10	0.102	0.0989	0.100	0.085 to 0.115	102	70 to 130	3.24	20
AW20858	Lithium, Total	mg/L	0.0000296	0.022	0.20	0.232	0.227	0.214	0.17 to 0.23	116	70 to 130	2.18	20
AW20858	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.0998	0.0947	0.100	0.085 to 0.115	99.8	70 to 130	5.22	20
AW20858	Boron, Total	mg/L	0.0174	0.044	1.00	1.04	1.05	1.02	0.85 to 1.15	101	70 to 130	0.957	20
AW20858	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.105	0.101	0.102	0.085 to 0.115	97.0	70 to 130	4.06	20
AW20858	Lead, Total	mg/L	0.00000439	0.0022	0.10	0.102	0.0991	0.102	0.085 to 0.115	102	70 to 130	2.98	20
AW20858	Antimony, Total	mg/L	0.0000708	0.00132	0.10	0.0904	0.0868	0.0955	0.085 to 0.115	90.4	70 to 130	4.11	20
AW20858	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.195	0.188	0.0962	0.085 to 0.115	93.0	70 to 130	3.77	20
AW20858	Beryllium, Total	mg/L	0.00000829	0.00132	0.10	0.103	0.101	0.106	0.085 to 0.115	103	70 to 130	1.92	20
AW20858	Cadmium, Total	mg/L	0.00000606	0.00044	0.10	0.0954	0.0907	0.101	0.085 to 0.115	95.4	70 to 130	5.02	20
AW20861	Mercury, Total by CVAA	mg/L	0.000103	0.0005	0.004	0.00391	0.00392	0.00393	0.0034 to 0.0046	97.8	70 to 130	0.293	20
AW20858	Chromium, Total	mg/L	0.00000833	0.0044	0.10	0.100	0.0966	0.102	0.085 to 0.115	100	70 to 130	3.69	20
AW20858	Selenium, Total	mg/L	0.0000118	0.0044	0.10	0.0983	0.0927	0.104	0.085 to 0.115	98.3	70 to 130	5.88	20
AW20858	Calcium, Total	mg/L	-0.00283	0.22	5.00	94.0	92.7	4.84	4.25 to 5.75	86.0	70 to 130	1.39	20
AW20858	Cobalt, Total	mg/L	0.00000335	0.0044	0.10	0.106	0.103	0.104	0.085 to 0.115	102	70 to 130	3.12	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.
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17
Recovery for Calcium is out of range.
The spike amount is less than 30% of the sample amount, therefore will not be qualified. SGC 11/29/16

Reported: 7/19/2017
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: WMWGREAP
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AW20858

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20867	Fluoride, Total	mg/L	0.000	0.3	2.00	2.13	0.188	1.98	1.8 to 2.2	97.0	80 to 120	1.06	20
AW20867	Sulfate, Total	mg/L	0.304	1.0	200	297	95.5	19.6	18 to 22	101	80 to 120	0.314	20
AW20862	Solids, Dissolved	mg/L	0.0	25			184	54	40 to 60			0.822	5
AW20867	Chloride, Total	mg/L	0.000	0.25	100	133	32.2	9.95	9 to 11	101	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
Recovery for Calcium is out of range.
The spike amount is less than 30% of the sample amount, therefore will not be qualified. SGC 11/29/16

CC:

Reported: 7/19/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AW20859

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0330	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	8/30/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.1	0.5		40.9	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25		132	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25		1.50	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	J	0.093	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		1	0.3	1		19.1	mg/L

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* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report
Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected.
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17
The result for Calcium is over the calibration curve and is therefore considered an estimated result.

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AW20859

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20868	Antimony, Total	mg/L	0.0000708	0.00132	0.10	0.0895	0.0903	0.0955	0.085 to 0.115	89.5	70 to 130	0.936	20
AW20868	Chromium, Total	mg/L	0.00000833	0.0044	0.10	0.0895	0.0900	0.102	0.085 to 0.115	89.5	70 to 130	0.630	20
AW20868	Lithium, Total	mg/L	-0.00000246	0.022	0.20	0.312	0.315	0.208	0.17 to 0.23	110	70 to 130	0.957	20
AW20868	Cobalt, Total	mg/L	0.00000335	0.0044	0.10	0.109	0.109	0.104	0.085 to 0.115	92.1	70 to 130	0.625	20
AW20868	Selenium, Total	mg/L	0.0000118	0.0044	0.10	0.0975	0.0980	0.104	0.085 to 0.115	97.5	70 to 130	0.504	20
AW20868	Boron, Total	mg/L	0.000550	0.044	1.00	1.46	1.48	1.01	0.85 to 1.15	98.3	70 to 130	1.36	20
AW20868	Calcium, Total	mg/L	-0.00302	0.22	5.00	65.4	65.4	4.49	4.25 to 5.75	88.0	70 to 130	0.00	20
AW20868	Lead, Total	mg/L	0.00000439	0.0022	0.10	0.102	0.102	0.102	0.085 to 0.115	102	70 to 130	0.0376	20
AW20861	Mercury, Total by CVAA	mg/L	0.000103	0.0005	0.004	0.00391	0.00392	0.00393	0.0034 to 0.0046	97.8	70 to 130	0.293	20
AW20868	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.452	0.454	0.102	0.085 to 0.115	83.0	70 to 130	0.587	20
AW20868	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.101	0.102	0.100	0.085 to 0.115	97.7	70 to 130	0.867	20
AW20868	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.487	0.490	0.0962	0.085 to 0.115	90.0	70 to 130	0.462	20
AW20868	Beryllium, Total	mg/L	0.00000829	0.00132	0.10	0.105	0.105	0.106	0.085 to 0.115	105	70 to 130	0.158	20
AW20868	Cadmium, Total	mg/L	0.00000606	0.00044	0.10	0.0938	0.0957	0.101	0.085 to 0.115	93.8	70 to 130	2.02	20
AW20868	Thallium, Total	mg/L	0.00000245	0.00044	0.10	0.103	0.103	0.100	0.085 to 0.115	103	70 to 130	0.610	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
The result for Calcium is over the calibration curve and is therefore considered an estimated result.

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AW20859

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20867	Sulfate, Total	mg/L	0.304	1.0	200	297	95.5	19.6	18 to 22	101	80 to 120	0.314	20
AW20867	Fluoride, Total	mg/L	0.000	0.3	2.00	2.13	0.188	1.98	1.8 to 2.2	97.0	80 to 120	1.06	20
AW20862	Solids, Dissolved	mg/L	0.0	25			184	54	40 to 60			0.822	5
AW20867	Chloride, Total	mg/L	0.000	0.25	100	133	32.2	9.95	9 to 11	101	80 to 120	0.00	20

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Expiration: June 30, 2018

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Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17
The result for Calcium is over the calibration curve and is therefore considered an estimated result.

CC:

Reported: 7/19/2017
Version: 2.0

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Calera, AL 35040
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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AW20860

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0308	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	8/30/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.1	0.5		6.77	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25		48.0	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25		3.45	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	J	0.046	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		1	0.3	1		12.2	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 3/20/17

Reported: 7/19/2017
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Alabama Power General Test Laboratory
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Calera, AL 35040
(205) 664-6032 or 6171
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AW20860

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20868	Chromium, Total	mg/L	0.00000833	0.0044	0.10	0.0895	0.0900	0.102	0.085 to 0.115	89.5	70 to 130	0.630	20
AW20868	Antimony, Total	mg/L	0.0000708	0.00132	0.10	0.0895	0.0903	0.0955	0.085 to 0.115	89.5	70 to 130	0.936	20
AW20868	Lithium, Total	mg/L	-0.00000246	0.022	0.20	0.312	0.315	0.208	0.17 to 0.23	110	70 to 130	0.957	20
AW20868	Cobalt, Total	mg/L	0.00000335	0.0044	0.10	0.109	0.109	0.104	0.085 to 0.115	92.1	70 to 130	0.625	20
AW20868	Selenium, Total	mg/L	0.0000118	0.0044	0.10	0.0975	0.0980	0.104	0.085 to 0.115	97.5	70 to 130	0.504	20
AW20861	Mercury, Total by CVAA	mg/L	0.000103	0.0005	0.004	0.00391	0.00392	0.00393	0.0034 to 0.0046	97.8	70 to 130	0.293	20
AW20868	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.452	0.454	0.102	0.085 to 0.115	83.0	70 to 130	0.587	20
AW20868	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.101	0.102	0.100	0.085 to 0.115	97.7	70 to 130	0.867	20
AW20868	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.487	0.490	0.0962	0.085 to 0.115	90.0	70 to 130	0.462	20
AW20868	Beryllium, Total	mg/L	0.00000829	0.00132	0.10	0.105	0.105	0.106	0.085 to 0.115	105	70 to 130	0.158	20
AW20868	Cadmium, Total	mg/L	0.00000606	0.00044	0.10	0.0938	0.0957	0.101	0.085 to 0.115	93.8	70 to 130	2.02	20
AW20868	Thallium, Total	mg/L	0.00000245	0.00044	0.10	0.103	0.103	0.100	0.085 to 0.115	103	70 to 130	0.610	20
AW20868	Boron, Total	mg/L	0.000550	0.044	1.00	1.46	1.48	1.01	0.85 to 1.15	98.3	70 to 130	1.36	20
AW20868	Calcium, Total	mg/L	-0.00302	0.22	5.00	65.4	65.4	4.49	4.25 to 5.75	88.0	70 to 130	0.00	20
AW20868	Lead, Total	mg/L	0.00000439	0.0022	0.10	0.102	0.102	0.102	0.085 to 0.115	102	70 to 130	0.0376	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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AW20860

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20867	Fluoride, Total	mg/L	0.000	0.3	2.00	2.13	0.188	1.98	1.8 to 2.2	97.0	80 to 120	1.06	20
AW20867	Sulfate, Total	mg/L	0.304	1.0	200	297	95.5	19.6	18 to 22	101	80 to 120	0.314	20
AW20862	Solids, Dissolved	mg/L	0.0	25			184	54	40 to 60			0.822	5
AW20867	Chloride, Total	mg/L	0.000	0.25	100	133	32.2	9.95	9 to 11	101	80 to 120	0.00	20

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Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

CC:

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Version: 2.0

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Calera, AL 35040
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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AW20861

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	J	0.00118	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0182	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	8/30/2016	EPA 200.7		1.015	0.02	0.1		0.268	mg/L
* Calcium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.1	0.5		24.0	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.01	0.05		0.282	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.127	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25		180	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25		12.5	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	J	0.219	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		1	0.3	1		67.1	mg/L

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Alabama Power General Test Laboratory
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Calera, AL 35040
(205) 664-6032 or 6171
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AW20861

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20868	Lithium, Total	mg/L	-0.00000246	0.022	0.20	0.312	0.315	0.208	0.17 to 0.23	110	70 to 130	0.957	20
AW20868	Chromium, Total	mg/L	0.00000833	0.0044	0.10	0.0895	0.0900	0.102	0.085 to 0.115	89.5	70 to 130	0.630	20
AW20868	Antimony, Total	mg/L	0.0000708	0.00132	0.10	0.0895	0.0903	0.0955	0.085 to 0.115	89.5	70 to 130	0.936	20
AW20861	Mercury, Total by CVAA	mg/L	0.000103	0.0005	0.004	0.00391	0.00392	0.00393	0.0034 to 0.0046	97.8	70 to 130	0.293	20
AW20868	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.452	0.454	0.102	0.085 to 0.115	83.0	70 to 130	0.587	20
AW20868	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.101	0.102	0.100	0.085 to 0.115	97.7	70 to 130	0.867	20
AW20868	Cobalt, Total	mg/L	0.00000335	0.0044	0.10	0.109	0.109	0.104	0.085 to 0.115	92.1	70 to 130	0.625	20
AW20868	Selenium, Total	mg/L	0.0000118	0.0044	0.10	0.0975	0.0980	0.104	0.085 to 0.115	97.5	70 to 130	0.504	20
AW20868	Boron, Total	mg/L	0.000550	0.044	1.00	1.46	1.48	1.01	0.85 to 1.15	98.3	70 to 130	1.36	20
AW20868	Calcium, Total	mg/L	-0.00302	0.22	5.00	65.4	65.4	4.49	4.25 to 5.75	88.0	70 to 130	0.00	20
AW20868	Lead, Total	mg/L	0.00000439	0.0022	0.10	0.102	0.102	0.102	0.085 to 0.115	102	70 to 130	0.0376	20
AW20868	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.487	0.490	0.0962	0.085 to 0.115	90.0	70 to 130	0.462	20
AW20868	Beryllium, Total	mg/L	0.00000829	0.00132	0.10	0.105	0.105	0.106	0.085 to 0.115	105	70 to 130	0.158	20
AW20868	Cadmium, Total	mg/L	0.00000606	0.00044	0.10	0.0938	0.0957	0.101	0.085 to 0.115	93.8	70 to 130	2.02	20
AW20868	Thallium, Total	mg/L	0.00000245	0.00044	0.10	0.103	0.103	0.100	0.085 to 0.115	103	70 to 130	0.610	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

Reported: 7/19/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AW20861

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20867	Sulfate, Total	mg/L	0.304	1.0	200	297	95.5	19.6	18 to 22	101	80 to 120	0.314	20
AW20867	Fluoride, Total	mg/L	0.000	0.3	2.00	2.13	0.188	1.98	1.8 to 2.2	97.0	80 to 120	1.06	20
AW20862	Solids, Dissolved	mg/L	0.0	25			184	54	40 to 60			0.822	5
AW20867	Chloride, Total	mg/L	0.000	0.25	100	133	32.2	9.95	9 to 11	101	80 to 120	0.00	20

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Expiration: June 30, 2018

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Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

CC:

Reported: 7/19/2017
Version: 2.0

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AW20862

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0385	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	8/30/2016	EPA 200.7		1.015	0.02	0.1		0.292	mg/L
* Calcium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.1	0.5		25.4	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.01	0.05		0.301	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0791	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25		181	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25		12.0	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	J	0.218	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		1	0.3	1		71.9	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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AW20862

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20868	Chromium, Total	mg/L	0.00000833	0.0044	0.10	0.0895	0.0900	0.102	0.085 to 0.115	89.5	70 to 130	0.630	20
AW20868	Antimony, Total	mg/L	0.0000708	0.00132	0.10	0.0895	0.0903	0.0955	0.085 to 0.115	89.5	70 to 130	0.936	20
AW20868	Lithium, Total	mg/L	-0.00000246	0.022	0.20	0.312	0.315	0.208	0.17 to 0.23	110	70 to 130	0.957	20
AW20868	Boron, Total	mg/L	0.000550	0.044	1.00	1.46	1.48	1.01	0.85 to 1.15	98.3	70 to 130	1.36	20
AW20868	Calcium, Total	mg/L	-0.00302	0.22	5.00	65.4	65.4	4.49	4.25 to 5.75	88.0	70 to 130	0.00	20
AW20868	Lead, Total	mg/L	0.00000439	0.0022	0.10	0.102	0.102	0.102	0.085 to 0.115	102	70 to 130	0.0376	20
AW20868	Cobalt, Total	mg/L	0.00000335	0.0044	0.10	0.109	0.109	0.104	0.085 to 0.115	92.1	70 to 130	0.625	20
AW20868	Selenium, Total	mg/L	0.0000118	0.0044	0.10	0.0975	0.0980	0.104	0.085 to 0.115	97.5	70 to 130	0.504	20
AW20868	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.487	0.490	0.0962	0.085 to 0.115	90.0	70 to 130	0.462	20
AW20868	Beryllium, Total	mg/L	0.00000829	0.00132	0.10	0.105	0.105	0.106	0.085 to 0.115	105	70 to 130	0.158	20
AW20868	Cadmium, Total	mg/L	0.00000606	0.00044	0.10	0.0938	0.0957	0.101	0.085 to 0.115	93.8	70 to 130	2.02	20
AW20868	Thallium, Total	mg/L	0.00000245	0.00044	0.10	0.103	0.103	0.100	0.085 to 0.115	103	70 to 130	0.610	20
AW20861	Mercury, Total by CVAA	mg/L	0.000103	0.0005	0.004	0.00391	0.00392	0.00393	0.0034 to 0.0046	97.8	70 to 130	0.293	20
AW20868	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.452	0.454	0.102	0.085 to 0.115	83.0	70 to 130	0.587	20
AW20868	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.101	0.102	0.100	0.085 to 0.115	97.7	70 to 130	0.867	20

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Expiration: June 30, 2018

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Reported: 7/19/2017
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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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AW20862

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20867	Fluoride, Total	mg/L	0.000	0.3	2.00	2.13	0.188	1.98	1.8 to 2.2	97.0	80 to 120	1.06	20
AW20867	Sulfate, Total	mg/L	0.304	1.0	200	297	95.5	19.6	18 to 22	101	80 to 120	0.314	20
AW20862	Solids, Dissolved	mg/L	0.0	25			184	54	40 to 60			0.822	5
AW20867	Chloride, Total	mg/L	0.000	0.25	100	133	32.2	9.95	9 to 11	101	80 to 120	0.00	20

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Expiration: June 30, 2018

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CC:

Reported: 7/19/2017
Version: 2.0

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744 County Road 87, GSC#8
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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AW20863

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005		0.00680	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0989	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	8/30/2016	EPA 200.7		1.015	0.02	0.1		0.554	mg/L
* Calcium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.1	0.5		18.4	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0464	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.01	0.05		0.0750	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	J	0.00582	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25		173	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25		17.0	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	J	0.116	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		1	0.3	1		38.5	mg/L

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AW20863

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20868	Lithium, Total	mg/L	-0.00000246	0.022	0.20	0.312	0.315	0.208	0.17 to 0.23	110	70 to 130	0.957	20
AW20868	Antimony, Total	mg/L	0.0000708	0.00132	0.10	0.0895	0.0903	0.0955	0.085 to 0.115	89.5	70 to 130	0.936	20
AW20868	Chromium, Total	mg/L	0.00000833	0.0044	0.10	0.0895	0.0900	0.102	0.085 to 0.115	89.5	70 to 130	0.630	20
AW20872	Mercury, Total by CVAA	mg/L	0.0000942	0.0005	0.004	0.00379	0.00378	0.00371	0.0034 to 0.0046	94.8	70 to 130	0.209	20
AW20868	Cobalt, Total	mg/L	0.00000335	0.0044	0.10	0.109	0.109	0.104	0.085 to 0.115	92.1	70 to 130	0.625	20
AW20868	Selenium, Total	mg/L	0.0000118	0.0044	0.10	0.0975	0.0980	0.104	0.085 to 0.115	97.5	70 to 130	0.504	20
AW20868	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.452	0.454	0.102	0.085 to 0.115	83.0	70 to 130	0.587	20
AW20868	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.101	0.102	0.100	0.085 to 0.115	97.7	70 to 130	0.867	20
AW20868	Boron, Total	mg/L	0.000550	0.044	1.00	1.46	1.48	1.01	0.85 to 1.15	98.3	70 to 130	1.36	20
AW20868	Calcium, Total	mg/L	-0.00302	0.22	5.00	65.4	65.4	4.49	4.25 to 5.75	88.0	70 to 130	0.00	20
AW20868	Lead, Total	mg/L	0.00000439	0.0022	0.10	0.102	0.102	0.102	0.085 to 0.115	102	70 to 130	0.0376	20
AW20868	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.487	0.490	0.0962	0.085 to 0.115	90.0	70 to 130	0.462	20
AW20868	Beryllium, Total	mg/L	0.00000829	0.00132	0.10	0.105	0.105	0.106	0.085 to 0.115	105	70 to 130	0.158	20
AW20868	Cadmium, Total	mg/L	0.00000606	0.00044	0.10	0.0938	0.0957	0.101	0.085 to 0.115	93.8	70 to 130	2.02	20
AW20868	Thallium, Total	mg/L	0.00000245	0.00044	0.10	0.103	0.103	0.100	0.085 to 0.115	103	70 to 130	0.610	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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AW20863

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20867	Chloride, Total	mg/L	0.000	0.25	100	133	32.2	9.95	9 to 11	101	80 to 120	0.00	20
AW20867	Fluoride, Total	mg/L	0.000	0.3	2.00	2.13	0.188	1.98	1.8 to 2.2	97.0	80 to 120	1.06	20
AW20867	Sulfate, Total	mg/L	0.304	1.0	200	297	95.5	19.6	18 to 22	101	80 to 120	0.314	20
AW20877	Solids, Dissolved	mg/L	0.0	25			102	54	40 to 60			0.493	5

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CC:

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(205) 664-6032 or 6171
FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW20864

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	8/30/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		1	0.3	1	J	0.312	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW20864

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20868	Antimony, Total	mg/L	0.0000708	0.00132	0.10	0.0895	0.0903	0.0955	0.085 to 0.115	89.5	70 to 130	0.936	20
AW20868	Lithium, Total	mg/L	-0.00000246	0.022	0.20	0.312	0.315	0.208	0.17 to 0.23	110	70 to 130	0.957	20
AW20868	Chromium, Total	mg/L	0.00000833	0.0044	0.10	0.0895	0.0900	0.102	0.085 to 0.115	89.5	70 to 130	0.630	20
AW20872	Mercury, Total by CVAA	mg/L	0.0000942	0.0005	0.004	0.00379	0.00378	0.00371	0.0034 to 0.0046	94.8	70 to 130	0.209	20
AW20868	Cobalt, Total	mg/L	0.00000335	0.0044	0.10	0.109	0.109	0.104	0.085 to 0.115	92.1	70 to 130	0.625	20
AW20868	Selenium, Total	mg/L	0.0000118	0.0044	0.10	0.0975	0.0980	0.104	0.085 to 0.115	97.5	70 to 130	0.504	20
AW20868	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.452	0.454	0.102	0.085 to 0.115	83.0	70 to 130	0.587	20
AW20868	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.101	0.102	0.100	0.085 to 0.115	97.7	70 to 130	0.867	20
AW20868	Boron, Total	mg/L	0.000550	0.044	1.00	1.46	1.48	1.01	0.85 to 1.15	98.3	70 to 130	1.36	20
AW20868	Calcium, Total	mg/L	-0.00302	0.22	5.00	65.4	65.4	4.49	4.25 to 5.75	88.0	70 to 130	0.00	20
AW20868	Lead, Total	mg/L	0.00000439	0.0022	0.10	0.102	0.102	0.102	0.085 to 0.115	102	70 to 130	0.0376	20
AW20868	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.487	0.490	0.0962	0.085 to 0.115	90.0	70 to 130	0.462	20
AW20868	Beryllium, Total	mg/L	0.00000829	0.00132	0.10	0.105	0.105	0.106	0.085 to 0.115	105	70 to 130	0.158	20
AW20868	Cadmium, Total	mg/L	0.00000606	0.00044	0.10	0.0938	0.0957	0.101	0.085 to 0.115	93.8	70 to 130	2.02	20
AW20868	Thallium, Total	mg/L	0.00000245	0.00044	0.10	0.103	0.103	0.100	0.085 to 0.115	103	70 to 130	0.610	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.
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW20864

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20867	Chloride, Total	mg/L	0.000	0.25	100	133	32.2	9.95	9 to 11	101	80 to 120	0.00	20
AW20867	Fluoride, Total	mg/L	0.000	0.3	2.00	2.13	0.188	1.98	1.8 to 2.2	97.0	80 to 120	1.06	20
AW20867	Sulfate, Total	mg/L	0.304	1.0	200	297	95.5	19.6	18 to 22	101	80 to 120	0.314	20
AW20877	Solids, Dissolved	mg/L	0.0	25			102	54	40 to 60			0.493	5

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CC:

Reported: 7/19/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AW20865

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005		0.0128	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.160	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	8/30/2016	EPA 200.7		1.015	0.02	0.1		1.34	mg/L
* Calcium, Total	HRG	8/30/2016	EPA 200.7		10.15	1.0	5.0		65.6	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0160	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.01	0.05		0.124	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	J	0.00991	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25		327	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25		17.7	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	J	0.238	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		1	0.3	1		9.10	mg/L

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AW20865

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20868	Lithium, Total	mg/L	-0.00000246	0.022	0.20	0.312	0.315	0.208	0.17 to 0.23	110	70 to 130	0.957	20
AW20868	Antimony, Total	mg/L	0.0000708	0.00132	0.10	0.0895	0.0903	0.0955	0.085 to 0.115	89.5	70 to 130	0.936	20
AW20868	Chromium, Total	mg/L	0.00000833	0.0044	0.10	0.0895	0.0900	0.102	0.085 to 0.115	89.5	70 to 130	0.630	20
AW20872	Mercury, Total by CVAA	mg/L	0.0000942	0.0005	0.004	0.00379	0.00378	0.00371	0.0034 to 0.0046	94.8	70 to 130	0.209	20
AW20868	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.452	0.454	0.102	0.085 to 0.115	83.0	70 to 130	0.587	20
AW20868	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.101	0.102	0.100	0.085 to 0.115	97.7	70 to 130	0.867	20
AW20868	Cobalt, Total	mg/L	0.00000335	0.0044	0.10	0.109	0.109	0.104	0.085 to 0.115	92.1	70 to 130	0.625	20
AW20868	Selenium, Total	mg/L	0.0000118	0.0044	0.10	0.0975	0.0980	0.104	0.085 to 0.115	97.5	70 to 130	0.504	20
AW20868	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.487	0.490	0.0962	0.085 to 0.115	90.0	70 to 130	0.462	20
AW20868	Beryllium, Total	mg/L	0.00000829	0.00132	0.10	0.105	0.105	0.106	0.085 to 0.115	105	70 to 130	0.158	20
AW20868	Cadmium, Total	mg/L	0.00000606	0.00044	0.10	0.0938	0.0957	0.101	0.085 to 0.115	93.8	70 to 130	2.02	20
AW20868	Thallium, Total	mg/L	0.00000245	0.00044	0.10	0.103	0.103	0.100	0.085 to 0.115	103	70 to 130	0.610	20
AW20868	Boron, Total	mg/L	0.000550	0.044	1.00	1.46	1.48	1.01	0.85 to 1.15	98.3	70 to 130	1.36	20
AW20868	Calcium, Total	mg/L	-0.00302	0.22	5.00	65.4	65.4	4.49	4.25 to 5.75	88.0	70 to 130	0.00	20
AW20868	Lead, Total	mg/L	0.00000439	0.0022	0.10	0.102	0.102	0.102	0.085 to 0.115	102	70 to 130	0.0376	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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Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AW20865

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20867	Chloride, Total	mg/L	0.000	0.25	100	133	32.2	9.95	9 to 11	101	80 to 120	0.00	20
AW20867	Fluoride, Total	mg/L	0.000	0.3	2.00	2.13	0.188	1.98	1.8 to 2.2	97.0	80 to 120	1.06	20
AW20867	Sulfate, Total	mg/L	0.304	1.0	200	297	95.5	19.6	18 to 22	101	80 to 120	0.314	20
AW20877	Solids, Dissolved	mg/L	0.0	25			102	54	40 to 60			0.493	5

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AW20866

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0875	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	8/30/2016	EPA 200.7		1.015	0.02	0.1	J	0.0920	mg/L
* Calcium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.1	0.5		8.88	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	J	0.00659	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25		142	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25		22.1	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	J	0.037	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		1	0.3	1		30.5	mg/L

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AW20866

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20868	Antimony, Total	mg/L	0.0000708	0.00132	0.10	0.0895	0.0903	0.0955	0.085 to 0.115	89.5	70 to 130	0.936	20
AW20868	Lithium, Total	mg/L	-0.00000246	0.022	0.20	0.312	0.315	0.208	0.17 to 0.23	110	70 to 130	0.957	20
AW20868	Chromium, Total	mg/L	0.00000833	0.0044	0.10	0.0895	0.0900	0.102	0.085 to 0.115	89.5	70 to 130	0.630	20
AW20872	Mercury, Total by CVAA	mg/L	0.0000942	0.0005	0.004	0.00379	0.00378	0.00371	0.0034 to 0.0046	94.8	70 to 130	0.209	20
AW20868	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.452	0.454	0.102	0.085 to 0.115	83.0	70 to 130	0.587	20
AW20868	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.101	0.102	0.100	0.085 to 0.115	97.7	70 to 130	0.867	20
AW20868	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.487	0.490	0.0962	0.085 to 0.115	90.0	70 to 130	0.462	20
AW20868	Beryllium, Total	mg/L	0.00000829	0.00132	0.10	0.105	0.105	0.106	0.085 to 0.115	105	70 to 130	0.158	20
AW20868	Cadmium, Total	mg/L	0.00000606	0.00044	0.10	0.0938	0.0957	0.101	0.085 to 0.115	93.8	70 to 130	2.02	20
AW20868	Thallium, Total	mg/L	0.00000245	0.00044	0.10	0.103	0.103	0.100	0.085 to 0.115	103	70 to 130	0.610	20
AW20868	Boron, Total	mg/L	0.000550	0.044	1.00	1.46	1.48	1.01	0.85 to 1.15	98.3	70 to 130	1.36	20
AW20868	Calcium, Total	mg/L	-0.00302	0.22	5.00	65.4	65.4	4.49	4.25 to 5.75	88.0	70 to 130	0.00	20
AW20868	Lead, Total	mg/L	0.00000439	0.0022	0.10	0.102	0.102	0.102	0.085 to 0.115	102	70 to 130	0.0376	20
AW20868	Cobalt, Total	mg/L	0.00000335	0.0044	0.10	0.109	0.109	0.104	0.085 to 0.115	92.1	70 to 130	0.625	20
AW20868	Selenium, Total	mg/L	0.0000118	0.0044	0.10	0.0975	0.0980	0.104	0.085 to 0.115	97.5	70 to 130	0.504	20

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AW20866

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20867	Chloride, Total	mg/L	0.000	0.25	100	133	32.2	9.95	9 to 11	101	80 to 120	0.00	20
AW20867	Sulfate, Total	mg/L	0.304	1.0	200	297	95.5	19.6	18 to 22	101	80 to 120	0.314	20
AW20867	Fluoride, Total	mg/L	0.000	0.3	2.00	2.13	0.188	1.98	1.8 to 2.2	97.0	80 to 120	1.06	20
AW20878	Solids, Dissolved	mg/L	17.0	25			132	60	40 to 60			3.65	5

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CC:

Reported: 7/19/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AW20867

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0434	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	8/30/2016	EPA 200.7		1.015	0.02	0.1		2.01	mg/L
* Calcium, Total	HRG	8/30/2016	EPA 200.7		10.15	1.0	5.0		120	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	J	0.00234	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		50		628	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		10	0.40	2.50		32.2	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	J	0.190	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		10	3.0	10		95.8	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

Reported: 7/19/2017
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

Alabama Power

Corrected Copy

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AW20867

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20868	Lithium, Total	mg/L	-0.00000246	0.022	0.20	0.312	0.315	0.208	0.17 to 0.23	110	70 to 130	0.957	20
AW20868	Antimony, Total	mg/L	0.0000708	0.00132	0.10	0.0895	0.0903	0.0955	0.085 to 0.115	89.5	70 to 130	0.936	20
AW20868	Chromium, Total	mg/L	0.00000833	0.0044	0.10	0.0895	0.0900	0.102	0.085 to 0.115	89.5	70 to 130	0.630	20
AW20872	Mercury, Total by CVAA	mg/L	0.0000942	0.0005	0.004	0.00379	0.00378	0.00371	0.0034 to 0.0046	94.8	70 to 130	0.209	20
AW20868	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.452	0.454	0.102	0.085 to 0.115	83.0	70 to 130	0.587	20
AW20868	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.101	0.102	0.100	0.085 to 0.115	97.7	70 to 130	0.867	20
AW20868	Boron, Total	mg/L	0.000550	0.044	1.00	1.46	1.48	1.01	0.85 to 1.15	98.3	70 to 130	1.36	20
AW20868	Calcium, Total	mg/L	-0.00302	0.22	5.00	65.4	65.4	4.49	4.25 to 5.75	88.0	70 to 130	0.00	20
AW20868	Lead, Total	mg/L	0.00000439	0.0022	0.10	0.102	0.102	0.102	0.085 to 0.115	102	70 to 130	0.0376	20
AW20868	Cobalt, Total	mg/L	0.00000335	0.0044	0.10	0.109	0.109	0.104	0.085 to 0.115	92.1	70 to 130	0.625	20
AW20868	Selenium, Total	mg/L	0.0000118	0.0044	0.10	0.0975	0.0980	0.104	0.085 to 0.115	97.5	70 to 130	0.504	20
AW20868	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.487	0.490	0.0962	0.085 to 0.115	90.0	70 to 130	0.462	20
AW20868	Beryllium, Total	mg/L	0.00000829	0.00132	0.10	0.105	0.105	0.106	0.085 to 0.115	105	70 to 130	0.158	20
AW20868	Cadmium, Total	mg/L	0.00000606	0.00044	0.10	0.0938	0.0957	0.101	0.085 to 0.115	93.8	70 to 130	2.02	20
AW20868	Thallium, Total	mg/L	0.00000245	0.00044	0.10	0.103	0.103	0.100	0.085 to 0.115	103	70 to 130	0.610	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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AW20867

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20867	Chloride, Total	mg/L	0.000	0.25	100	133	32.2	9.95	9 to 11	101	80 to 120	0.00	20
AW20867	Sulfate, Total	mg/L	0.304	1.0	200	297	95.5	19.6	18 to 22	101	80 to 120	0.314	20
AW20867	Fluoride, Total	mg/L	0.000	0.3	2.00	2.13	0.188	1.98	1.8 to 2.2	97.0	80 to 120	1.06	20
AW20878	Solids, Dissolved	mg/L	17.0	25			132	60	40 to 60			3.65	5

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Expiration: June 30, 2018

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CC:

Reported: 7/19/2017
Version: 2.0

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Calera, AL 35040
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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AW20868

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005		0.369	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.397	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	8/30/2016	EPA 200.7		1.015	0.02	0.1		0.477	mg/L
* Calcium, Total	HRG	8/30/2016	EPA 200.7		10.15	1.0	5.0		61.0	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0169	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	8/30/2016	EPA 200.7		1.015	0.01	0.05		0.0930	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	J	0.00330	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25		325	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25		16.4	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	J	0.225	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		1	0.3	1		3.63	mg/L

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AW20868

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20868	Antimony, Total	mg/L	0.0000708	0.00132	0.10	0.0895	0.0903	0.0955	0.085 to 0.115	89.5	70 to 130	0.936	20
AW20868	Lithium, Total	mg/L	-0.00000246	0.022	0.20	0.312	0.315	0.208	0.17 to 0.23	110	70 to 130	0.957	20
AW20868	Cobalt, Total	mg/L	0.00000335	0.0044	0.10	0.109	0.109	0.104	0.085 to 0.115	92.1	70 to 130	0.625	20
AW20868	Selenium, Total	mg/L	0.0000118	0.0044	0.10	0.0975	0.0980	0.104	0.085 to 0.115	97.5	70 to 130	0.504	20
AW20868	Boron, Total	mg/L	0.000550	0.044	1.00	1.46	1.48	1.01	0.85 to 1.15	98.3	70 to 130	1.36	20
AW20868	Calcium, Total	mg/L	-0.00302	0.22	5.00	65.4	65.4	4.49	4.25 to 5.75	88.0	70 to 130	0.00	20
AW20868	Lead, Total	mg/L	0.00000439	0.0022	0.10	0.102	0.102	0.102	0.085 to 0.115	102	70 to 130	0.0376	20
AW20868	Chromium, Total	mg/L	0.00000833	0.0044	0.10	0.0895	0.0900	0.102	0.085 to 0.115	89.5	70 to 130	0.630	20
AW20872	Mercury, Total by CVAA	mg/L	0.0000942	0.0005	0.004	0.00379	0.00378	0.00371	0.0034 to 0.0046	94.8	70 to 130	0.209	20
AW20868	Barium, Total	mg/L	0.00000779	0.0044	0.10	0.487	0.490	0.0962	0.085 to 0.115	90.0	70 to 130	0.462	20
AW20868	Beryllium, Total	mg/L	0.00000829	0.00132	0.10	0.105	0.105	0.106	0.085 to 0.115	105	70 to 130	0.158	20
AW20868	Cadmium, Total	mg/L	0.00000606	0.00044	0.10	0.0938	0.0957	0.101	0.085 to 0.115	93.8	70 to 130	2.02	20
AW20868	Thallium, Total	mg/L	0.00000245	0.00044	0.10	0.103	0.103	0.100	0.085 to 0.115	103	70 to 130	0.610	20
AW20868	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.452	0.454	0.102	0.085 to 0.115	83.0	70 to 130	0.587	20
AW20868	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.101	0.102	0.100	0.085 to 0.115	97.7	70 to 130	0.867	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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AW20868

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20878	Solids, Dissolved	mg/L	17.0	25			132	60	40 to 60			3.65	5
AW20877	Fluoride, Total	mg/L	0.000	0.3	2.00	1.96	0.062	1.98	1.8 to 2.2	95.0	80 to 120	1.63	20
AW20877	Chloride, Total	mg/L	0.000	0.25	10.00	14.7	4.90	9.93	9 to 11	98.2	80 to 120	0.409	20
AW20877	Sulfate, Total	mg/L	0.301	1.0	20.00	28.8	9.34	19.5	18 to 22	97.4	80 to 120	0.107	20

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW20869

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	9/7/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		1	0.3	1	U	Not Detected	mg/L

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Batch QC Summary

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW20869

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20878	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.0991	0.101	0.100	0.085 to 0.115	97.1	70 to 130	1.65	20
AW20872	Mercury, Total by CVAA	mg/L	0.0000942	0.0005	0.004	0.00379	0.00378	0.00371	0.0034 to 0.0046	94.8	70 to 130	0.209	20
AW20878	Lithium, Total	mg/L	0.000118	0.022	0.200	0.199	0.184	0.171	0.17 to 0.23	99.5	70 to 130	7.83	20
AW20878	Antimony, Total	mg/L	0.0000552	0.00132	0.10	0.0905	0.0908	0.0958	0.085 to 0.115	90.5	70 to 130	0.348	20
AW20878	Lead, Total	mg/L	0.00000869	0.0022	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.159	20
AW20878	Selenium, Total	mg/L	0.00000532	0.0044	0.10	0.0980	0.0978	0.103	0.085 to 0.115	98.0	70 to 130	0.195	20
AW20878	Arsenic, Total	mg/L	0.0000181	0.0022	0.10	0.0999	0.0997	0.101	0.085 to 0.115	98.0	70 to 130	0.275	20
AW20878	Thallium, Total	mg/L	0.00000393	0.00044	0.10	0.103	0.103	0.100	0.085 to 0.115	103	70 to 130	0.500	20
AW20878	Boron, Total	mg/L	0.00207	0.044	1.00	0.982	0.955	0.973	0.85 to 1.15	98.2	70 to 130	2.79	20
AW20878	Calcium, Total	mg/L	-0.0144	0.22	5.00	44.7	44.7	5.01	4.25 to 5.75	104	70 to 130	0.00	20
AW20878	Cobalt, Total	mg/L	0.00000294	0.0044	0.10	0.104	0.105	0.104	0.085 to 0.115	104	70 to 130	0.617	20
AW20878	Barium, Total	mg/L	0.0000204	0.0044	0.10	0.116	0.117	0.0964	0.085 to 0.115	93.4	70 to 130	1.31	20
AW20878	Beryllium, Total	mg/L	0.0000104	0.00132	0.10	0.105	0.105	0.108	0.085 to 0.115	105	70 to 130	0.510	20
AW20878	Cadmium, Total	mg/L	0.00000344	0.00044	0.10	0.0965	0.0962	0.101	0.085 to 0.115	96.5	70 to 130	0.337	20
AW20878	Chromium, Total	mg/L	0.0000122	0.0044	0.10	0.100	0.101	0.102	0.085 to 0.115	100	70 to 130	0.323	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.
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW20869

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20878	Solids, Dissolved	mg/L	17.0	25			132	60	40 to 60			3.65	5
AW20877	Fluoride, Total	mg/L	0.000	0.3	2.00	1.96	0.062	1.98	1.8 to 2.2	95.0	80 to 120	1.63	20
AW20877	Sulfate, Total	mg/L	0.301	1.0	20.00	28.8	9.34	19.5	18 to 22	97.4	80 to 120	0.107	20
AW20877	Chloride, Total	mg/L	0.000	0.25	10.00	14.7	4.90	9.93	9 to 11	98.2	80 to 120	0.409	20

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CC:

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Version: 2.0

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW20870

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	9/7/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		1	0.3	1	U	Not Detected	mg/L

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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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW20870

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20878	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.0991	0.101	0.100	0.085 to 0.115	97.1	70 to 130	1.65	20
AW20872	Mercury, Total by CVAA	mg/L	0.0000942	0.0005	0.004	0.00379	0.00378	0.00371	0.0034 to 0.0046	94.8	70 to 130	0.209	20
AW20878	Lithium, Total	mg/L	0.000118	0.022	0.200	0.199	0.184	0.171	0.17 to 0.23	99.5	70 to 130	7.83	20
AW20878	Arsenic, Total	mg/L	0.0000181	0.0022	0.10	0.0999	0.0997	0.101	0.085 to 0.115	98.0	70 to 130	0.275	20
AW20878	Thallium, Total	mg/L	0.00000393	0.00044	0.10	0.103	0.103	0.100	0.085 to 0.115	103	70 to 130	0.500	20
AW20878	Antimony, Total	mg/L	0.0000552	0.00132	0.10	0.0905	0.0908	0.0958	0.085 to 0.115	90.5	70 to 130	0.348	20
AW20878	Lead, Total	mg/L	0.00000869	0.0022	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.159	20
AW20878	Selenium, Total	mg/L	0.00000532	0.0044	0.10	0.0980	0.0978	0.103	0.085 to 0.115	98.0	70 to 130	0.195	20
AW20878	Barium, Total	mg/L	0.0000204	0.0044	0.10	0.116	0.117	0.0964	0.085 to 0.115	93.4	70 to 130	1.31	20
AW20878	Beryllium, Total	mg/L	0.0000104	0.00132	0.10	0.105	0.105	0.108	0.085 to 0.115	105	70 to 130	0.510	20
AW20878	Cadmium, Total	mg/L	0.00000344	0.00044	0.10	0.0965	0.0962	0.101	0.085 to 0.115	96.5	70 to 130	0.337	20
AW20878	Chromium, Total	mg/L	0.0000122	0.0044	0.10	0.100	0.101	0.102	0.085 to 0.115	100	70 to 130	0.323	20
AW20878	Boron, Total	mg/L	0.00207	0.044	1.00	0.982	0.955	0.973	0.85 to 1.15	98.2	70 to 130	2.79	20
AW20878	Calcium, Total	mg/L	-0.0144	0.22	5.00	44.7	44.7	5.01	4.25 to 5.75	104	70 to 130	0.00	20
AW20878	Cobalt, Total	mg/L	0.00000294	0.0044	0.10	0.104	0.105	0.104	0.085 to 0.115	104	70 to 130	0.617	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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Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW20870

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20877	Sulfate, Total	mg/L	0.301	1.0	20.00	28.8	9.34	19.5	18 to 22	97.4	80 to 120	0.107	20
AW20878	Solids, Dissolved	mg/L	17.0	25			132	60	40 to 60			3.65	5
AW20877	Fluoride, Total	mg/L	0.000	0.3	2.00	1.96	0.062	1.98	1.8 to 2.2	95.0	80 to 120	1.63	20
AW20877	Chloride, Total	mg/L	0.000	0.25	10.00	14.7	4.90	9.93	9 to 11	98.2	80 to 120	0.409	20

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AW20871

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005		0.116	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.113	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	9/7/2016	EPA 200.7		1.015	0.02	0.1		1.66	mg/L
* Calcium, Total	HRG	9/7/2016	EPA 200.7		10.15	1.0	5.0		84.4	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0225	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.01	0.05		0.558	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		50		454	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25		22.4	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	J	0.149	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		1	0.3	1		56.0	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AW20871

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20878	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.0991	0.101	0.100	0.085 to 0.115	97.1	70 to 130	1.65	20
AW20872	Mercury, Total by CVAA	mg/L	0.0000942	0.0005	0.004	0.00379	0.00378	0.00371	0.0034 to 0.0046	94.8	70 to 130	0.209	20
AW20878	Lithium, Total	mg/L	0.000118	0.022	0.200	0.199	0.184	0.171	0.17 to 0.23	99.5	70 to 130	7.83	20
AW20878	Arsenic, Total	mg/L	0.0000181	0.0022	0.10	0.0999	0.0997	0.101	0.085 to 0.115	98.0	70 to 130	0.275	20
AW20878	Thallium, Total	mg/L	0.00000393	0.00044	0.10	0.103	0.103	0.100	0.085 to 0.115	103	70 to 130	0.500	20
AW20878	Boron, Total	mg/L	0.00207	0.044	1.00	0.982	0.955	0.973	0.85 to 1.15	98.2	70 to 130	2.79	20
AW20878	Calcium, Total	mg/L	-0.0144	0.22	5.00	44.7	44.7	5.01	4.25 to 5.75	104	70 to 130	0.00	20
AW20878	Cobalt, Total	mg/L	0.00000294	0.0044	0.10	0.104	0.105	0.104	0.085 to 0.115	104	70 to 130	0.617	20
AW20878	Barium, Total	mg/L	0.0000204	0.0044	0.10	0.116	0.117	0.0964	0.085 to 0.115	93.4	70 to 130	1.31	20
AW20878	Beryllium, Total	mg/L	0.0000104	0.00132	0.10	0.105	0.105	0.108	0.085 to 0.115	105	70 to 130	0.510	20
AW20878	Cadmium, Total	mg/L	0.00000344	0.00044	0.10	0.0965	0.0962	0.101	0.085 to 0.115	96.5	70 to 130	0.337	20
AW20878	Chromium, Total	mg/L	0.0000122	0.0044	0.10	0.100	0.101	0.102	0.085 to 0.115	100	70 to 130	0.323	20
AW20878	Antimony, Total	mg/L	0.0000552	0.00132	0.10	0.0905	0.0908	0.0958	0.085 to 0.115	90.5	70 to 130	0.348	20
AW20878	Lead, Total	mg/L	0.00000869	0.0022	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.159	20
AW20878	Selenium, Total	mg/L	0.00000532	0.0044	0.10	0.0980	0.0978	0.103	0.085 to 0.115	98.0	70 to 130	0.195	20

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AW20871

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20877	Fluoride, Total	mg/L	0.000	0.3	2.00	1.96	0.062	1.98	1.8 to 2.2	95.0	80 to 120	1.63	20
AW20877	Sulfate, Total	mg/L	0.301	1.0	20.00	28.8	9.34	19.5	18 to 22	97.4	80 to 120	0.107	20
AW20877	Chloride, Total	mg/L	0.000	0.25	10.00	14.7	4.90	9.93	9 to 11	98.2	80 to 120	0.409	20
AW20877	Solids, Dissolved	mg/L	0.0	25			102	54	40 to 60			0.493	5

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CC:

Reported: 7/19/2017
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AW20872

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005		0.253	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0634	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	9/7/2016	EPA 200.7		1.015	0.02	0.1		1.83	mg/L
* Calcium, Total	HRG	9/7/2016	EPA 200.7		10.15	1.0	5.0		45.6	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0134	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.01	0.05		0.571	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0838	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		50		392	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25		19.5	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3		0.362	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		1	0.3	1		50.1	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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AW20872

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20878	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.0991	0.101	0.100	0.085 to 0.115	97.1	70 to 130	1.65	20
AW20878	Arsenic, Total	mg/L	0.0000181	0.0022	0.10	0.0999	0.0997	0.101	0.085 to 0.115	98.0	70 to 130	0.275	20
AW20878	Thallium, Total	mg/L	0.00000393	0.00044	0.10	0.103	0.103	0.100	0.085 to 0.115	103	70 to 130	0.500	20
AW20872	Mercury, Total by CVAA	mg/L	0.0000942	0.0005	0.004	0.00379	0.00378	0.00371	0.0034 to 0.0046	94.8	70 to 130	0.209	20
AW20878	Lithium, Total	mg/L	0.000118	0.022	0.200	0.199	0.184	0.171	0.17 to 0.23	99.5	70 to 130	7.83	20
AW20878	Boron, Total	mg/L	0.00207	0.044	1.00	0.982	0.955	0.973	0.85 to 1.15	98.2	70 to 130	2.79	20
AW20878	Calcium, Total	mg/L	-0.0144	0.22	5.00	44.7	44.7	5.01	4.25 to 5.75	104	70 to 130	0.00	20
AW20878	Cobalt, Total	mg/L	0.00000294	0.0044	0.10	0.104	0.105	0.104	0.085 to 0.115	104	70 to 130	0.617	20
AW20878	Antimony, Total	mg/L	0.0000552	0.00132	0.10	0.0905	0.0908	0.0958	0.085 to 0.115	90.5	70 to 130	0.348	20
AW20878	Lead, Total	mg/L	0.00000869	0.0022	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.159	20
AW20878	Selenium, Total	mg/L	0.00000532	0.0044	0.10	0.0980	0.0978	0.103	0.085 to 0.115	98.0	70 to 130	0.195	20
AW20878	Barium, Total	mg/L	0.0000204	0.0044	0.10	0.116	0.117	0.0964	0.085 to 0.115	93.4	70 to 130	1.31	20
AW20878	Beryllium, Total	mg/L	0.0000104	0.00132	0.10	0.105	0.105	0.108	0.085 to 0.115	105	70 to 130	0.510	20
AW20878	Cadmium, Total	mg/L	0.00000344	0.00044	0.10	0.0965	0.0962	0.101	0.085 to 0.115	96.5	70 to 130	0.337	20
AW20878	Chromium, Total	mg/L	0.0000122	0.0044	0.10	0.100	0.101	0.102	0.085 to 0.115	100	70 to 130	0.323	20

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

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Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AW20872

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20877	Chloride, Total	mg/L	0.000	0.25	10.00	14.7	4.90	9.93	9 to 11	98.2	80 to 120	0.409	20
AW20877	Solids, Dissolved	mg/L	0.0	25			102	54	40 to 60			0.493	5
AW20877	Sulfate, Total	mg/L	0.301	1.0	20.00	28.8	9.34	19.5	18 to 22	97.4	80 to 120	0.107	20
AW20877	Fluoride, Total	mg/L	0.000	0.3	2.00	1.96	0.062	1.98	1.8 to 2.2	95.0	80 to 120	1.63	20

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To: Dustin Brooks
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John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AW20873

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005		0.105	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0377	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	9/7/2016	EPA 200.7		1.015	0.02	0.1		1.31	mg/L
* Calcium, Total	HRG	9/7/2016	EPA 200.7		10.15	1.0	5.0		56.2	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0133	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.01	0.05		0.557	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000278	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		50		366	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25		13.6	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	J	0.224	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		10	3.0	10		98.3	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AW20873

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20878	Lithium, Total	mg/L	0.000118	0.022	0.200	0.199	0.184	0.171	0.17 to 0.23	99.5	70 to 130	7.83	20
AW20878	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.0991	0.101	0.100	0.085 to 0.115	97.1	70 to 130	1.65	20
AW20878	Arsenic, Total	mg/L	0.0000181	0.0022	0.10	0.0999	0.0997	0.101	0.085 to 0.115	98.0	70 to 130	0.275	20
AW20878	Thallium, Total	mg/L	0.00000393	0.00044	0.10	0.103	0.103	0.100	0.085 to 0.115	103	70 to 130	0.500	20
AW20878	Boron, Total	mg/L	0.00207	0.044	1.00	0.982	0.955	0.973	0.85 to 1.15	98.2	70 to 130	2.79	20
AW20878	Calcium, Total	mg/L	-0.0144	0.22	5.00	44.7	44.7	5.01	4.25 to 5.75	104	70 to 130	0.00	20
AW20878	Cobalt, Total	mg/L	0.00000294	0.0044	0.10	0.104	0.105	0.104	0.085 to 0.115	104	70 to 130	0.617	20
AW20878	Barium, Total	mg/L	0.0000204	0.0044	0.10	0.116	0.117	0.0964	0.085 to 0.115	93.4	70 to 130	1.31	20
AW20878	Beryllium, Total	mg/L	0.0000104	0.00132	0.10	0.105	0.105	0.108	0.085 to 0.115	105	70 to 130	0.510	20
AW20878	Cadmium, Total	mg/L	0.00000344	0.00044	0.10	0.0965	0.0962	0.101	0.085 to 0.115	96.5	70 to 130	0.337	20
AW20878	Chromium, Total	mg/L	0.0000122	0.0044	0.10	0.100	0.101	0.102	0.085 to 0.115	100	70 to 130	0.323	20
AW20878	Antimony, Total	mg/L	0.0000552	0.00132	0.10	0.0905	0.0908	0.0958	0.085 to 0.115	90.5	70 to 130	0.348	20
AW20878	Lead, Total	mg/L	0.00000869	0.0022	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.159	20
AW20878	Selenium, Total	mg/L	0.00000532	0.0044	0.10	0.0980	0.0978	0.103	0.085 to 0.115	98.0	70 to 130	0.195	20
AW20882	Mercury, Total by CVAA	mg/L	0.0000979	0.0005	0.004	0.00352	0.00358	0.00383	0.0034 to 0.0046	88.0	70 to 130	1.61	20

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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: WMWGREAP
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AW20873

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20877	Sulfate, Total	mg/L	0.301	1.0	20.00	28.8	9.34	19.5	18 to 22	97.4	80 to 120	0.107	20
AW20877	Fluoride, Total	mg/L	0.000	0.3	2.00	1.96	0.062	1.98	1.8 to 2.2	95.0	80 to 120	1.63	20
AW20877	Chloride, Total	mg/L	0.000	0.25	10.00	14.7	4.90	9.93	9 to 11	98.2	80 to 120	0.409	20
AW20877	Solids, Dissolved	mg/L	0.0	25			102	54	40 to 60			0.493	5

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW20874

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	9/7/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		1	0.3	1	J	0.318	mg/L

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Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW20874

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20878	Lithium, Total	mg/L	0.000118	0.022	0.200	0.199	0.184	0.171	0.17 to 0.23	99.5	70 to 130	7.83	20
AW20878	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.0991	0.101	0.100	0.085 to 0.115	97.1	70 to 130	1.65	20
AW20878	Arsenic, Total	mg/L	0.0000181	0.0022	0.10	0.0999	0.0997	0.101	0.085 to 0.115	98.0	70 to 130	0.275	20
AW20878	Thallium, Total	mg/L	0.00000393	0.00044	0.10	0.103	0.103	0.100	0.085 to 0.115	103	70 to 130	0.500	20
AW20878	Antimony, Total	mg/L	0.0000552	0.00132	0.10	0.0905	0.0908	0.0958	0.085 to 0.115	90.5	70 to 130	0.348	20
AW20878	Lead, Total	mg/L	0.00000869	0.0022	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.159	20
AW20878	Selenium, Total	mg/L	0.00000532	0.0044	0.10	0.0980	0.0978	0.103	0.085 to 0.115	98.0	70 to 130	0.195	20
AW20882	Mercury, Total by CVAA	mg/L	0.0000979	0.0005	0.004	0.00352	0.00358	0.00383	0.0034 to 0.0046	88.0	70 to 130	1.61	20
AW20878	Boron, Total	mg/L	0.00207	0.044	1.00	0.982	0.955	0.973	0.85 to 1.15	98.2	70 to 130	2.79	20
AW20878	Calcium, Total	mg/L	-0.0144	0.22	5.00	44.7	44.7	5.01	4.25 to 5.75	104	70 to 130	0.00	20
AW20878	Cobalt, Total	mg/L	0.00000294	0.0044	0.10	0.104	0.105	0.104	0.085 to 0.115	104	70 to 130	0.617	20
AW20878	Barium, Total	mg/L	0.0000204	0.0044	0.10	0.116	0.117	0.0964	0.085 to 0.115	93.4	70 to 130	1.31	20
AW20878	Beryllium, Total	mg/L	0.0000104	0.00132	0.10	0.105	0.105	0.108	0.085 to 0.115	105	70 to 130	0.510	20
AW20878	Cadmium, Total	mg/L	0.00000344	0.00044	0.10	0.0965	0.0962	0.101	0.085 to 0.115	96.5	70 to 130	0.337	20
AW20878	Chromium, Total	mg/L	0.0000122	0.0044	0.10	0.100	0.101	0.102	0.085 to 0.115	100	70 to 130	0.323	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.
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 15-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW20874

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20877	Sulfate, Total	mg/L	0.301	1.0	20.00	28.8	9.34	19.5	18 to 22	97.4	80 to 120	0.107	20
AW20877	Chloride, Total	mg/L	0.000	0.25	10.00	14.7	4.90	9.93	9 to 11	98.2	80 to 120	0.409	20
AW20877	Solids, Dissolved	mg/L	0.0	25			102	54	40 to 60			0.493	5
AW20877	Fluoride, Total	mg/L	0.000	0.3	2.00	1.96	0.062	1.98	1.8 to 2.2	95.0	80 to 120	1.63	20

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CC:

Reported: 7/19/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AW20875

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0134	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	9/7/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.1	0.5		9.33	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25		49.3	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25		4.24	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	J	0.054	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		1	0.3	1		2.06	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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AW20875

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20878	Lithium, Total	mg/L	0.000118	0.022	0.200	0.199	0.184	0.171	0.17 to 0.23	99.5	70 to 130	7.83	20
AW20878	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.0991	0.101	0.100	0.085 to 0.115	97.1	70 to 130	1.65	20
AW20878	Arsenic, Total	mg/L	0.0000181	0.0022	0.10	0.0999	0.0997	0.101	0.085 to 0.115	98.0	70 to 130	0.275	20
AW20878	Thallium, Total	mg/L	0.00000393	0.00044	0.10	0.103	0.103	0.100	0.085 to 0.115	103	70 to 130	0.500	20
AW20878	Boron, Total	mg/L	0.00207	0.044	1.00	0.982	0.955	0.973	0.85 to 1.15	98.2	70 to 130	2.79	20
AW20878	Calcium, Total	mg/L	-0.0144	0.22	5.00	44.7	44.7	5.01	4.25 to 5.75	104	70 to 130	0.00	20
AW20878	Cobalt, Total	mg/L	0.00000294	0.0044	0.10	0.104	0.105	0.104	0.085 to 0.115	104	70 to 130	0.617	20
AW20878	Barium, Total	mg/L	0.0000204	0.0044	0.10	0.116	0.117	0.0964	0.085 to 0.115	93.4	70 to 130	1.31	20
AW20878	Beryllium, Total	mg/L	0.0000104	0.00132	0.10	0.105	0.105	0.108	0.085 to 0.115	105	70 to 130	0.510	20
AW20878	Cadmium, Total	mg/L	0.00000344	0.00044	0.10	0.0965	0.0962	0.101	0.085 to 0.115	96.5	70 to 130	0.337	20
AW20878	Chromium, Total	mg/L	0.0000122	0.0044	0.10	0.100	0.101	0.102	0.085 to 0.115	100	70 to 130	0.323	20
AW20878	Antimony, Total	mg/L	0.0000552	0.00132	0.10	0.0905	0.0908	0.0958	0.085 to 0.115	90.5	70 to 130	0.348	20
AW20878	Lead, Total	mg/L	0.00000869	0.0022	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.159	20
AW20878	Selenium, Total	mg/L	0.00000532	0.0044	0.10	0.0980	0.0978	0.103	0.085 to 0.115	98.0	70 to 130	0.195	20
AW20882	Mercury, Total by CVAA	mg/L	0.0000979	0.0005	0.004	0.00352	0.00358	0.00383	0.0034 to 0.0046	88.0	70 to 130	1.61	20

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Expiration: June 30, 2018

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Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AW20875

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20877	Solids, Dissolved	mg/L	0.0	25			102	54	40 to 60			0.493	5
AW20877	Chloride, Total	mg/L	0.000	0.25	10.00	14.7	4.90	9.93	9 to 11	98.2	80 to 120	0.409	20
AW20877	Fluoride, Total	mg/L	0.000	0.3	2.00	1.96	0.062	1.98	1.8 to 2.2	95.0	80 to 120	1.63	20
AW20877	Sulfate, Total	mg/L	0.301	1.0	20.00	28.8	9.34	19.5	18 to 22	97.4	80 to 120	0.107	20

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Reported: 7/19/2017
Version: 2.0

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(205) 664-6032 or 6171
FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-32 Dup

Laboratory ID Number: AW20876

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0136	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	9/7/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.1	0.5		9.28	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25		51.3	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25		4.23	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	J	0.054	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		1	0.3	1		2.03	mg/L

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-32 Dup

Laboratory ID Number: AW20876

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20878	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.0991	0.101	0.100	0.085 to 0.115	97.1	70 to 130	1.65	20
AW20878	Lithium, Total	mg/L	0.000118	0.022	0.200	0.199	0.184	0.171	0.17 to 0.23	99.5	70 to 130	7.83	20
AW20878	Boron, Total	mg/L	0.00207	0.044	1.00	0.982	0.955	0.973	0.85 to 1.15	98.2	70 to 130	2.79	20
AW20878	Calcium, Total	mg/L	-0.0144	0.22	5.00	44.7	44.7	5.01	4.25 to 5.75	104	70 to 130	0.00	20
AW20878	Cobalt, Total	mg/L	0.00000294	0.0044	0.10	0.104	0.105	0.104	0.085 to 0.115	104	70 to 130	0.617	20
AW20878	Arsenic, Total	mg/L	0.0000181	0.0022	0.10	0.0999	0.0997	0.101	0.085 to 0.115	98.0	70 to 130	0.275	20
AW20878	Thallium, Total	mg/L	0.00000393	0.00044	0.10	0.103	0.103	0.100	0.085 to 0.115	103	70 to 130	0.500	20
AW20878	Barium, Total	mg/L	0.0000204	0.0044	0.10	0.116	0.117	0.0964	0.085 to 0.115	93.4	70 to 130	1.31	20
AW20878	Beryllium, Total	mg/L	0.0000104	0.00132	0.10	0.105	0.105	0.108	0.085 to 0.115	105	70 to 130	0.510	20
AW20878	Cadmium, Total	mg/L	0.00000344	0.00044	0.10	0.0965	0.0962	0.101	0.085 to 0.115	96.5	70 to 130	0.337	20
AW20878	Chromium, Total	mg/L	0.0000122	0.0044	0.10	0.100	0.101	0.102	0.085 to 0.115	100	70 to 130	0.323	20
AW20878	Antimony, Total	mg/L	0.0000552	0.00132	0.10	0.0905	0.0908	0.0958	0.085 to 0.115	90.5	70 to 130	0.348	20
AW20878	Lead, Total	mg/L	0.00000869	0.0022	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.159	20
AW20878	Selenium, Total	mg/L	0.00000532	0.0044	0.10	0.0980	0.0978	0.103	0.085 to 0.115	98.0	70 to 130	0.195	20
AW20882	Mercury, Total by CVAA	mg/L	0.0000979	0.0005	0.004	0.00352	0.00358	0.00383	0.0034 to 0.0046	88.0	70 to 130	1.61	20

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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: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-32 Dup

Laboratory ID Number: AW20876

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20877	Chloride, Total	mg/L	0.000	0.25	10.00	14.7	4.90	9.93	9 to 11	98.2	80 to 120	0.409	20
AW20877	Sulfate, Total	mg/L	0.301	1.0	20.00	28.8	9.34	19.5	18 to 22	97.4	80 to 120	0.107	20
AW20877	Solids, Dissolved	mg/L	0.0	25			102	54	40 to 60			0.493	5
AW20877	Fluoride, Total	mg/L	0.000	0.3	2.00	1.96	0.062	1.98	1.8 to 2.2	95.0	80 to 120	1.63	20

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CC:

Reported: 7/19/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AW20877

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	J	0.00122	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0304	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	9/7/2016	EPA 200.7		1.015	0.02	0.1	J	0.0268	mg/L
* Calcium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.1	0.5		5.54	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	J	0.00923	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25		101	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25		4.88	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	J	0.061	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		1	0.3	1		9.33	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

Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AW20877

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20878	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.0991	0.101	0.100	0.085 to 0.115	97.1	70 to 130	1.65	20
AW20878	Lithium, Total	mg/L	0.000118	0.022	0.200	0.199	0.184	0.171	0.17 to 0.23	99.5	70 to 130	7.83	20
AW20878	Arsenic, Total	mg/L	0.0000181	0.0022	0.10	0.0999	0.0997	0.101	0.085 to 0.115	98.0	70 to 130	0.275	20
AW20878	Thallium, Total	mg/L	0.00000393	0.00044	0.10	0.103	0.103	0.100	0.085 to 0.115	103	70 to 130	0.500	20
AW20878	Boron, Total	mg/L	0.00207	0.044	1.00	0.982	0.955	0.973	0.85 to 1.15	98.2	70 to 130	2.79	20
AW20878	Calcium, Total	mg/L	-0.0144	0.22	5.00	44.7	44.7	5.01	4.25 to 5.75	104	70 to 130	0.00	20
AW20878	Cobalt, Total	mg/L	0.00000294	0.0044	0.10	0.104	0.105	0.104	0.085 to 0.115	104	70 to 130	0.617	20
AW20878	Barium, Total	mg/L	0.0000204	0.0044	0.10	0.116	0.117	0.0964	0.085 to 0.115	93.4	70 to 130	1.31	20
AW20878	Beryllium, Total	mg/L	0.0000104	0.00132	0.10	0.105	0.105	0.108	0.085 to 0.115	105	70 to 130	0.510	20
AW20878	Cadmium, Total	mg/L	0.00000344	0.00044	0.10	0.0965	0.0962	0.101	0.085 to 0.115	96.5	70 to 130	0.337	20
AW20878	Chromium, Total	mg/L	0.0000122	0.0044	0.10	0.100	0.101	0.102	0.085 to 0.115	100	70 to 130	0.323	20
AW20878	Antimony, Total	mg/L	0.0000552	0.00132	0.10	0.0905	0.0908	0.0958	0.085 to 0.115	90.5	70 to 130	0.348	20
AW20878	Lead, Total	mg/L	0.00000869	0.0022	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.159	20
AW20878	Selenium, Total	mg/L	0.00000532	0.0044	0.10	0.0980	0.0978	0.103	0.085 to 0.115	98.0	70 to 130	0.195	20
AW20882	Mercury, Total by CVAA	mg/L	0.0000979	0.0005	0.004	0.00352	0.00358	0.00383	0.0034 to 0.0046	88.0	70 to 130	1.61	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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AW20877

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20877	Chloride, Total	mg/L	0.000	0.25	10.00	14.7	4.90	9.93	9 to 11	98.2	80 to 120	0.409	20
AW20877	Sulfate, Total	mg/L	0.301	1.0	20.00	28.8	9.34	19.5	18 to 22	97.4	80 to 120	0.107	20
AW20877	Solids, Dissolved	mg/L	0.0	25			102	54	40 to 60			0.493	5
AW20877	Fluoride, Total	mg/L	0.000	0.3	2.00	1.96	0.062	1.98	1.8 to 2.2	95.0	80 to 120	1.63	20

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AW20878

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	J	0.00185	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0226	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	9/7/2016	EPA 200.7		1.015	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.1	0.5		39.5	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	J	0.00201	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25		142	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25		5.32	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	J	0.087	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		1	0.3	1		1.78	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AW20878

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20878	Lithium, Total	mg/L	0.000118	0.022	0.200	0.199	0.184	0.171	0.17 to 0.23	99.5	70 to 130	7.83	20
AW20878	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.0991	0.101	0.100	0.085 to 0.115	97.1	70 to 130	1.65	20
AW20878	Boron, Total	mg/L	0.00207	0.044	1.00	0.982	0.955	0.973	0.85 to 1.15	98.2	70 to 130	2.79	20
AW20878	Calcium, Total	mg/L	-0.0144	0.22	5.00	44.7	44.7	5.01	4.25 to 5.75	104	70 to 130	0.00	20
AW20878	Cobalt, Total	mg/L	0.00000294	0.0044	0.10	0.104	0.105	0.104	0.085 to 0.115	104	70 to 130	0.617	20
AW20878	Barium, Total	mg/L	0.0000204	0.0044	0.10	0.116	0.117	0.0964	0.085 to 0.115	93.4	70 to 130	1.31	20
AW20878	Beryllium, Total	mg/L	0.0000104	0.00132	0.10	0.105	0.105	0.108	0.085 to 0.115	105	70 to 130	0.510	20
AW20878	Cadmium, Total	mg/L	0.00000344	0.00044	0.10	0.0965	0.0962	0.101	0.085 to 0.115	96.5	70 to 130	0.337	20
AW20878	Chromium, Total	mg/L	0.0000122	0.0044	0.10	0.100	0.101	0.102	0.085 to 0.115	100	70 to 130	0.323	20
AW20878	Arsenic, Total	mg/L	0.0000181	0.0022	0.10	0.0999	0.0997	0.101	0.085 to 0.115	98.0	70 to 130	0.275	20
AW20878	Thallium, Total	mg/L	0.00000393	0.00044	0.10	0.103	0.103	0.100	0.085 to 0.115	103	70 to 130	0.500	20
AW20878	Antimony, Total	mg/L	0.0000552	0.00132	0.10	0.0905	0.0908	0.0958	0.085 to 0.115	90.5	70 to 130	0.348	20
AW20878	Lead, Total	mg/L	0.00000869	0.0022	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.159	20
AW20878	Selenium, Total	mg/L	0.00000532	0.0044	0.10	0.0980	0.0978	0.103	0.085 to 0.115	98.0	70 to 130	0.195	20
AW20882	Mercury, Total by CVAA	mg/L	0.0000979	0.0005	0.004	0.00352	0.00358	0.00383	0.0034 to 0.0046	88.0	70 to 130	1.61	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: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AW20878

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20878	Solids, Dissolved	mg/L	17.0	25			132	60	40 to 60			3.65	5
AW20884	Fluoride, Total	mg/L	0.000	0.3	2.00	2.10	0.176	1.95	1.8 to 2.2	96.2	80 to 120	0.567	20
AW20884	Chloride, Total	mg/L	0.000	0.25	10.00	25.9	16.5	9.90	9 to 11	93.0	80 to 120	0.604	20
AW20884	Sulfate, Total	mg/L	0.298	1.0	20.00	77.4	59.3	19.3	18 to 22	90.5	80 to 120	0.00	20

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AW20879

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005		0.0153	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0332	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	9/7/2016	EPA 200.7		1.015	0.02	0.1		0.509	mg/L
* Calcium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.1	0.5		35.9	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	J	0.00545	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.01	0.05		0.444	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0236	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25		269	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25		12.8	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	J	0.147	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		1	0.3	1		85.4	mg/L

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Batch QC Summary

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AW20879

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20884	Barium, Total	mg/L	0.0000204	0.0044	0.10	0.179	0.180	0.0964	0.085 to 0.115	91.2	70 to 130	0.695	20
AW21228	Calcium, Total	mg/L	-0.0155	0.22	5.00	41.9	42.2	4.89	4.25 to 5.75	92.0	70 to 130	0.713	20
AW21228	Boron, Total	mg/L	0.00338	0.044	1.00	1.80	1.81	0.946	0.85 to 1.15	96.5	70 to 130	0.554	20
AW20884	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.194	0.195	0.100	0.085 to 0.115	98.4	70 to 130	0.515	20
AW20884	Thallium, Total	mg/L	0.00000393	0.00044	0.10	0.102	0.103	0.100	0.085 to 0.115	102	70 to 130	1.39	20
AW20884	Cadmium, Total	mg/L	0.00000344	0.00044	0.10	0.0959	0.0959	0.101	0.085 to 0.115	95.9	70 to 130	0.0435	20
AW20884	Chromium, Total	mg/L	0.0000122	0.0044	0.10	0.102	0.102	0.102	0.085 to 0.115	98.2	70 to 130	0.0415	20
AW20884	Selenium, Total	mg/L	0.00000532	0.0044	0.10	0.117	0.118	0.103	0.085 to 0.115	96.2	70 to 130	0.830	20
AW20884	Arsenic, Total	mg/L	0.0000181	0.0022	0.10	0.109	0.109	0.101	0.085 to 0.115	96.4	70 to 130	0.198	20
AW21228	Lithium, Total	mg/L	0.000439	0.022	0.20	0.221	0.224	0.206	0.17 to 0.23	102	70 to 130	1.35	20
AW20882	Mercury, Total by CVAA	mg/L	0.0000979	0.0005	0.004	0.00352	0.00358	0.00383	0.0034 to 0.0046	88.0	70 to 130	1.61	20
AW20884	Antimony, Total	mg/L	0.0000552	0.00132	0.10	0.0921	0.0915	0.0958	0.085 to 0.115	90.8	70 to 130	0.632	20
AW20884	Beryllium, Total	mg/L	0.0000104	0.00132	0.10	0.107	0.107	0.108	0.085 to 0.115	107	70 to 130	0.219	20
AW20884	Cobalt, Total	mg/L	0.00000294	0.0044	0.10	0.102	0.102	0.104	0.085 to 0.115	102	70 to 130	0.489	20
AW20884	Lead, Total	mg/L	0.00000869	0.0022	0.10	0.102	0.102	0.102	0.085 to 0.115	102	70 to 130	0.613	20

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Expiration: June 30, 2018

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Reported: 7/19/2017
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Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AW20879

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20884	Solids, Dissolved	mg/L	17.0	25			193	60	40 to 60			0.260	5
AW20884	Fluoride, Total	mg/L	0.000	0.3	2.00	2.10	0.176	1.95	1.8 to 2.2	96.2	80 to 120	0.567	20
AW20884	Chloride, Total	mg/L	0.000	0.25	10.00	25.9	16.5	9.90	9 to 11	93.0	80 to 120	0.604	20
AW20884	Sulfate, Total	mg/L	0.298	1.0	20.00	77.4	59.3	19.3	18 to 22	90.5	80 to 120	0.00	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected.
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

CC:

Reported: 7/19/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AW20880

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005		0.00648	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0745	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	9/7/2016	EPA 200.7		1.015	0.02	0.1		0.412	mg/L
* Calcium, Total	HRG	9/8/2016	EPA 200.7		10.15	1.0	5.0		50.3	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0120	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.01	0.05	J	0.0398	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25		290	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25		14.4	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	J	0.171	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		1	0.3	1		31.9	mg/L

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Expiration: June 30, 2018

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Reported: 7/19/2017
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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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AW20880

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20884	Barium, Total	mg/L	0.0000204	0.0044	0.10	0.179	0.180	0.0964	0.085 to 0.115	91.2	70 to 130	0.695	20
AW21228	Boron, Total	mg/L	0.00338	0.044	1.00	1.80	1.81	0.946	0.85 to 1.15	96.5	70 to 130	0.554	20
AW21228	Calcium, Total	mg/L	-0.0155	0.22	5.00	41.9	42.2	4.89	4.25 to 5.75	92.0	70 to 130	0.713	20
AW20884	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.194	0.195	0.100	0.085 to 0.115	98.4	70 to 130	0.515	20
AW20884	Thallium, Total	mg/L	0.00000393	0.00044	0.10	0.102	0.103	0.100	0.085 to 0.115	102	70 to 130	1.39	20
AW20884	Arsenic, Total	mg/L	0.0000181	0.0022	0.10	0.109	0.109	0.101	0.085 to 0.115	96.4	70 to 130	0.198	20
AW21228	Lithium, Total	mg/L	0.000439	0.022	0.20	0.221	0.224	0.206	0.17 to 0.23	102	70 to 130	1.35	20
AW20884	Cadmium, Total	mg/L	0.00000344	0.00044	0.10	0.0959	0.0959	0.101	0.085 to 0.115	95.9	70 to 130	0.0435	20
AW20884	Chromium, Total	mg/L	0.0000122	0.0044	0.10	0.102	0.102	0.102	0.085 to 0.115	98.2	70 to 130	0.0415	20
AW20884	Selenium, Total	mg/L	0.00000532	0.0044	0.10	0.117	0.118	0.103	0.085 to 0.115	96.2	70 to 130	0.830	20
AW20882	Mercury, Total by CVAA	mg/L	0.0000979	0.0005	0.004	0.00352	0.00358	0.00383	0.0034 to 0.0046	88.0	70 to 130	1.61	20
AW20884	Antimony, Total	mg/L	0.0000552	0.00132	0.10	0.0921	0.0915	0.0958	0.085 to 0.115	90.8	70 to 130	0.632	20
AW20884	Beryllium, Total	mg/L	0.0000104	0.00132	0.10	0.107	0.107	0.108	0.085 to 0.115	107	70 to 130	0.219	20
AW20884	Cobalt, Total	mg/L	0.00000294	0.0044	0.10	0.102	0.102	0.104	0.085 to 0.115	102	70 to 130	0.489	20
AW20884	Lead, Total	mg/L	0.00000869	0.0022	0.10	0.102	0.102	0.102	0.085 to 0.115	102	70 to 130	0.613	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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AW20880

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20884	Fluoride, Total	mg/L	0.000	0.3	2.00	2.10	0.176	1.95	1.8 to 2.2	96.2	80 to 120	0.567	20
AW20884	Solids, Dissolved	mg/L	17.0	25			193	60	40 to 60			0.260	5
AW20884	Chloride, Total	mg/L	0.000	0.25	10.00	25.9	16.5	9.90	9 to 11	93.0	80 to 120	0.604	20
AW20884	Sulfate, Total	mg/L	0.298	1.0	20.00	77.4	59.3	19.3	18 to 22	90.5	80 to 120	0.00	20

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AW20881

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.105	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	9/7/2016	EPA 200.7		1.015	0.02	0.1		1.57	mg/L
* Calcium, Total	HRG	9/8/2016	EPA 200.7		10.15	1.0	5.0		74.2	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0138	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.01	0.05	J	0.0143	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		50		624	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		10	0.40	2.50		56.7	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	J	0.089	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		1	0.3	1		42.9	mg/L

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Calera, AL 35040
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AW20881

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW21228	Calcium, Total	mg/L	-0.0155	0.22	5.00	41.9	42.2	4.89	4.25 to 5.75	92.0	70 to 130	0.713	20
AW20884	Barium, Total	mg/L	0.0000204	0.0044	0.10	0.179	0.180	0.0964	0.085 to 0.115	91.2	70 to 130	0.695	20
AW21228	Boron, Total	mg/L	0.00338	0.044	1.00	1.80	1.81	0.946	0.85 to 1.15	96.5	70 to 130	0.554	20
AW20884	Arsenic, Total	mg/L	0.0000181	0.0022	0.10	0.109	0.109	0.101	0.085 to 0.115	96.4	70 to 130	0.198	20
AW21228	Lithium, Total	mg/L	0.000439	0.022	0.20	0.221	0.224	0.206	0.17 to 0.23	102	70 to 130	1.35	20
AW20884	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.194	0.195	0.100	0.085 to 0.115	98.4	70 to 130	0.515	20
AW20884	Thallium, Total	mg/L	0.00000393	0.00044	0.10	0.102	0.103	0.100	0.085 to 0.115	102	70 to 130	1.39	20
AW20884	Cadmium, Total	mg/L	0.00000344	0.00044	0.10	0.0959	0.0959	0.101	0.085 to 0.115	95.9	70 to 130	0.0435	20
AW20884	Chromium, Total	mg/L	0.0000122	0.0044	0.10	0.102	0.102	0.102	0.085 to 0.115	98.2	70 to 130	0.0415	20
AW20884	Selenium, Total	mg/L	0.00000532	0.0044	0.10	0.117	0.118	0.103	0.085 to 0.115	96.2	70 to 130	0.830	20
AW20882	Mercury, Total by CVAA	mg/L	0.0000979	0.0005	0.004	0.00352	0.00358	0.00383	0.0034 to 0.0046	88.0	70 to 130	1.61	20
AW20884	Antimony, Total	mg/L	0.0000552	0.00132	0.10	0.0921	0.0915	0.0958	0.085 to 0.115	90.8	70 to 130	0.632	20
AW20884	Beryllium, Total	mg/L	0.0000104	0.00132	0.10	0.107	0.107	0.108	0.085 to 0.115	107	70 to 130	0.219	20
AW20884	Cobalt, Total	mg/L	0.00000294	0.0044	0.10	0.102	0.102	0.104	0.085 to 0.115	102	70 to 130	0.489	20
AW20884	Lead, Total	mg/L	0.00000869	0.0022	0.10	0.102	0.102	0.102	0.085 to 0.115	102	70 to 130	0.613	20

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Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AW20881

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20884	Solids, Dissolved	mg/L	17.0	25			193	60	40 to 60			0.260	5
AW20884	Fluoride, Total	mg/L	0.000	0.3	2.00	2.10	0.176	1.95	1.8 to 2.2	96.2	80 to 120	0.567	20
AW20884	Chloride, Total	mg/L	0.000	0.25	10.00	25.9	16.5	9.90	9 to 11	93.0	80 to 120	0.604	20
AW20884	Sulfate, Total	mg/L	0.298	1.0	20.00	77.4	59.3	19.3	18 to 22	90.5	80 to 120	0.00	20

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CC:

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AW20882

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0789	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	9/7/2016	EPA 200.7		1.015	0.02	0.1		0.492	mg/L
* Calcium, Total	HRG	9/8/2016	EPA 200.7		10.15	1.0	5.0		152	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	J	0.00217	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/29/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		100		1070	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		10	0.40	2.50		53.3	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	J	0.078	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		10	3.0	10		306	mg/L

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Expiration: June 30, 2018

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Reported: 7/19/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AW20882

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20884	Barium, Total	mg/L	0.0000204	0.0044	0.10	0.179	0.180	0.0964	0.085 to 0.115	91.2	70 to 130	0.695	20
AW21228	Boron, Total	mg/L	0.00338	0.044	1.00	1.80	1.81	0.946	0.85 to 1.15	96.5	70 to 130	0.554	20
AW21228	Calcium, Total	mg/L	-0.0155	0.22	5.00	41.9	42.2	4.89	4.25 to 5.75	92.0	70 to 130	0.713	20
AW20884	Arsenic, Total	mg/L	0.0000181	0.0022	0.10	0.109	0.109	0.101	0.085 to 0.115	96.4	70 to 130	0.198	20
AW21228	Lithium, Total	mg/L	0.000439	0.022	0.20	0.221	0.224	0.206	0.17 to 0.23	102	70 to 130	1.35	20
AW20884	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.194	0.195	0.100	0.085 to 0.115	98.4	70 to 130	0.515	20
AW20884	Thallium, Total	mg/L	0.00000393	0.00044	0.10	0.102	0.103	0.100	0.085 to 0.115	102	70 to 130	1.39	20
AW20882	Mercury, Total by CVAA	mg/L	0.0000979	0.0005	0.004	0.00352	0.00358	0.00383	0.0034 to 0.0046	88.0	70 to 130	1.61	20
AW20884	Antimony, Total	mg/L	0.0000552	0.00132	0.10	0.0921	0.0915	0.0958	0.085 to 0.115	90.8	70 to 130	0.632	20
AW20884	Beryllium, Total	mg/L	0.0000104	0.00132	0.10	0.107	0.107	0.108	0.085 to 0.115	107	70 to 130	0.219	20
AW20884	Cobalt, Total	mg/L	0.00000294	0.0044	0.10	0.102	0.102	0.104	0.085 to 0.115	102	70 to 130	0.489	20
AW20884	Lead, Total	mg/L	0.00000869	0.0022	0.10	0.102	0.102	0.102	0.085 to 0.115	102	70 to 130	0.613	20
AW20884	Cadmium, Total	mg/L	0.00000344	0.00044	0.10	0.0959	0.0959	0.101	0.085 to 0.115	95.9	70 to 130	0.0435	20
AW20884	Chromium, Total	mg/L	0.0000122	0.0044	0.10	0.102	0.102	0.102	0.085 to 0.115	98.2	70 to 130	0.0415	20
AW20884	Selenium, Total	mg/L	0.00000532	0.0044	0.10	0.117	0.118	0.103	0.085 to 0.115	96.2	70 to 130	0.830	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

Reported: 7/19/2017
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: WMWGREAP
Sample Date: 17-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AW20882

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20884	Solids, Dissolved	mg/L	17.0	25			193	60	40 to 60			0.260	5
AW20884	Fluoride, Total	mg/L	0.000	0.3	2.00	2.10	0.176	1.95	1.8 to 2.2	96.2	80 to 120	0.567	20
AW20884	Chloride, Total	mg/L	0.000	0.25	10.00	25.9	16.5	9.90	9 to 11	93.0	80 to 120	0.604	20
AW20884	Sulfate, Total	mg/L	0.298	1.0	20.00	77.4	59.3	19.3	18 to 22	90.5	80 to 120	0.00	20

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CC:

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AW20883

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0243	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	9/7/2016	EPA 200.7		1.015	0.02	0.1		0.438	mg/L
* Calcium, Total	HRG	9/8/2016	EPA 200.7		10.15	1.0	5.0		49.4	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0153	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	8/31/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.01	0.05		0.699	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25		367	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25		10.2	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	J	0.135	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		10	3.0	10		196	mg/L

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Reported: 7/19/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AW20883

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW21228	Calcium, Total	mg/L	-0.0155	0.22	5.00	41.9	42.2	4.89	4.25 to 5.75	92.0	70 to 130	0.713	20
AW21228	Boron, Total	mg/L	0.00338	0.044	1.00	1.80	1.81	0.946	0.85 to 1.15	96.5	70 to 130	0.554	20
AW21385	Mercury, Total by CVAA	mg/L	0.000131	0.0005	0.004	0.00403	0.00402	0.00398	0.0034 to 0.0046	101	70 to 130	0.261	20
AW20884	Barium, Total	mg/L	0.0000204	0.0044	0.10	0.179	0.180	0.0964	0.085 to 0.115	91.2	70 to 130	0.695	20
AW20884	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.194	0.195	0.100	0.085 to 0.115	98.4	70 to 130	0.515	20
AW20884	Thallium, Total	mg/L	0.00000393	0.00044	0.10	0.102	0.103	0.100	0.085 to 0.115	102	70 to 130	1.39	20
AW20884	Antimony, Total	mg/L	0.0000552	0.00132	0.10	0.0921	0.0915	0.0958	0.085 to 0.115	90.8	70 to 130	0.632	20
AW20884	Beryllium, Total	mg/L	0.0000104	0.00132	0.10	0.107	0.107	0.108	0.085 to 0.115	107	70 to 130	0.219	20
AW20884	Cobalt, Total	mg/L	0.00000294	0.0044	0.10	0.102	0.102	0.104	0.085 to 0.115	102	70 to 130	0.489	20
AW20884	Lead, Total	mg/L	0.00000869	0.0022	0.10	0.102	0.102	0.102	0.085 to 0.115	102	70 to 130	0.613	20
AW20884	Arsenic, Total	mg/L	0.0000181	0.0022	0.10	0.109	0.109	0.101	0.085 to 0.115	96.4	70 to 130	0.198	20
AW21228	Lithium, Total	mg/L	0.000439	0.022	0.20	0.221	0.224	0.206	0.17 to 0.23	102	70 to 130	1.35	20
AW20884	Cadmium, Total	mg/L	0.00000344	0.00044	0.10	0.0959	0.0959	0.101	0.085 to 0.115	95.9	70 to 130	0.0435	20
AW20884	Chromium, Total	mg/L	0.0000122	0.0044	0.10	0.102	0.102	0.102	0.085 to 0.115	98.2	70 to 130	0.0415	20
AW20884	Selenium, Total	mg/L	0.00000532	0.0044	0.10	0.117	0.118	0.103	0.085 to 0.115	96.2	70 to 130	0.830	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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Reported: 7/19/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AW20883

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20884	Solids, Dissolved	mg/L	17.0	25			193	60	40 to 60			0.260	5
AW20884	Fluoride, Total	mg/L	0.000	0.3	2.00	2.10	0.176	1.95	1.8 to 2.2	96.2	80 to 120	0.567	20
AW20884	Chloride, Total	mg/L	0.000	0.25	10.00	25.9	16.5	9.90	9 to 11	93.0	80 to 120	0.604	20
AW20884	Sulfate, Total	mg/L	0.298	1.0	20.00	77.4	59.3	19.3	18 to 22	90.5	80 to 120	0.00	20

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CC:

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AW20884

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Radiological										
Total Radium, Test America	SGC	11/29/2016	EPA 9315/9320		1				Attached	
Metals, Cyanide, Total Phenols										
* Antimony, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	J	0.00128	mg/L
* Arsenic, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005		0.0126	mg/L
* Barium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0878	mg/L
* Beryllium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0006	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	9/7/2016	EPA 200.7		1.015	0.02	0.1		0.322	mg/L
* Calcium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.1	0.5		25.5	mg/L
* Cadmium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	U	Not Detected	mg/L
* Cobalt, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01	J	0.00381	mg/L
* Mercury, Total by CVAA	MCW	8/31/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	9/7/2016	EPA 200.7		1.015	0.01	0.05		0.371	mg/L
* Molybdenum, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0956	mg/L
* Lead, Total	JHK	9/1/2016	EPA 200.8		5.075	0.001	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.002	0.01		0.0208	mg/L
* Thallium, Total	JHK	9/1/2016	EPA 200.8		5.075	0.0002	0.001	J	0.000449	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	8/22/2016	SM 2540C		1		25		192	mg/L
* Chloride, Total	SES	8/19/2016	EPA 300.0		1	0.04	0.25		16.6	mg/L
* Fluoride, Total	SES	8/19/2016	EPA 300.0		1	0.01	0.3	J	0.177	mg/L
* Sulfate, Total	SES	8/19/2016	EPA 300.0		1	0.3	1		59.3	mg/L

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Batch QC Summary

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AW20884

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW21228	Calcium, Total	mg/L	-0.0155	0.22	5.00	41.9	42.2	4.89	4.25 to 5.75	92.0	70 to 130	0.713	20
AW21228	Boron, Total	mg/L	0.00338	0.044	1.00	1.80	1.81	0.946	0.85 to 1.15	96.5	70 to 130	0.554	20
AW21385	Mercury, Total by CVAA	mg/L	0.000131	0.0005	0.004	0.00403	0.00402	0.00398	0.0034 to 0.0046	101	70 to 130	0.261	20
AW20884	Barium, Total	mg/L	0.0000204	0.0044	0.10	0.179	0.180	0.0964	0.085 to 0.115	91.2	70 to 130	0.695	20
AW20884	Cadmium, Total	mg/L	0.00000344	0.00044	0.10	0.0959	0.0959	0.101	0.085 to 0.115	95.9	70 to 130	0.0435	20
AW20884	Chromium, Total	mg/L	0.0000122	0.0044	0.10	0.102	0.102	0.102	0.085 to 0.115	98.2	70 to 130	0.0415	20
AW20884	Selenium, Total	mg/L	0.00000532	0.0044	0.10	0.117	0.118	0.103	0.085 to 0.115	96.2	70 to 130	0.830	20
AW20884	Arsenic, Total	mg/L	0.0000181	0.0022	0.10	0.109	0.109	0.101	0.085 to 0.115	96.4	70 to 130	0.198	20
AW21228	Lithium, Total	mg/L	0.000439	0.022	0.20	0.221	0.224	0.206	0.17 to 0.23	102	70 to 130	1.35	20
AW20884	Molybdenum, Total	mg/L	0.0000124	0.0044	0.10	0.194	0.195	0.100	0.085 to 0.115	98.4	70 to 130	0.515	20
AW20884	Thallium, Total	mg/L	0.00000393	0.00044	0.10	0.102	0.103	0.100	0.085 to 0.115	102	70 to 130	1.39	20
AW20884	Antimony, Total	mg/L	0.0000552	0.00132	0.10	0.0921	0.0915	0.0958	0.085 to 0.115	90.8	70 to 130	0.632	20
AW20884	Beryllium, Total	mg/L	0.0000104	0.00132	0.10	0.107	0.107	0.108	0.085 to 0.115	107	70 to 130	0.219	20
AW20884	Cobalt, Total	mg/L	0.00000294	0.0044	0.10	0.102	0.102	0.104	0.085 to 0.115	102	70 to 130	0.489	20
AW20884	Lead, Total	mg/L	0.00000869	0.0022	0.10	0.102	0.102	0.102	0.085 to 0.115	102	70 to 130	0.613	20

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Batch QC Summary

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 16-Aug-16
Customer ID:
Delivery Date: 18-Aug-16

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AW20884

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW20884	Solids, Dissolved	mg/L	17.0	25			193	60	40 to 60			0.260	5
AW20884	Fluoride, Total	mg/L	0.000	0.3	2.00	2.10	0.176	1.95	1.8 to 2.2	96.2	80 to 120	0.567	20
AW20884	Chloride, Total	mg/L	0.000	0.25	10.00	25.9	16.5	9.90	9 to 11	93.0	80 to 120	0.604	20
AW20884	Sulfate, Total	mg/L	0.298	1.0	20.00	77.4	59.3	19.3	18 to 22	90.5	80 to 120	0.00	20

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CC:

Reported: 7/19/2017
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

Definitions

Alabama Power

Lab & Field SERVICES

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

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

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

✔ Field Complete
✔ Lab Complete

Lab ETA: 08/18/2016 11:00

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Nick Pitts	Location	Greene Ash Pond

Analysis Requested	Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle
Comments	Rad Dup collected on MW-31

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-18	08/15/2016	13:45	3	Groundwater		AW20871
MW-17	08/15/2016	14:48	3	Groundwater		AW20872
MW-16	08/15/2016	16:18	3	Groundwater		AW20873
FB-1	08/15/2016	15:30	3	Field Blank		AW20874
MW-32	08/16/2016	09:52	3	Groundwater		AW20875
MW-32 Dup	08/16/2016	09:52	3	Sample Duplicate		AW20876
MW-33	08/16/2016	11:12	3	Groundwater		AW20877
MW-31	08/16/2016	12:06	4	Groundwater		AW20878
MW-14	08/17/2016	10:06	3	Groundwater		AW20879
MW-9	08/17/2016	11:08	3	Groundwater		AW20880
MW-8	08/17/2016	12:00	3	Groundwater		AW20881
MW-7	08/17/2016	13:06	3	Groundwater		AW20882
MW-15	08/16/2016	14:05	3	Groundwater		AW20883
MW-13	08/16/2016	14:58	3	Groundwater		AW20884

Relinquished By	Received By	Date/Time
[signature]	Sarah Copeland Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US Date: 2016.08.18 12:34:46 -05'00'	08/18/2016 12:34

SmarTroll ID	5141-26150-1-1
Turbidity ID	3901-20010-2-2

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	1.7 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	4831-24386-20-13

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

✔ Field Complete
✔ Lab Complete

Lab ETA: 08/18/2016 12:00

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Jason Rouss	Location	Greene Ash Pond

Analysis Requested: Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle

Comments:

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-1	08/15/2016	13:35	3	Groundwater		AW20855
MW-1 Dup	08/15/2016	13:35	3	Sample Duplicate		AW20856
MW-2	08/15/2016	14:43	3	Groundwater		AW20857
MW-3	08/15/2016	15:38	3	Groundwater		AW20858
MW-23	08/16/2016	09:15	4	Groundwater		AW20859
MW-24	08/16/2016	10:20	3	Groundwater		AW20860
MW-12	08/16/2016	11:25	3	Groundwater		AW20861
MW-21	08/16/2016	12:40	3	Groundwater		AW20862
MW-11	08/16/2016	13:45	3	Groundwater		AW20863
FB-2	08/16/2016	13:55	3	Field Blank		AW20864
MW-10	08/16/2016	15:10	3	Groundwater		AW20865
MW-25	08/17/2016	09:53	3	Groundwater		AW20866
MW-6	08/17/2016	11:15	3	Groundwater		AW20867
MW-5	08/17/2016	12:28	3	Groundwater		AW20868
FB-3	08/17/2016	12:35	3	Field Blank		AW20869
EB-1	08/17/2016	13:20	3	Equipment Blank		AW20870

Relinquished By	Received By	Date/Time
	Sarah Copeland Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US Date: 2016.08.18 12:37:30 -05'00'	08/18/2016 12:37

SmarTroll ID	4696-23441-1-1
Turbidity ID	4677-23342-4-1

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	1.7 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	4831-24391-20-18

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

✔ Field Complete
✔ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Greene Ash Pond

Analysis Requested: Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle

Comments:

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-30	08/16/2016	14:41	3	Groundwater		AW20849
MW-29	08/16/2016	15:43	3	Groundwater		AW20850
MW-28	08/17/2016	14:22	3	Groundwater		AW20851
MW-27	08/17/2016	11:25	3	Groundwater		AW20852
MW-27DUP	08/17/2016	11:25	3	Sample Duplicate		AW20853
MW-26	08/17/2016	12:31	3	Groundwater		AW20854

Relinquished By	Received By	Date/Time
Anthony Goggins	Sarah Copeland Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US Date: 2016.08.18 12:39:26 -05'00'	08/18/2016 12:39

SmarTroll ID: 5151-26193-1-1
Turbidity ID: 5160-26211-1-1

All metals and radiological bottles have pH < 2 ✔

Cooler Temp: 1.7 degrees C
Thermometer ID: 5408-27568-2-2
pH Strip ID: 4831-24391-20-18

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: 400-126317-1
TestAmerica Sample Delivery Group: Greene Ash Pond (4)
Client Project/Site: CCR Plant Greene

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

Attn: Sarah Copeland

Authorized for release by:
9/29/2016 5:48:49 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

LINKS

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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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Job ID: 400-126317-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-126317-1

RAD

Method(s) PrecSep_0: Radium-228 Prep Batch: 160-267874: The following samples were prepared at a reduced aliquot due to limited volume. AW20849 MW-30 (400-126317-1), AW20850 MW-29 (400-126317-2), AW20851 MW-28 (400-126317-3), AW20852 MW-27 (400-126317-4), AW20853 MW-27 DUP (400-126317-5), AW20854 MW-26 (400-126317-6), AW20855 MW-1 (400-126317-7), AW20856 MW-1 DUP (400-126317-8), AW20857 MW-2 (400-126317-9), AW20858 MW-3 (400-126317-10), AW20859 MW-23 (400-126317-11), AW20859 MW-23 (400-126317-11[DU]), AW20860 MW-24 (400-126317-12), AW20861 MW-12 (400-126317-13), AW20862 MW-21 (400-126317-14), AW20863 MW-11 (400-126317-15), AW20864 FB-2 (400-126317-16), AW20865 MW-10 (400-126317-17), AW20866 MW-25 (400-126317-18), AW20867 MW-6 (400-126317-19) and AW20868 MW-5 (400-126317-20)

Method(s) PrecSep_0: Radium-228 Prep Batch: 160-267897: The following samples were prepared at a reduced aliquot due to limited volume. AW20869 FB-3 (400-126317-21), AW20870 EB-1 (400-126317-22), AW20871 MW-18 (400-126317-23), AW20872 MW-17 (400-126317-24), AW20873 MW-16 (400-126317-25), AW20874 FB-1 (400-126317-26), AW20875 MW-32 (400-126317-27), AW20876 MW-32 DUP (400-126317-28), AW20877 MW-33 (400-126317-29), AW20878 MW-31 (400-126317-30), AW20878 MW-31 (400-126317-30[DU]), AW20879 MW-14 (400-126317-31), AW20880 MW-9 (400-126317-32), AW20881 MW-8 (400-126317-33), AW20882 MW-7 (400-126317-34), AW20883 MW-15 (400-126317-35) and AW20884 MW-13 (400-126317-36)

Method(s) PrecSep-21: Radium-226 Prep Batch: 160-267864: The following samples were prepared at a reduced aliquot due to limited volume. AW20849 MW-30 (400-126317-1), AW20850 MW-29 (400-126317-2), AW20851 MW-28 (400-126317-3), AW20852 MW-27 (400-126317-4), AW20853 MW-27 DUP (400-126317-5), AW20854 MW-26 (400-126317-6), AW20855 MW-1 (400-126317-7), AW20856 MW-1 DUP (400-126317-8), AW20857 MW-2 (400-126317-9), AW20858 MW-3 (400-126317-10), AW20859 MW-23 (400-126317-11), AW20859 MW-23 (400-126317-11[DU]), AW20860 MW-24 (400-126317-12), AW20861 MW-12 (400-126317-13), AW20862 MW-21 (400-126317-14), AW20863 MW-11 (400-126317-15), AW20864 FB-2 (400-126317-16), AW20865 MW-10 (400-126317-17), AW20866 MW-25 (400-126317-18), AW20867 MW-6 (400-126317-19) and AW20868 MW-5 (400-126317-20)

Method(s) PrecSep-21: Radium-226 Prep Batch: 160-267892: The following samples were prepared at a reduced aliquot due to limited volume. AW20869 FB-3 (400-126317-21), AW20870 EB-1 (400-126317-22), AW20871 MW-18 (400-126317-23), AW20872 MW-17 (400-126317-24), AW20873 MW-16 (400-126317-25), AW20874 FB-1 (400-126317-26), AW20875 MW-32 (400-126317-27), AW20876 MW-32 DUP (400-126317-28), AW20877 MW-33 (400-126317-29), AW20878 MW-31 (400-126317-30), AW20878 MW-31 (400-126317-30[DU]), AW20879 MW-14 (400-126317-31), AW20880 MW-9 (400-126317-32), AW20881 MW-8 (400-126317-33), AW20882 MW-7 (400-126317-34), AW20883 MW-15 (400-126317-35) and AW20884 MW-13 (400-126317-36)

Method Summary

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

TestAmerica Job ID: 400-126317-1
SDG: Greene 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 Greene

TestAmerica Job ID: 400-126317-1
SDG: Greene Ash Pond (4)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-126317-1	AW20849 MW-30	Water	08/16/16 14:41	08/25/16 16:00
400-126317-2	AW20850 MW-29	Water	08/16/16 15:43	08/25/16 16:00
400-126317-3	AW20851 MW-28	Water	08/17/16 14:22	08/25/16 16:00
400-126317-4	AW20852 MW-27	Water	08/17/16 11:25	08/25/16 16:00
400-126317-5	AW20853 MW-27 DUP	Water	08/17/16 11:25	08/25/16 16:00
400-126317-6	AW20854 MW-26	Water	08/17/16 12:31	08/25/16 16:00
400-126317-7	AW20855 MW-1	Water	08/15/16 13:35	08/25/16 16:00
400-126317-8	AW20856 MW-1 DUP	Water	08/15/16 13:35	08/25/16 16:00
400-126317-9	AW20857 MW-2	Water	08/15/16 14:43	08/25/16 16:00
400-126317-10	AW20858 MW-3	Water	08/15/16 15:38	08/25/16 16:00
400-126317-11	AW20859 MW-23	Water	08/16/16 09:15	08/25/16 16:00
400-126317-12	AW20860 MW-24	Water	08/16/16 10:20	08/25/16 16:00
400-126317-13	AW20861 MW-12	Water	08/16/16 11:25	08/25/16 16:00
400-126317-14	AW20862 MW-21	Water	08/16/16 12:40	08/25/16 16:00
400-126317-15	AW20863 MW-11	Water	08/16/16 13:45	08/25/16 16:00
400-126317-16	AW20864 FB-2	Water	08/16/16 13:55	08/25/16 16:00
400-126317-17	AW20865 MW-10	Water	08/16/16 15:10	08/25/16 16:00
400-126317-18	AW20866 MW-25	Water	08/17/16 09:53	08/25/16 16:00
400-126317-19	AW20867 MW-6	Water	08/17/16 11:15	08/25/16 16:00
400-126317-20	AW20868 MW-5	Water	08/17/16 12:28	08/25/16 16:00
400-126317-21	AW20869 FB-3	Water	08/17/16 12:35	08/25/16 16:00
400-126317-22	AW20870 EB-1	Water	08/17/16 13:20	08/25/16 16:00
400-126317-23	AW20871 MW-18	Water	08/15/16 13:45	08/25/16 16:00
400-126317-24	AW20872 MW-17	Water	08/15/16 14:48	08/25/16 16:00
400-126317-25	AW20873 MW-16	Water	08/15/16 16:18	08/25/16 16:00
400-126317-26	AW20874 FB-1	Water	08/15/16 15:30	08/25/16 16:00
400-126317-27	AW20875 MW-32	Water	08/16/16 09:52	08/25/16 16:00
400-126317-28	AW20876 MW-32 DUP	Water	08/16/16 09:52	08/25/16 16:00
400-126317-29	AW20877 MW-33	Water	08/16/16 11:12	08/25/16 16:00
400-126317-30	AW20878 MW-31	Water	08/16/16 12:06	08/25/16 16:00
400-126317-31	AW20879 MW-14	Water	08/17/16 10:06	08/25/16 16:00
400-126317-32	AW20880 MW-9	Water	08/17/16 11:08	08/25/16 16:00
400-126317-33	AW20881 MW-8	Water	08/17/16 12:00	08/25/16 16:00
400-126317-34	AW20882 MW-7	Water	08/17/16 13:06	08/25/16 16:00
400-126317-35	AW20883 MW-15	Water	08/16/16 14:05	08/25/16 16:00
400-126317-36	AW20884 MW-13	Water	08/16/16 14:58	08/25/16 16:00

Client Sample ID: AW20849 MW-30

Date Collected: 08/16/16 14:41
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-1

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	0.173		0.0774	0.0789	1.00	0.0922	pCi/L	09/02/16 11:42	09/27/16 07:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.8*		*40 - 110*	*09/02/16 11:42*	*09/27/16 07:09*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.261	U	0.329	0.330	1.00	0.545	pCi/L	09/02/16 12:24	09/17/16 14:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.8*		*40 - 110*	*09/02/16 12:24*	*09/17/16 14:58*	*1*
Y Carrier	*89.3*		*40 - 110*	*09/02/16 12:24*	*09/17/16 14:58*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.434	U	0.338	0.339	5.00	0.545	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20850 MW-29

Date Collected: 08/16/16 15:43
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-2

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	**0.162**		0.0714	0.0729	1.00	0.0883	pCi/L	09/02/16 11:42	09/27/16 07:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.3*		*40 - 110*	*09/02/16 11:42*	*09/27/16 07:09*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.359	U	0.293	0.295	1.00	0.465	pCi/L	09/02/16 12:24	09/17/16 14:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.3*		*40 - 110*	*09/02/16 12:24*	*09/17/16 14:58*	*1*
Y Carrier	*93.8*		*40 - 110*	*09/02/16 12:24*	*09/17/16 14:58*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.522**		0.302	0.304	5.00	0.465	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20851 MW-28

Date Collected: 08/17/16 14:22
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-3

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	0.525		0.116	0.125	1.00	0.0973	pCi/L	09/02/16 11:42	09/27/16 11:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.9*		*40 - 110*	*09/02/16 11:42*	*09/27/16 11:16*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.941		0.384	0.394	1.00	0.544	pCi/L	09/02/16 12:24	09/17/16 14:58	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.9*		*40 - 110*	*09/02/16 12:24*	*09/17/16 14:58*	*1*
Y Carrier	*84.9*		*40 - 110*	*09/02/16 12:24*	*09/17/16 14:58*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.47		0.401	0.413	5.00	0.544	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20852 MW-27

Date Collected: 08/17/16 11:25
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-4

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	0.260		0.0845	0.0877	1.00	0.0839	pCi/L	09/02/16 11:42	09/27/16 11:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.3*		*40 - 110*	*09/02/16 11:42*	*09/27/16 11:16*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.126	U	0.304	0.304	1.00	0.524	pCi/L	09/02/16 12:24	09/17/16 14:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.3*		*40 - 110*	*09/02/16 12:24*	*09/17/16 14:59*	*1*
Y Carrier	*82.6*		*40 - 110*	*09/02/16 12:24*	*09/17/16 14:59*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.386	U	0.315	0.317	5.00	0.524	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20853 MW-27 DUP

Date Collected: 08/17/16 11:25
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-5

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	0.223		0.0856	0.0880	1.00	0.0995	pCi/L	09/02/16 11:42	09/27/16 11:17	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.9*		*40 - 110*	*09/02/16 11:42*	*09/27/16 11:17*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.472	U	0.342	0.345	1.00	0.535	pCi/L	09/02/16 12:24	09/17/16 14:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.9*		*40 - 110*	*09/02/16 12:24*	*09/17/16 14:59*	*1*
Y Carrier	*82.6*		*40 - 110*	*09/02/16 12:24*	*09/17/16 14:59*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.695		0.353	0.356	5.00	0.535	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20854 MW-26

Date Collected: 08/17/16 12:31
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-6

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	**0.209**		0.0774	0.0797	1.00	0.0792	pCi/L	09/02/16 11:42	09/27/16 11:17	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.0*		*40 - 110*	*09/02/16 11:42*	*09/27/16 11:17*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.451	U	0.308	0.310	1.00	0.478	pCi/L	09/02/16 12:24	09/17/16 14:59	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.0*		*40 - 110*	*09/02/16 12:24*	*09/17/16 14:59*	*1*
Y Carrier	*96.4*		*40 - 110*	*09/02/16 12:24*	*09/17/16 14:59*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.660**		0.317	0.321	5.00	0.478	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20855 MW-1

Date Collected: 08/15/16 13:35
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-7

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	0.764		0.141	0.157	1.00	0.114	pCi/L	09/02/16 11:42	09/27/16 11:17	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.6*		*40 - 110*	*09/02/16 11:42*	*09/27/16 11:17*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.659		0.353	0.358	1.00	0.529	pCi/L	09/02/16 12:24	09/17/16 15:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.6*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:04*	*1*
Y Carrier	*87.9*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:04*	*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	1.42		0.380	0.391	5.00	0.529	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20856 MW-1 DUP

Date Collected: 08/15/16 13:35
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-8

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	**0.517**		0.114	0.124	1.00	0.0838	pCi/L	09/02/16 11:42	09/27/16 11:17	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*40 - 110*	*09/02/16 11:42*	*09/27/16 11:17*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.525	U	0.395	0.398	1.00	0.624	pCi/L	09/02/16 12:24	09/17/16 15:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:04*	*1*
Y Carrier	*85.6*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:04*	*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	**1.04**		0.411	0.417	5.00	0.624	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20857 MW-2

Date Collected: 08/15/16 14:43
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-9

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	0.415		0.109	0.115	1.00	0.101	pCi/L	09/02/16 11:42	09/27/16 11:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*40 - 110*	*09/02/16 11:42*	*09/27/16 11:18*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.223	U	0.366	0.367	1.00	0.618	pCi/L	09/02/16 12:24	09/17/16 15:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:04*	*1*
Y Carrier	*78.9*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:04*	*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	0.638		0.382	0.385	5.00	0.618	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20858 MW-3

Date Collected: 08/15/16 15:38
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-10

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	**0.647**		0.130	0.142	1.00	0.0902	pCi/L	09/02/16 11:42	09/27/16 11:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.5*		*40 - 110*	*09/02/16 11:42*	*09/27/16 11:18*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.324	U	0.380	0.382	1.00	0.627	pCi/L	09/02/16 12:24	09/17/16 15:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.5*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:04*	*1*
Y Carrier	*90.1*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:04*	*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	**0.972**		0.402	0.407	5.00	0.627	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20859 MW-23

Date Collected: 08/16/16 09:15
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-11

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	**0.192**		0.0942	0.0958	1.00	0.129	pCi/L	09/02/16 11:42	09/27/16 11:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.0*		*40 - 110*	*09/02/16 11:42*	*09/27/16 11:18*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0212	U	0.339	0.339	1.00	0.600	pCi/L	09/02/16 12:24	09/17/16 15:04	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.0*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:04*	*1*
Y Carrier	*84.9*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:04*	*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	0.213	U	0.352	0.352	5.00	0.600	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20860 MW-24

Date Collected: 08/16/16 10:20
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-12

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	0.233		0.0965	0.0987	1.00	0.122	pCi/L	09/02/16 11:42	09/27/16 11:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.9*		*40 - 110*	*09/02/16 11:42*	*09/27/16 11:18*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.314	U	0.376	0.377	1.00	0.621	pCi/L	09/02/16 12:24	09/17/16 15:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.9*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:05*	*1*
Y Carrier	*83.0*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:05*	*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	0.547	U	0.388	0.390	5.00	0.621	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20861 MW-12

Date Collected: 08/16/16 11:25
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-13

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	0.0981	U	0.0856	0.0860	1.00	0.135	pCi/L	09/02/16 11:42	09/27/16 11:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.6*		*40 - 110*	*09/02/16 11:42*	*09/27/16 11:18*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.599**		0.343	0.348	1.00	0.516	pCi/L	09/02/16 12:24	09/17/16 15:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.6*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:05*	*1*
Y Carrier	*87.9*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:05*	*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	**0.697**		0.354	0.358	5.00	0.516	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20862 MW-21

Date Collected: 08/16/16 12:40
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-14

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	**0.208**		0.0837	0.0858	1.00	0.0983	pCi/L	09/02/16 11:42	09/27/16 15:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.4*		*40 - 110*	*09/02/16 11:42*	*09/27/16 15:06*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.269	U	0.276	0.277	1.00	0.449	pCi/L	09/02/16 12:24	09/17/16 15:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.4*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:05*	*1*
Y Carrier	*89.0*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:05*	*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	**0.477**		0.289	0.290	5.00	0.449	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20863 MW-11

Date Collected: 08/16/16 13:45
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-15

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	**0.216**		0.0868	0.0890	1.00	0.104	pCi/L	09/02/16 11:42	09/27/16 11:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.2*		*40 - 110*	*09/02/16 11:42*	*09/27/16 11:18*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.305	U	0.353	0.355	1.00	0.582	pCi/L	09/02/16 12:24	09/17/16 15:05	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.2*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:05*	*1*
Y Carrier	*84.9*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:05*	*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	0.521	U	0.364	0.366	5.00	0.582	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20864 FB-2

Date Collected: 08/16/16 13:55
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-16

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	0.0739	U	0.0776	0.0779	1.00	0.125	pCi/L	09/02/16 11:42	09/27/16 11:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.6*		*40 - 110*	*09/02/16 11:42*	*09/27/16 11:19*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.176	U	0.344	0.344	1.00	0.587	pCi/L	09/02/16 12:24	09/17/16 15:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.6*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:06*	*1*
Y Carrier	*81.1*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:06*	*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	0.250	U	0.352	0.353	5.00	0.587	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20865 MW-10

Date Collected: 08/16/16 15:10
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-17

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	**0.499**		0.115	0.124	1.00	0.0913	pCi/L	09/02/16 11:42	09/27/16 11:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.0*		*40 - 110*	*09/02/16 11:42*	*09/27/16 11:19*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.320	U	0.349	0.350	1.00	0.571	pCi/L	09/02/16 12:24	09/17/16 15:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.0*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:06*	*1*
Y Carrier	*85.6*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:06*	*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	**0.820**		0.367	0.371	5.00	0.571	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20866 MW-25

Date Collected: 08/17/16 09:53
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-18

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	**0.271**		0.0937	0.0968	1.00	0.102	pCi/L	09/02/16 11:42	09/27/16 11:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.5*		*40 - 110*	*09/02/16 11:42*	*09/27/16 11:19*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.102	U	0.283	0.283	1.00	0.492	pCi/L	09/02/16 12:24	09/17/16 15:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.2*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:06*	*1*
Y Carrier	*88.6*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:06*	*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	0.372	U	0.298	0.299	5.00	0.492	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20867 MW-6

Date Collected: 08/17/16 11:15
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-19

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	0.143		0.0708	0.0719	1.00	0.0862	pCi/L	09/02/16 11:42	09/27/16 11:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*40 - 110*	*09/02/16 11:42*	*09/27/16 11:19*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.238	U	0.333	0.334	1.00	0.557	pCi/L	09/02/16 12:24	09/17/16 15:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.3*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:08*	*1*
Y Carrier	*83.4*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:08*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.381	U	0.341	0.342	5.00	0.557	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20868 MW-5

Date Collected: 08/17/16 12:28
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-20

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	**1.56**		0.189	0.236	1.00	0.0848	pCi/L	09/02/16 11:42	09/27/16 11:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.4*		*40 - 110*	*09/02/16 11:42*	*09/27/16 11:19*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.715	U	0.467	0.471	1.00	0.730	pCi/L	09/02/16 12:24	09/17/16 15:06	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.4*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:06*	*1*
Y Carrier	*83.4*		*40 - 110*	*09/02/16 12:24*	*09/17/16 15:06*	*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	**2.28**		0.504	0.527	5.00	0.730	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20869 FB-3

Date Collected: 08/17/16 12:35
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-21

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	0.108		0.0649	0.0656	1.00	0.0875	pCi/L	09/02/16 13:06	09/27/16 06:55	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.2*		*40 - 110*	*09/02/16 13:06*	*09/27/16 06:55*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.145	U	0.288	0.288	1.00	0.494	pCi/L	09/02/16 13:26	09/17/16 15:23	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.2*		*40 - 110*	*09/02/16 13:26*	*09/17/16 15:23*	*1*
Y Carrier	*87.1*		*40 - 110*	*09/02/16 13:26*	*09/17/16 15:23*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.253	U	0.295	0.296	5.00	0.494	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20870 EB-1

Date Collected: 08/17/16 13:20
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-22

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	0.0719	U	0.0662	0.0665	1.00	0.104	pCi/L	09/02/16 13:06	09/27/16 06:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*40 - 110*	*09/02/16 13:06*	*09/27/16 06:56*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.813**		0.407	0.414	1.00	0.602	pCi/L	09/02/16 13:26	09/17/16 15:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*40 - 110*	*09/02/16 13:26*	*09/17/16 15:24*	*1*
Y Carrier	*87.5*		*40 - 110*	*09/02/16 13:26*	*09/17/16 15:24*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.885**		0.412	0.419	5.00	0.602	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20871 MW-18

Date Collected: 08/15/16 13:45
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-23

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	0.904		0.150	0.171	1.00	0.0844	pCi/L	09/02/16 13:06	09/27/16 06:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.0*		*40 - 110*	*09/02/16 13:06*	*09/27/16 06:56*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.944		0.396	0.405	1.00	0.552	pCi/L	09/02/16 13:26	09/17/16 15:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.0*		*40 - 110*	*09/02/16 13:26*	*09/17/16 15:24*	*1*
Y Carrier	*84.5*		*40 - 110*	*09/02/16 13:26*	*09/17/16 15:24*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.85		0.423	0.440	5.00	0.552	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20872 MW-17

Date Collected: 08/15/16 14:48
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-24

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	0.306		0.104	0.107	1.00	0.119	pCi/L	09/02/16 13:06	09/27/16 06:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.6*		*40 - 110*	*09/02/16 13:06*	*09/27/16 06:56*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.12		0.401	0.414	1.00	0.531	pCi/L	09/02/16 13:26	09/17/16 15:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.6*		*40 - 110*	*09/02/16 13:26*	*09/17/16 15:24*	*1*
Y Carrier	*83.7*		*40 - 110*	*09/02/16 13:26*	*09/17/16 15:24*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.43		0.414	0.428	5.00	0.531	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20873 MW-16

Date Collected: 08/15/16 16:18
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-25

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	0.209		0.0785	0.0807	1.00	0.0823	pCi/L	09/02/16 13:06	09/27/16 06:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.5*		*40 - 110*	*09/02/16 13:06*	*09/27/16 06:56*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.633		0.383	0.387	1.00	0.581	pCi/L	09/02/16 13:26	09/17/16 15:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.5*		*40 - 110*	*09/02/16 13:26*	*09/17/16 15:24*	*1*
Y Carrier	*81.5*		*40 - 110*	*09/02/16 13:26*	*09/17/16 15:24*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.843		0.391	0.396	5.00	0.581	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20874 FB-1

Date Collected: 08/15/16 15:30
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-26

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	0.0723	U	0.0655	0.0658	1.00	0.102	pCi/L	09/02/16 13:06	09/27/16 06:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*40 - 110*	*09/02/16 13:06*	*09/27/16 06:56*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0425	U	0.309	0.309	1.00	0.550	pCi/L	09/02/16 13:26	09/17/16 15:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*40 - 110*	*09/02/16 13:26*	*09/17/16 15:24*	*1*
Y Carrier	*84.5*		*40 - 110*	*09/02/16 13:26*	*09/17/16 15:24*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.115	U	0.316	0.316	5.00	0.550	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20875 MW-32

Date Collected: 08/16/16 09:52
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-27

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	0.151		0.0732	0.0745	1.00	0.0892	pCi/L	09/02/16 13:06	09/27/16 06:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.5*		*40 - 110*	*09/02/16 13:06*	*09/27/16 06:56*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.800		0.404	0.410	1.00	0.592	pCi/L	09/02/16 13:26	09/17/16 15:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.5*		*40 - 110*	*09/02/16 13:26*	*09/17/16 15:24*	*1*
Y Carrier	*83.4*		*40 - 110*	*09/02/16 13:26*	*09/17/16 15:24*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.951		0.410	0.417	5.00	0.592	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20876 MW-32 DUP

Date Collected: 08/16/16 09:52
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-28

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	0.147		0.0909	0.0919	1.00	0.133	pCi/L	09/02/16 13:06	09/27/16 06:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.9*		*40 - 110*	*09/02/16 13:06*	*09/27/16 06:56*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.548		0.355	0.359	1.00	0.544	pCi/L	09/02/16 13:26	09/17/16 15:24	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.9*		*40 - 110*	*09/02/16 13:26*	*09/17/16 15:24*	*1*
Y Carrier	*86.0*		*40 - 110*	*09/02/16 13:26*	*09/17/16 15:24*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.695		0.367	0.370	5.00	0.544	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20877 MW-33

Date Collected: 08/16/16 11:12
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-29

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	0.199		0.0940	0.0957	1.00	0.122	pCi/L	09/02/16 13:06	09/27/16 06:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.1*		*40 - 110*	*09/02/16 13:06*	*09/27/16 06:49*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.335	U	0.390	0.391	1.00	0.642	pCi/L	09/02/16 13:26	09/17/16 14:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.1*		*40 - 110*	*09/02/16 13:26*	*09/17/16 14:49*	*1*
Y Carrier	*81.1*		*40 - 110*	*09/02/16 13:26*	*09/17/16 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	0.534	U	0.401	0.403	5.00	0.642	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20878 MW-31

Date Collected: 08/16/16 12:06
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-30

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	0.249		0.0952	0.0978	1.00	0.108	pCi/L	09/02/16 13:06	09/27/16 06:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.9*		*40 - 110*	*09/02/16 13:06*	*09/27/16 06:50*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.09		0.443	0.455	1.00	0.619	pCi/L	09/02/16 13:26	09/17/16 14:49	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.9*		*40 - 110*	*09/02/16 13:26*	*09/17/16 14:49*	*1*
Y Carrier	*80.0*		*40 - 110*	*09/02/16 13:26*	*09/17/16 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	1.34		0.454	0.465	5.00	0.619	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20879 MW-14

Date Collected: 08/17/16 10:06
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-31

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	0.212		0.0913	0.0933	1.00	0.111	pCi/L	09/02/16 13:06	09/27/16 06:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.9*		*40 - 110*	*09/02/16 13:06*	*09/27/16 06:50*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.278	U	0.400	0.400	1.00	0.668	pCi/L	09/02/16 13:26	09/17/16 14:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.9*		*40 - 110*	*09/02/16 13:26*	*09/17/16 14:50*	*1*
Y Carrier	*84.5*		*40 - 110*	*09/02/16 13:26*	*09/17/16 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	0.490	U	0.410	0.411	5.00	0.668	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20880 MW-9

Date Collected: 08/17/16 11:08
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-32

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	0.389		0.105	0.110	1.00	0.0926	pCi/L	09/02/16 13:06	09/27/16 06:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*40 - 110*	*09/02/16 13:06*	*09/27/16 06:50*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.680		0.376	0.381	1.00	0.561	pCi/L	09/02/16 13:26	09/17/16 14:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*40 - 110*	*09/02/16 13:26*	*09/17/16 14:50*	*1*
Y Carrier	*84.5*		*40 - 110*	*09/02/16 13:26*	*09/17/16 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	1.07		0.390	0.396	5.00	0.561	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20881 MW-8

Date Collected: 08/17/16 12:00
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-33

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	0.425		0.120	0.126	1.00	0.133	pCi/L	09/02/16 13:06	09/27/16 06:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.5*		*40 - 110*	*09/02/16 13:06*	*09/27/16 06:50*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.632		0.395	0.399	1.00	0.607	pCi/L	09/02/16 13:26	09/17/16 14:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.5*		*40 - 110*	*09/02/16 13:26*	*09/17/16 14:50*	*1*
Y Carrier	*83.4*		*40 - 110*	*09/02/16 13:26*	*09/17/16 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	1.06		0.413	0.419	5.00	0.607	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20882 MW-7

Date Collected: 08/17/16 13:06
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-34

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	**0.465**		0.116	0.123	1.00	0.0935	pCi/L	09/02/16 13:06	09/27/16 06:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.0*		*40 - 110*	*09/02/16 13:06*	*09/27/16 06:50*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.471	U	0.382	0.384	1.00	0.607	pCi/L	09/02/16 13:26	09/17/16 14:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.0*		*40 - 110*	*09/02/16 13:26*	*09/17/16 14:50*	*1*
Y Carrier	*87.9*		*40 - 110*	*09/02/16 13:26*	*09/17/16 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	**0.936**		0.399	0.403	5.00	0.607	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20883 MW-15

Date Collected: 08/16/16 14:05
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-35

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	0.152		0.0874	0.0884	1.00	0.123	pCi/L	09/02/16 13:06	09/27/16 06:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.7*		*40 - 110*	*09/02/16 13:06*	*09/27/16 06:50*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.247	U	0.338	0.339	1.00	0.564	pCi/L	09/02/16 13:26	09/17/16 14:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.7*		*40 - 110*	*09/02/16 13:26*	*09/17/16 14:50*	*1*
Y Carrier	*82.2*		*40 - 110*	*09/02/16 13:26*	*09/17/16 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	0.399	U	0.349	0.350	5.00	0.564	pCi/L		09/28/16 01:05	1

Client Sample ID: AW20884 MW-13

Date Collected: 08/16/16 14:58
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-36

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	0.0798	U	0.0692	0.0695	1.00	0.107	pCi/L	09/02/16 13:06	09/27/16 06:55	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.8*		*40 - 110*	*09/02/16 13:06*	*09/27/16 06:55*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.355	U	0.430	0.431	1.00	0.710	pCi/L	09/02/16 13:26	09/17/16 14:50	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.8*		*40 - 110*	*09/02/16 13:26*	*09/17/16 14:50*	*1*
Y Carrier	*78.5*		*40 - 110*	*09/02/16 13:26*	*09/17/16 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	0.435	U	0.435	0.437	5.00	0.710	pCi/L		09/28/16 01:05	1

Qualifiers

Rad

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

Glossary

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

Client Sample ID: AW20849 MW-30

Lab Sample ID: 400-126317-1

Date Collected: 08/16/16 14:41

Matrix: Water

Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267864	09/02/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	271840	09/27/16 07:09	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267874	09/02/16 12:24	MCJ	TAL SL
Total/NA	Analysis	9320		1	270404	09/17/16 14:58	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20850 MW-29

Lab Sample ID: 400-126317-2

Date Collected: 08/16/16 15:43

Matrix: Water

Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267864	09/02/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	271840	09/27/16 07:09	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267874	09/02/16 12:24	MCJ	TAL SL
Total/NA	Analysis	9320		1	270404	09/17/16 14:58	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20851 MW-28

Lab Sample ID: 400-126317-3

Date Collected: 08/17/16 14:22

Matrix: Water

Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267864	09/02/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 11:16	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267874	09/02/16 12:24	MCJ	TAL SL
Total/NA	Analysis	9320		1	270404	09/17/16 14:58	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20852 MW-27

Lab Sample ID: 400-126317-4

Date Collected: 08/17/16 11:25

Matrix: Water

Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267864	09/02/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 11:16	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267874	09/02/16 12:24	MCJ	TAL SL
Total/NA	Analysis	9320		1	270404	09/17/16 14:59	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20853 MW-27 DUP

Lab Sample ID: 400-126317-5
Date Collected: 08/17/16 11:25
Matrix: Water
Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267864	09/02/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 11:17	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267874	09/02/16 12:24	MCJ	TAL SL
Total/NA	Analysis	9320		1	270404	09/17/16 14:59	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20854 MW-26

Lab Sample ID: 400-126317-6
Date Collected: 08/17/16 12:31
Matrix: Water
Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267864	09/02/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 11:17	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267874	09/02/16 12:24	MCJ	TAL SL
Total/NA	Analysis	9320		1	270404	09/17/16 14:59	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20855 MW-1

Lab Sample ID: 400-126317-7
Date Collected: 08/15/16 13:35
Matrix: Water
Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267864	09/02/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 11:17	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267874	09/02/16 12:24	MCJ	TAL SL
Total/NA	Analysis	9320		1	270403	09/17/16 15:04	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20856 MW-1 DUP

Lab Sample ID: 400-126317-8
Date Collected: 08/15/16 13:35
Matrix: Water
Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267864	09/02/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 11:17	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267874	09/02/16 12:24	MCJ	TAL SL
Total/NA	Analysis	9320		1	270403	09/17/16 15:04	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20857 MW-2

Lab Sample ID: 400-126317-9

Date Collected: 08/15/16 14:43
Matrix: Water
Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267864	09/02/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 11:18	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267874	09/02/16 12:24	MCJ	TAL SL
Total/NA	Analysis	9320		1	270403	09/17/16 15:04	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20858 MW-3

Lab Sample ID: 400-126317-10

Date Collected: 08/15/16 15:38
Matrix: Water
Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267864	09/02/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 11:18	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267874	09/02/16 12:24	MCJ	TAL SL
Total/NA	Analysis	9320		1	270403	09/17/16 15:04	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20859 MW-23

Lab Sample ID: 400-126317-11

Date Collected: 08/16/16 09:15
Matrix: Water
Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267864	09/02/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 11:18	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267874	09/02/16 12:24	MCJ	TAL SL
Total/NA	Analysis	9320		1	270403	09/17/16 15:04	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20860 MW-24

Lab Sample ID: 400-126317-12

Date Collected: 08/16/16 10:20
Matrix: Water
Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267864	09/02/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 11:18	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267874	09/02/16 12:24	MCJ	TAL SL
Total/NA	Analysis	9320		1	270403	09/17/16 15:05	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20861 MW-12

Lab Sample ID: 400-126317-13

Date Collected: 08/16/16 11:25

Matrix: Water

Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267864	09/02/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 11:18	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267874	09/02/16 12:24	MCJ	TAL SL
Total/NA	Analysis	9320		1	270403	09/17/16 15:05	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20862 MW-21

Lab Sample ID: 400-126317-14

Date Collected: 08/16/16 12:40

Matrix: Water

Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267864	09/02/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 15:06	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267874	09/02/16 12:24	MCJ	TAL SL
Total/NA	Analysis	9320		1	270403	09/17/16 15:05	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20863 MW-11

Lab Sample ID: 400-126317-15

Date Collected: 08/16/16 13:45

Matrix: Water

Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267864	09/02/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 11:18	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267874	09/02/16 12:24	MCJ	TAL SL
Total/NA	Analysis	9320		1	270403	09/17/16 15:05	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20864 FB-2

Lab Sample ID: 400-126317-16

Date Collected: 08/16/16 13:55

Matrix: Water

Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267864	09/02/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 11:19	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267874	09/02/16 12:24	MCJ	TAL SL
Total/NA	Analysis	9320		1	270403	09/17/16 15:06	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20865 MW-10

Lab Sample ID: 400-126317-17
Date Collected: 08/16/16 15:10
Matrix: Water
Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267864	09/02/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 11:19	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267874	09/02/16 12:24	MCJ	TAL SL
Total/NA	Analysis	9320		1	270403	09/17/16 15:06	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20866 MW-25

Lab Sample ID: 400-126317-18
Date Collected: 08/17/16 09:53
Matrix: Water
Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267864	09/02/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 11:19	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267874	09/02/16 12:24	MCJ	TAL SL
Total/NA	Analysis	9320		1	270403	09/17/16 15:06	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20867 MW-6

Lab Sample ID: 400-126317-19
Date Collected: 08/17/16 11:15
Matrix: Water
Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267864	09/02/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 11:19	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267874	09/02/16 12:24	MCJ	TAL SL
Total/NA	Analysis	9320		1	270403	09/17/16 15:08	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20868 MW-5

Lab Sample ID: 400-126317-20
Date Collected: 08/17/16 12:28
Matrix: Water
Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267864	09/02/16 11:42	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 11:19	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267874	09/02/16 12:24	MCJ	TAL SL
Total/NA	Analysis	9320		1	270403	09/17/16 15:06	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20869 FB-3

Lab Sample ID: 400-126317-21

Date Collected: 08/17/16 12:35

Matrix: Water

Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267892	09/02/16 13:06	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 06:55	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267897	09/02/16 13:26	MCJ	TAL SL
Total/NA	Analysis	9320		1	270404	09/17/16 15:23	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20870 EB-1

Lab Sample ID: 400-126317-22

Date Collected: 08/17/16 13:20

Matrix: Water

Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267892	09/02/16 13:06	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 06:56	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267897	09/02/16 13:26	MCJ	TAL SL
Total/NA	Analysis	9320		1	270404	09/17/16 15:24	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20871 MW-18

Lab Sample ID: 400-126317-23

Date Collected: 08/15/16 13:45

Matrix: Water

Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267892	09/02/16 13:06	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 06:56	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267897	09/02/16 13:26	MCJ	TAL SL
Total/NA	Analysis	9320		1	270404	09/17/16 15:24	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20872 MW-17

Lab Sample ID: 400-126317-24

Date Collected: 08/15/16 14:48

Matrix: Water

Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267892	09/02/16 13:06	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 06:56	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267897	09/02/16 13:26	MCJ	TAL SL
Total/NA	Analysis	9320		1	270404	09/17/16 15:24	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20873 MW-16

Lab Sample ID: 400-126317-25
Date Collected: 08/15/16 16:18
Matrix: Water
Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267892	09/02/16 13:06	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 06:56	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267897	09/02/16 13:26	MCJ	TAL SL
Total/NA	Analysis	9320		1	270404	09/17/16 15:24	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20874 FB-1

Lab Sample ID: 400-126317-26
Date Collected: 08/15/16 15:30
Matrix: Water
Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267892	09/02/16 13:06	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 06:56	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267897	09/02/16 13:26	MCJ	TAL SL
Total/NA	Analysis	9320		1	270404	09/17/16 15:24	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20875 MW-32

Lab Sample ID: 400-126317-27
Date Collected: 08/16/16 09:52
Matrix: Water
Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267892	09/02/16 13:06	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 06:56	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267897	09/02/16 13:26	MCJ	TAL SL
Total/NA	Analysis	9320		1	270404	09/17/16 15:24	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20876 MW-32 DUP

Lab Sample ID: 400-126317-28
Date Collected: 08/16/16 09:52
Matrix: Water
Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267892	09/02/16 13:06	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 06:56	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267897	09/02/16 13:26	MCJ	TAL SL
Total/NA	Analysis	9320		1	270404	09/17/16 15:24	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20877 MW-33

Lab Sample ID: 400-126317-29

Date Collected: 08/16/16 11:12

Matrix: Water

Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267892	09/02/16 13:06	MCJ	TAL SL
Total/NA	Analysis	9315		1	271838	09/27/16 06:49	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267897	09/02/16 13:26	MCJ	TAL SL
Total/NA	Analysis	9320		1	270402	09/17/16 14:49	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20878 MW-31

Lab Sample ID: 400-126317-30

Date Collected: 08/16/16 12:06

Matrix: Water

Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267892	09/02/16 13:06	MCJ	TAL SL
Total/NA	Analysis	9315		1	271838	09/27/16 06:50	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267897	09/02/16 13:26	MCJ	TAL SL
Total/NA	Analysis	9320		1	270402	09/17/16 14:49	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20879 MW-14

Lab Sample ID: 400-126317-31

Date Collected: 08/17/16 10:06

Matrix: Water

Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267892	09/02/16 13:06	MCJ	TAL SL
Total/NA	Analysis	9315		1	271838	09/27/16 06:50	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267897	09/02/16 13:26	MCJ	TAL SL
Total/NA	Analysis	9320		1	270402	09/17/16 14:50	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20880 MW-9

Lab Sample ID: 400-126317-32

Date Collected: 08/17/16 11:08

Matrix: Water

Date Received: 08/25/16 16:00

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267892	09/02/16 13:06	MCJ	TAL SL
Total/NA	Analysis	9315		1	271838	09/27/16 06:50	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267897	09/02/16 13:26	MCJ	TAL SL
Total/NA	Analysis	9320		1	270402	09/17/16 14:50	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Lab Chronicle

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

TestAmerica Job ID: 400-126317-1
SDG: Greene Ash Pond (4)

Client Sample ID: AW20881 MW-8

Date Collected: 08/17/16 12:00
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-33

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267892	09/02/16 13:06	MCJ	TAL SL
Total/NA	Analysis	9315		1	271838	09/27/16 06:50	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267897	09/02/16 13:26	MCJ	TAL SL
Total/NA	Analysis	9320		1	270402	09/17/16 14:50	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20882 MW-7

Date Collected: 08/17/16 13:06
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-34

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267892	09/02/16 13:06	MCJ	TAL SL
Total/NA	Analysis	9315		1	271838	09/27/16 06:50	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267897	09/02/16 13:26	MCJ	TAL SL
Total/NA	Analysis	9320		1	270402	09/17/16 14:50	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20883 MW-15

Date Collected: 08/16/16 14:05
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-35

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267892	09/02/16 13:06	MCJ	TAL SL
Total/NA	Analysis	9315		1	271838	09/27/16 06:50	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267897	09/02/16 13:26	MCJ	TAL SL
Total/NA	Analysis	9320		1	270402	09/17/16 14:50	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Client Sample ID: AW20884 MW-13

Date Collected: 08/16/16 14:58
Date Received: 08/25/16 16:00

Lab Sample ID: 400-126317-36

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			267892	09/02/16 13:06	MCJ	TAL SL
Total/NA	Analysis	9315		1	271839	09/27/16 06:55	ALS	TAL SL
Total/NA	Prep	PrecSep_0			267897	09/02/16 13:26	MCJ	TAL SL
Total/NA	Analysis	9320		1	270402	09/17/16 14:50	ALS	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	272055	09/28/16 01:05	ALS	TAL SL

Laboratory References:

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

Rad

Prep Batch: 267864

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126317-1	AW20849 MW-30	Total/NA	Water	PrecSep-21	
400-126317-2	AW20850 MW-29	Total/NA	Water	PrecSep-21	
400-126317-3	AW20851 MW-28	Total/NA	Water	PrecSep-21	
400-126317-4	AW20852 MW-27	Total/NA	Water	PrecSep-21	
400-126317-5	AW20853 MW-27 DUP	Total/NA	Water	PrecSep-21	
400-126317-6	AW20854 MW-26	Total/NA	Water	PrecSep-21	
400-126317-7	AW20855 MW-1	Total/NA	Water	PrecSep-21	
400-126317-8	AW20856 MW-1 DUP	Total/NA	Water	PrecSep-21	
400-126317-9	AW20857 MW-2	Total/NA	Water	PrecSep-21	
400-126317-10	AW20858 MW-3	Total/NA	Water	PrecSep-21	
400-126317-11	AW20859 MW-23	Total/NA	Water	PrecSep-21	
400-126317-12	AW20860 MW-24	Total/NA	Water	PrecSep-21	
400-126317-13	AW20861 MW-12	Total/NA	Water	PrecSep-21	
400-126317-14	AW20862 MW-21	Total/NA	Water	PrecSep-21	
400-126317-15	AW20863 MW-11	Total/NA	Water	PrecSep-21	
400-126317-16	AW20864 FB-2	Total/NA	Water	PrecSep-21	
400-126317-17	AW20865 MW-10	Total/NA	Water	PrecSep-21	
400-126317-18	AW20866 MW-25	Total/NA	Water	PrecSep-21	
400-126317-19	AW20867 MW-6	Total/NA	Water	PrecSep-21	
400-126317-20	AW20868 MW-5	Total/NA	Water	PrecSep-21	
MB 160-267864/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-267864/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-126317-11 DU	AW20859 MW-23	Total/NA	Water	PrecSep-21	

Prep Batch: 267874

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126317-1	AW20849 MW-30	Total/NA	Water	PrecSep_0	
400-126317-2	AW20850 MW-29	Total/NA	Water	PrecSep_0	
400-126317-3	AW20851 MW-28	Total/NA	Water	PrecSep_0	
400-126317-4	AW20852 MW-27	Total/NA	Water	PrecSep_0	
400-126317-5	AW20853 MW-27 DUP	Total/NA	Water	PrecSep_0	
400-126317-6	AW20854 MW-26	Total/NA	Water	PrecSep_0	
400-126317-7	AW20855 MW-1	Total/NA	Water	PrecSep_0	
400-126317-8	AW20856 MW-1 DUP	Total/NA	Water	PrecSep_0	
400-126317-9	AW20857 MW-2	Total/NA	Water	PrecSep_0	
400-126317-10	AW20858 MW-3	Total/NA	Water	PrecSep_0	
400-126317-11	AW20859 MW-23	Total/NA	Water	PrecSep_0	
400-126317-12	AW20860 MW-24	Total/NA	Water	PrecSep_0	
400-126317-13	AW20861 MW-12	Total/NA	Water	PrecSep_0	
400-126317-14	AW20862 MW-21	Total/NA	Water	PrecSep_0	
400-126317-15	AW20863 MW-11	Total/NA	Water	PrecSep_0	
400-126317-16	AW20864 FB-2	Total/NA	Water	PrecSep_0	
400-126317-17	AW20865 MW-10	Total/NA	Water	PrecSep_0	
400-126317-18	AW20866 MW-25	Total/NA	Water	PrecSep_0	
400-126317-19	AW20867 MW-6	Total/NA	Water	PrecSep_0	
400-126317-20	AW20868 MW-5	Total/NA	Water	PrecSep_0	
MB 160-267874/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-267874/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-126317-11 DU	AW20859 MW-23	Total/NA	Water	PrecSep_0	

Rad (Continued)

Prep Batch: 267892

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126317-21	AW20869 FB-3	Total/NA	Water	PrecSep-21	
400-126317-22	AW20870 EB-1	Total/NA	Water	PrecSep-21	
400-126317-23	AW20871 MW-18	Total/NA	Water	PrecSep-21	
400-126317-24	AW20872 MW-17	Total/NA	Water	PrecSep-21	
400-126317-25	AW20873 MW-16	Total/NA	Water	PrecSep-21	
400-126317-26	AW20874 FB-1	Total/NA	Water	PrecSep-21	
400-126317-27	AW20875 MW-32	Total/NA	Water	PrecSep-21	
400-126317-28	AW20876 MW-32 DUP	Total/NA	Water	PrecSep-21	
400-126317-29	AW20877 MW-33	Total/NA	Water	PrecSep-21	
400-126317-30	AW20878 MW-31	Total/NA	Water	PrecSep-21	
400-126317-31	AW20879 MW-14	Total/NA	Water	PrecSep-21	
400-126317-32	AW20880 MW-9	Total/NA	Water	PrecSep-21	
400-126317-33	AW20881 MW-8	Total/NA	Water	PrecSep-21	
400-126317-34	AW20882 MW-7	Total/NA	Water	PrecSep-21	
400-126317-35	AW20883 MW-15	Total/NA	Water	PrecSep-21	
400-126317-36	AW20884 MW-13	Total/NA	Water	PrecSep-21	
MB 160-267892/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-267892/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-126317-30 DU	AW20878 MW-31	Total/NA	Water	PrecSep-21	

Prep Batch: 267897

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-126317-21	AW20869 FB-3	Total/NA	Water	PrecSep_0	
400-126317-22	AW20870 EB-1	Total/NA	Water	PrecSep_0	
400-126317-23	AW20871 MW-18	Total/NA	Water	PrecSep_0	
400-126317-24	AW20872 MW-17	Total/NA	Water	PrecSep_0	
400-126317-25	AW20873 MW-16	Total/NA	Water	PrecSep_0	
400-126317-26	AW20874 FB-1	Total/NA	Water	PrecSep_0	
400-126317-27	AW20875 MW-32	Total/NA	Water	PrecSep_0	
400-126317-28	AW20876 MW-32 DUP	Total/NA	Water	PrecSep_0	
400-126317-29	AW20877 MW-33	Total/NA	Water	PrecSep_0	
400-126317-30	AW20878 MW-31	Total/NA	Water	PrecSep_0	
400-126317-31	AW20879 MW-14	Total/NA	Water	PrecSep_0	
400-126317-32	AW20880 MW-9	Total/NA	Water	PrecSep_0	
400-126317-33	AW20881 MW-8	Total/NA	Water	PrecSep_0	
400-126317-34	AW20882 MW-7	Total/NA	Water	PrecSep_0	
400-126317-35	AW20883 MW-15	Total/NA	Water	PrecSep_0	
400-126317-36	AW20884 MW-13	Total/NA	Water	PrecSep_0	
MB 160-267897/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-267897/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-126317-30 DU	AW20878 MW-31	Total/NA	Water	PrecSep_0	

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-267864/1-A
Matrix: Water
Analysis Batch: 271840

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 267864

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1091		0.0676	0.0683	1.00	0.0928	pCi/L	09/02/16 11:42	09/27/16 07:08	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.0*		*40 - 110*	*09/02/16 11:42*	*09/27/16 07:08*	*1*

Lab Sample ID: LCS 160-267864/2-A
Matrix: Water
Analysis Batch: 271840

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 267864

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			14.9	18.69		1.80	1.00	0.0897	pCi/L	126	68 - 137		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*87.7*		*40 - 110*

Lab Sample ID: 400-126317-11 DU
Matrix: Water
Analysis Batch: 271839

Client Sample ID: AW20859 MW-23
Prep Type: Total/NA
Prep Batch: 267864

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.192			0.1438		0.0717	1.00	0.0847	pCi/L			0.29	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*86.0*		*40 - 110*

Lab Sample ID: MB 160-267892/1-A
Matrix: Water
Analysis Batch: 271838

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 267892

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.04145	U	0.0527	0.0528	1.00	0.0876	pCi/L	09/02/16 13:06	09/27/16 06:49	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*09/02/16 13:06*	*09/27/16 06:49*	*1*

Lab Sample ID: LCS 160-267892/2-A
Matrix: Water
Analysis Batch: 271838

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 267892

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			14.9	19.54		1.88	1.00	0.0896	pCi/L	131	68 - 137		

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

Lab Sample ID: LCS 160-267892/2-A
Matrix: Water
Analysis Batch: 271838

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 267892

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	84.0		40 - 110

Lab Sample ID: 400-126317-30 DU
Matrix: Water
Analysis Batch: 271838

Client Sample ID: AW20878 MW-31
Prep Type: Total/NA
Prep Batch: 267892

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-226	0.249			0.2106		0.0865	1.00	0.0971	pCi/L			0.21	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	89.7		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-267874/1-A
Matrix: Water
Analysis Batch: 270404

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 267874

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.02955	U	0.354	0.354	1.00	0.627	pCi/L	09/02/16 12:24	09/17/16 14:58	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		40 - 110	09/02/16 12:24	09/17/16 14:58	1
Y Carrier	82.2		40 - 110	09/02/16 12:24	09/17/16 14:58	1

Lab Sample ID: LCS 160-267874/2-A
Matrix: Water
Analysis Batch: 270404

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 267874

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			19.4	22.50		2.44	1.00	0.605	pCi/L	116	56 - 140		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	87.7		40 - 110
Y Carrier	78.1		40 - 110

Lab Sample ID: 400-126317-11 DU
Matrix: Water
Analysis Batch: 270403

Client Sample ID: AW20859 MW-23
Prep Type: Total/NA
Prep Batch: 267874

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	0.0212	U		-0.2081	U	0.369	1.00	0.688	pCi/L			0.32	1

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

Lab Sample ID: 400-126317-11 DU
Matrix: Water
Analysis Batch: 270403

Client Sample ID: AW20859 MW-23
Prep Type: Total/NA
Prep Batch: 267874

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	86.0		40 - 110
Y Carrier	81.9		40 - 110

Lab Sample ID: MB 160-267897/1-A
Matrix: Water
Analysis Batch: 270402

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 267897

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1127	U	0.355	0.355	1.00	0.610	pCi/L	09/02/16 13:26	09/17/16 14:49	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110	09/02/16 13:26	09/17/16 14:49	1
Y Carrier	84.1		40 - 110	09/02/16 13:26	09/17/16 14:49	1

Lab Sample ID: LCS 160-267897/2-A
Matrix: Water
Analysis Batch: 270402

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 267897

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			19.4	24.65		2.66	1.00	0.669	pCi/L	127	56 - 140		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	84.0		40 - 110
Y Carrier	78.1		40 - 110

Lab Sample ID: 400-126317-30 DU
Matrix: Water
Analysis Batch: 270402

Client Sample ID: AW20878 MW-31
Prep Type: Total/NA
Prep Batch: 267897

Analyte	Sample Result	Sample Qual		DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit			RER	RER Limit
Radium-228	1.09			0.5674	U	0.404	1.00	0.626	pCi/L			0.61	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	89.7		40 - 110
Y Carrier	83.0		40 - 110

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

Lab Sample ID: 400-126317-11 DU
Matrix: Water
Analysis Batch: 272055

Client Sample ID: AW20859 MW-23
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	0.213	U		-0.06434	U	0.376	5.00	0.688	pCi/L			0.38	

Lab Sample ID: 400-126317-30 DU
Matrix: Water
Analysis Batch: 272055

Client Sample ID: AW20878 MW-31
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	1.34			0.7780		0.413	5.00	0.626	pCi/L			0.64	

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Anthony Goggins/ Jason Rouss	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Sarah Copeland	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 1 of 4
Company: Alabama Power General Test Laboratory				Job #:
Address: 744 County Rd 87 GSC #8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6121(Tel)	PO #:			
Email: sgcopela@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Greene Ash Pond (4)	SSOW#:			

Analysis Requested

400-126317 COC

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
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)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:		X	X	D	X	
AW20849	8/16/16	1441	G	Water			X	1	MW-30
AW20850	8/16/16	1543	G	Water			X	1	MW-29
AW20851	8/17/16	1422	G	Water			X	1	MW-28
AW20852	8/17/16	1125	G	Water			X	1	MW-27
AW20853	8/17/16	1125	G	Water			X	1	MW-27 Dup (Sample Duplicate)
AW20854	8/17/16	1231	G	Water			X	1	MW-26
AW20855	8/15/16	1335	G	Water			X	1	MW-1
AW20856	8/15/16	1335	G	Water			X	1	MW-1 Dup (Sample Duplicate)
AW20857	8/15/16	1443	G	Water			X	1	MW-2
AW20858	8/15/16	1538	G	Water			X	1	MW-3
AW20859	8/16/16	0915	G	Water		X	X	2	MW-23

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment: 16000 RD 8/25		
Relinquished by: Sarah Copeland	Date/Time: 08/24/2016; 1030	Company APC	Received by: [signature]	Date/Time: 8/25/16 ~~1630~~	Company TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ 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	Sampler: Jason Rouss	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Sarah Copeland	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 2 of 4
Company: Alabama Power General Test Laboratory				Job #:
Address: 744 County Rd 87 GSC #8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040	PO #:			
Phone: 205-664-6121(Tel)	WO #:			
Email: sgcopela@southernco.com	Project #: 40007143			
Project Name: CCR	SSOW#:			
Site: Greene Ash Pond (4)				

Analysis Requested

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, 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)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D		
AW20860	8/16/16	1020	G	Water			X	1	MW-24
AW20861	8/16/16	1125	G	Water			X	1	MW-12
AW20862	8/16/16	1240	G	Water			X	1	MW-21
AW20863	8/16/16	1345	G	Water			X	1	MW-11
AW20864	8/16/16	1355	G	Water			X	1	FB-2 (Field Blank)
AW20865	8/16/16	1510	G	Water			X	1	MW-10
AW20866	8/17/16	0953	G	Water			X	1	MW-25
AW20867	8/17/16	1115	G	Water			X	1	MW-6
AW20868	8/17/16	1228	G	Water			X	1	MW-5
AW20869	8/17/16	1235	G	Water			X	1	FB-3 (Field Blank)
AW20870	8/17/16	1320	G	Water			X	1	EB-1 (Equipment Blank)

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Sarah Copeland	Date/Time: 08/24/2016; 1030	Company APC	Received by:	Date/Time: 8/25/16 1600	Company TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

9/29/2016

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: 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 3 of 4
Company: Alabama Power General Test Laboratory				Job #:

Address: 744 County Rd 87 GSC #8	Due Date Requested:	Analysis Requested
City: Calera	TAT Requested (days): Routine	
State, Zip: AL, 35040		
Phone: 205-664-6121(Tel)	PO #:	
Email: sgcopela@southernco.com	WO #:	
Project Name: CCR	Project #: 40007143	
Site: Greene Ash Pond (4)	SSOW#:	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
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)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D		
AW20871	8/15/16	1345	G	Water			X	1	MW-18
AW20872	8/15/16	1448	G	Water			X	1	MW-17
AW20873	8/15/16	1618	G	Water			X	1	MW-16
AW20874	8/15/16	1530	G	Water			X	1	FB-1 (Field Blank)
AW20875	8/16/16	0952	G	Water			X	1	MW-32
AW20876	8/16/16	0952	G	Water			X	1	MW-32 Dup (Sample Duplicate)
AW20877	8/16/16	1112	G	Water			X	1	MW-33
AW20878	8/16/16	1206	G	Water		x	X	2	MW-31
AW20879	8/17/16	1006	G	Water			X	1	MW-14
AW20880	8/17/16	1108	G	Water			X	1	MW-9
AW20881	8/17/16	1200	G	Water			X	1	MW-8

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:
Relinquished by: Sarah Copeland	Date/Time: 08/24/2016; 1030	Company: APC	Received by: [signature] Date/Time: 8/25/16 1600 Company: TA
Relinquished by:	Date/Time:	Company	Received by: Date/Time: Company
Relinquished by:	Date/Time:	Company	Received 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	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 4 of 4
Company: Alabama Power General Test Laboratory				Job #:

Address: 744 County Rd 87 GSC #8	Due Date Requested:	Analysis Requested
City: Calera	TAT Requested (days): Routine	
State, Zip: AL, 35040		
Phone: 205-664-6121(Tel)	PO #:	
Email: sgcopela@southernco.com	WO #:	
Project Name: CCR	Project #: 40007143	
Site: Greene Ash Pond (4)	SSOW#:	

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
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)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D		
AW20882	8/17/16	1306	G	Water			X		MW-7
AW20883	8/16/16	1405	G	Water			X		MW-15
AW20884	8/16/16	1458	G	Water			X		MW-13

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Sarah Copeland	Date/Time: 08/24/2016; 1030	Company APC	Received by:	Date/Time: 8/25/16 1600	Company TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

9/29/2016

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-126317-1
SDG Number: Greene Ash Pond (4)

Login Number: 126317
List Number: 1
Creator: Siddoway, Benjamin

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	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 <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

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

TestAmerica Job ID: 400-126317-1
SDG: Greene 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	10-31-16
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16 *
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alaska	State Program	10	MO00054	06-30-17
California	State Program	9	2886	03-31-18
Connecticut	State Program	1	PH-0241	03-31-17
Florida	NELAP	4	E87689	06-30-17
Illinois	NELAP	5	003757	11-30-16 *
Iowa	State Program	7	373	12-01-16 *
Kansas	NELAP	7	E-10236	10-31-16 *
Kentucky (DW)	State Program	4	90125	12-31-16
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-17
Louisiana (DW)	NELAP	6	LA160008	12-31-16
Maryland	State Program	3	310	09-30-17
Missouri	State Program	7	780	06-30-17
Nevada	State Program	9	MO000542016-1	07-31-17
New Jersey	NELAP	2	MO002	06-30-17
New York	NELAP	2	11616	03-31-17
North Dakota	State Program	8	R207	06-30-17
NRC	NRC		24-24817-01	12-31-22

* Certification renewal pending - certification considered valid.

Certification Summary

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

TestAmerica Job ID: 400-126317-1
SDG: Greene 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	08-31-16 *

* Certification renewal pending - certification considered valid.

Alabama Power General Test Laboratory
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Analytical Report

Alabama Power

Lab & Field SERVICES

Sample Group : WMWGREAP_1049

Project/Site : Greene County Ash Pond
Demopolis, AL 36732

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:**

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Case Narrative

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Lab & Field SERVICES

Anions

Greene County Ash Pond

WMWGREAP_1049

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

Sample ID	Chloride Batch ID	Fluoride Batch ID	Sulfate Batch ID	Project ID
AW25889	578590	578594	578598	WMWGREAP_1049
AW25890	578590	578594	578598	WMWGREAP_1049
AW25891	578590	578594	578598	WMWGREAP_1049
AW25892	578590	578594	578598	WMWGREAP_1049
AW25893	578590	578594	578598	WMWGREAP_1049
AW25894	578590	578594	578598	WMWGREAP_1049
AW25895	578590	578594	578598	WMWGREAP_1049
AW25896	578590	578594	578598	WMWGREAP_1049
AW25897	578590	578594	578598	WMWGREAP_1049
AW25898	578590	578594	578598	WMWGREAP_1049
AW25899	578591	578595	578599	WMWGREAP_1049
AW25900	578591	578595	578599	WMWGREAP_1049
AW25901	578591	578595	578599	WMWGREAP_1049
AW25902	578591	578595	578599	WMWGREAP_1049
AW25903	578591	578595	578599	WMWGREAP_1049
AW25904	578591	578595	578599	WMWGREAP_1049
AW25905	578591	578595	578599	WMWGREAP_1049
AW25906	578591	578595	578599	WMWGREAP_1049
AW25907	578591	578595	578599	WMWGREAP_1049
AW25908	578591	578595	578599	WMWGREAP_1049
AW25909	578592	578596	578600	WMWGREAP_1049
AW25910	578592	578596	578600	WMWGREAP_1049
AW25911	578592	578596	578600	WMWGREAP_1049
AW25912	578592	578596	578600	WMWGREAP_1049
AW25913	578592	578596	578600	WMWGREAP_1049
AW25914	578592	578596	578600	WMWGREAP_1049
AW25915	578592	578596	578600	WMWGREAP_1049
AW25916	578592	578596	578600	WMWGREAP_1049
AW25917	578592	578596	578600	WMWGREAP_1049
AW25918	578592	578596	578600	WMWGREAP_1049
AW25919	578593	578597	578601	WMWGREAP_1049
AW25920	578593	578597	578601	WMWGREAP_1049

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AW25921	578593	578597	578601	WMWGREAP_1049
AW25922	578593	578597	578601	WMWGREAP_1049
AW25923	578593	578597	578601	WMWGREAP_1049
AW25924	578593	578597	578601	WMWGREAP_1049

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 578598 presented a negative concentration greater than the absolute MDL value of 0.3, at -0.401 mg/L. One batch sample (AW25891) presented a negative sulfate concentration greater than the absolute MDL value, and should be considered as a quantitatively estimated non-detect value, with indication of potential low bias on the reported RL result. All other batch sulfate samples are above 10x the absolute blank value; no qualification is necessary.
    2. The blank for anion sulfate in batch 578599 presented a negative concentration greater than the absolute MDL value of 0.3, at -0.400 mg/L. Two batch samples (AW25899 and AW25908) presented negative sulfate concentrations greater than the absolute MDL value, and should be considered as a quantitatively estimated non-detect values, with indication of potential low bias on the reported RL results. Three batch samples (AW25901, AW25902 and AW25904) presented positive sulfate concentrations above RL but below 10x the absolute blank result, and are qualified as quantitatively estimated concentrations with indication of potential low bias on the reported results.
    3. The blank for anion sulfate in batch 578600 presented a negative concentration greater than the absolute MDL value of 0.3, at -0.396 mg/L. Batch sample AW25916 presented a negative sulfate concentration greater than the absolute MDL value, and should be considered as a quantitatively estimated non-detect value, with indication of potential low bias on the reported RL result. Batch sample AW25909 presented a positive sulfate concentration above MDL but below 10x the absolute blank result, and is qualified as a quantitatively estimated concentration with indication of potential low bias on the reported result.
    4. The blank for anion sulfate in batch 578601 presented a negative concentration greater than the absolute MDL value of 0.3, at -0.386 mg/L. Batch sample AW25924 presented a negative sulfate concentration greater than the absolute MDL value and below 10x the absolute blank result, and should be considered as a quantitatively estimated non-detect value, with indication of potential low bias on the reported RL result.

- All laboratory fortified blanks were within acceptance criteria for the anions requested, with the following exceptions:

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1. No closing LFB was listed for the dilution re-analyses for sulfate in batch 578598. Due to absence of LFB data, the reported results for the following sample dilutions for sulfate are qualified as quantitatively estimated with indeterminate bias direction and magnitude: AW25894 and AW25897.

2. No closing LFB was listed for the dilution re-analysis for sulfate in batch 578599. Due to absence of LFB data, the reported result for the following sample dilution for sulfate is qualified as quantitatively estimated with indeterminate bias direction and magnitude: AW25900.
3. No closing LFB was listed for the dilution re-analyses for sulfate in batch 578600. Due to absence of LFB data, the reported results for the following sample dilutions for sulfate are qualified as quantitatively estimated with indeterminate bias direction and magnitude: AW25914 and AW25915.
4. No closing LFB was listed for the dilution re-analyses for chloride or for sulfate in batches 578593 and 578601, respectively. Due to absence of LFB data, the reported results for the following sample dilutions are qualified as quantitatively estimated with indeterminate bias direction and magnitude: for chloride, AW25919, AW25920 and AW25921; for sulfate, AW25919 and AW25920.

- 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.

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7. Samples AW25919 and AW25920 were re-analyzed for chloride and for sulfate at a 10x dilution, sample AW25921 was re-analyzed for chloride at a 10x dilution, sample AW25914 was re-analyzed for sulfate at a 20x dilution, samples AW25894 and AW25915 were re-analyzed for sulfate at a 10x dilution, and samples AW25897 and AW25900 were re-analyzed for sulfate at a 2x dilution, due to undiluted results exceeding the calibrated range of the detector. The dilution results for sulfate for these samples should be used; reporting limit (RL) values are adjusted upward to reflect the dilution factor applied.

Sample ID		**Analyte**		**Dilution Factor**
AW25894		Sulfate		10X
AW25897		Sulfate		2X
AW25900		Sulfate		2X
AW25914		Sulfate		20X
AW25915		Sulfate		10X
AW25919		Chloride, Sulfate		10X
AW25920		Chloride, Sulfate		10X
AW25921		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.

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Metals ICP

Greene County Ash Pond

WMWGREAP_1049

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

Sample ID	Batch ID	Project ID
AW25889	20161031	WMWGREAP_1049
AW25890	20161031	WMWGREAP_1049
AW25891	20161031	WMWGREAP_1049
AW25892	20161031	WMWGREAP_1049
AW25893	20161031	WMWGREAP_1049
AW25894	20161031	WMWGREAP_1049
AW25895	20161031	WMWGREAP_1049
AW25896	20161031	WMWGREAP_1049
AW25897	20161031	WMWGREAP_1049
AW25898	20161031	WMWGREAP_1049
AW25899	20161031A	WMWGREAP_1049
AW25900	20161031A	WMWGREAP_1049
AW25901	20161031A	WMWGREAP_1049
AW25902	20161031A	WMWGREAP_1049
AW25903	20161031A	WMWGREAP_1049
AW25904	20161031A	WMWGREAP_1049
AW25905	20161031A	WMWGREAP_1049
AW25906	20161031A	WMWGREAP_1049
AW25907	20161031A	WMWGREAP_1049
AW25908	20161031A	WMWGREAP_1049
AW25909	20161031B	WMWGREAP_1049
AW25910	20161031B	WMWGREAP_1049
AW25911	20161031B	WMWGREAP_1049
AW25912	20161031B	WMWGREAP_1049
AW25913	20161031B	WMWGREAP_1049
AW25914	20161031B	WMWGREAP_1049
AW25915	20161031B	WMWGREAP_1049
AW25916	20161031B	WMWGREAP_1049
AW25917	20161031B	WMWGREAP_1049
AW25918	20161031B	WMWGREAP_1049
AW25919	20161031C	WMWGREAP_1049
AW25920	20161031C	WMWGREAP_1049

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AW25921	20161031C	WMWGREAP_1049
AW25922	20161116D	WMWGREAP_1049
AW25923	20161031C	WMWGREAP_1049
AW25924	20161031C	WMWGREAP_1049

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

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

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Sample ID	Analyte	Dilution Factor
AW25894	Calcium	10X
AW25895	Calcium	10X
AW25896	Calcium	10X
AW25897	Calcium	10X
AW25914	Calcium	10X
AW25915	Calcium	10X
AW25916	Calcium	10X
AW25917	Calcium	10X
AW25918	Calcium	10X
AW25918MS	Calcium	10X
AW25918MSD	Calcium	10X
AW25919	Calcium	10X
AW25920	Calcium	10X
AW25921	Calcium	10X
AW25923	Calcium	10X
AW25922	Calcium	10X

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

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Lab & Field SERVICES

Metals ICPMS

Greene County Ash Pond

WMWGREAP_1049

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

Sample ID	Batch ID	Project ID
AW25889	580109	WMWGREAP_1049
AW25890	580109	WMWGREAP_1049
AW25891	580109	WMWGREAP_1049
AW25892	580109	WMWGREAP_1049
AW25893	580109	WMWGREAP_1049
AW25894	580109	WMWGREAP_1049
AW25895	580109	WMWGREAP_1049
AW25896	580109	WMWGREAP_1049
AW25897	580109	WMWGREAP_1049
AW25898	580545	WMWGREAP_1049
AW25899	580545	WMWGREAP_1049
AW25900	580545	WMWGREAP_1049
AW25901	580545	WMWGREAP_1049
AW25902	580545	WMWGREAP_1049
AW25903	580545	WMWGREAP_1049
AW25904	580545	WMWGREAP_1049
AW25905	580545	WMWGREAP_1049
AW25906	580545	WMWGREAP_1049
AW25907	580545	WMWGREAP_1049
AW25908	580546	WMWGREAP_1049
AW25909	580546	WMWGREAP_1049
AW25910	580546	WMWGREAP_1049
AW25911	580546	WMWGREAP_1049
AW25912	580546	WMWGREAP_1049
AW25913	580546	WMWGREAP_1049
AW25914	580546	WMWGREAP_1049
AW25915	580546	WMWGREAP_1049
AW25916	580546	WMWGREAP_1049
AW25917	580546	WMWGREAP_1049
AW25918	580547	WMWGREAP_1049
AW25919	580547	WMWGREAP_1049
AW25920	580547	WMWGREAP_1049

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AW25921	580547	WMWGREAP_1049
AW25922	580547	WMWGREAP_1049
AW25923	580547	WMWGREAP_1049
AW25924	580547	WMWGREAP_1049

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. Samples AW25894, AW25905, AW25906, AW25909, and AW25910 are 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 for batch 580109, a blank rinse (APC-222-52-11) was reported as the Initial Calibration Blank (ICB) because of draw error on ICB. Therefore the rinse (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.

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Case Narrative

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Mercury

Greene County Ash Pond

WMWGREAP_1049

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

Sample ID	Batch ID	Project ID
AW25889	579637	WMWGREAP_1049
AW25890	579637	WMWGREAP_1049
AW25891	579637	WMWGREAP_1049
AW25892	579637	WMWGREAP_1049
AW25893	579637	WMWGREAP_1049
AW25894	579637	WMWGREAP_1049
AW25895	579637	WMWGREAP_1049
AW25896	579847	WMWGREAP_1049
AW25897	579847	WMWGREAP_1049
AW25898	579847	WMWGREAP_1049
AW25899	579847	WMWGREAP_1049
AW25900	579847	WMWGREAP_1049
AW25901	579847	WMWGREAP_1049
AW25902	579847	WMWGREAP_1049
AW25903	579847	WMWGREAP_1049
AW25904	579847	WMWGREAP_1049
AW25905	579847	WMWGREAP_1049
AW25906	579848	WMWGREAP_1049
AW25907	579848	WMWGREAP_1049
AW25908	579848	WMWGREAP_1049
AW25909	579848	WMWGREAP_1049
AW25910	579848	WMWGREAP_1049
AW25911	579848	WMWGREAP_1049
AW25912	579848	WMWGREAP_1049
AW25913	579848	WMWGREAP_1049
AW25914	579848	WMWGREAP_1049
AW25915	579848	WMWGREAP_1049
AW25916	579849	WMWGREAP_1049
AW25917	579849	WMWGREAP_1049
AW25918	579849	WMWGREAP_1049
AW25919	579849	WMWGREAP_1049
AW25920	579849	WMWGREAP_1049

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AW25921	579849	WMWGREAP_1049
AW25922	579849	WMWGREAP_1049
AW25923	579849	WMWGREAP_1049
AW25924	579849	WMWGREAP_1049

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 for AW25895MS and AW25895MSD. Both samples were rerun due to a rise in the response signal during read time. The 2nd result for AW25895MS was reported in LabWorks. The 1st result for AW25895MSD was reported in LabWorks because the 2nd run was used as a confirmation of the 1st result.

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.

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Case Narrative

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TDS

Greene County Ash Pond

WMWGREAP_1049

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

Sample ID	Batch ID	Project ID
AW25908	578815	WMWGREAP_1049
AW25909	578814	WMWGREAP_1049
AW25910	578814	WMWGREAP_1049
AW25911	578814	WMWGREAP_1049
AW25912	578814	WMWGREAP_1049
AW25913	578814	WMWGREAP_1049
AW25914	578814	WMWGREAP_1049
AW25915	578814	WMWGREAP_1049
AW25916	578814	WMWGREAP_1049
AW25917	578814	WMWGREAP_1049
AW25918	578814	WMWGREAP_1049
AW25919	578815	WMWGREAP_1049
AW25920	578815	WMWGREAP_1049
AW25921	578815	WMWGREAP_1049
AW25922	578815	WMWGREAP_1049
AW25923	578815	WMWGREAP_1049
AW25924	578815	WMWGREAP_1049

4. All of the above samples were analyzed by Standard Method 2540C.
5. All samples were analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.
7. The reporting limit for TDS was incorrectly listed as 2.5mg/L. It has been corrected based on filter volume and project limits. Samples AW25909 and AW25924 are now reported as Not Detected.
8. Samples AW25889-25907, inclusive, will not have any TDS results due to QC failures and hold time exceedance. These will be re-sampled and reported in a separate report.

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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 AW25924 and AW25908 which were <2.5mg.

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AW25889

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	10/31/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	10/31/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010		0.100	mg/L
* Beryllium, Total	TAS	10/31/2016	EPA 200.8		5	0.00060	0.0030	J	0.000715	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1	J	0.0976	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		1	0.1	0.5		9.22	mg/L
* Cadmium, Total	TAS	10/31/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	J	0.00687	mg/L
* Chromium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/24/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	10/31/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	10/31/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	10/13/2016	EPA 300.0		1	0.04	0.25		21.8	mg/L
* Fluoride, Total	SES	10/13/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	10/13/2016	EPA 300.0		1	0.3	1		32.3	mg/L

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report
Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: REVISED COPY:
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Reported: 7/20/2017
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

Revised Copy

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Customer ID:
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Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AW25889

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25897	Lead, Total	mg/L	0.0000163	0.0022	0.10	0.114	0.119	0.111	0.085 to 0.115	114	70 to 130	4.43	20
AW25897	Selenium, Total	mg/L	0.0000471	0.0044	0.10	0.101	0.105	0.108	0.085 to 0.115	101	70 to 130	3.56	20
AW25895	Mercury, Total by CVAA	mg/L	0.0000477	0.0005	0.004	0.00369	0.00321	0.00386	0.0034 to 0.0046	92.2	70 to 130	13.7	20
AW25898	Calcium, Total	mg/L	-0.0305	0.22	5.00	35.8	35.7	4.86	4.25 to 5.75	93.4	70 to 130	0.280	20
AW25897	Barium, Total	mg/L	0.0000164	0.0044	0.10	0.141	0.152	0.104	0.085 to 0.115	98.1	70 to 130	7.56	20
AW25897	Molybdenum, Total	mg/L	0.0000495	0.0044	0.10	0.107	0.114	0.111	0.085 to 0.115	107	70 to 130	6.26	20
AW25897	Antimony, Total	mg/L	0.0000535	0.00132	0.10	0.0980	0.105	0.101	0.085 to 0.115	98.0	70 to 130	6.61	20
AW25898	Lithium, Total	mg/L	0.000217	0.022	0.20	0.591	0.590	0.207	0.17 to 0.23	102	70 to 130	0.169	20
AW25897	Beryllium, Total	mg/L	0.0000406	0.00132	0.10	0.0996	0.0958	0.106	0.085 to 0.115	99.6	70 to 130	3.92	20
AW25897	Cobalt, Total	mg/L	0.0000147	0.0044	0.10	0.117	0.125	0.109	0.085 to 0.115	102	70 to 130	6.85	20
AW25897	Arsenic, Total	mg/L	0.0000320	0.0022	0.10	0.184	0.193	0.109	0.085 to 0.115	101	70 to 130	4.77	20
AW25897	Cadmium, Total	mg/L	0.0000119	0.00044	0.10	0.103	0.109	0.107	0.085 to 0.115	103	70 to 130	5.49	20
AW25898	Boron, Total	mg/L	0.0107	0.044	1.00	1.54	1.54	0.979	0.85 to 1.15	96.8	70 to 130	0.00	20
AW25897	Chromium, Total	mg/L	0.0000239	0.0044	0.10	0.105	0.110	0.108	0.085 to 0.115	105	70 to 130	4.62	20
AW25897	Thallium, Total	mg/L	0.0000184	0.00044	0.10	0.114	0.119	0.109	0.085 to 0.115	113	70 to 130	4.70	20

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John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AW25889

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25898	Chloride, Total	mg/L	0.000	0.25	10.00	25.6	16.3	9.90	9 to 11	93.0	80 to 120	0.00	20
AW25898	Fluoride, Total	mg/L	0.000	0.3	2.00	2.04	0.114	2.01	1.8 to 2.2	96.2	80 to 120	0.873	20
AW25898	Sulfate, Total	mg/L	-0.401	1.0	20.00	72.4	53.5	20.0	18 to 22	94.5	80 to 120	0.00	20

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To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AW25890

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	10/31/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	10/31/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010		0.0352	mg/L
* Beryllium, Total	TAS	10/31/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1	J	0.0240	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		1	0.1	0.5		38.1	mg/L
* Cadmium, Total	TAS	10/31/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/24/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	10/31/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	10/31/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	10/13/2016	EPA 300.0		1	0.04	0.25		1.52	mg/L
* Fluoride, Total	SES	10/13/2016	EPA 300.0		1	0.01	0.3	J	0.059	mg/L
* Sulfate, Total	SES	10/13/2016	EPA 300.0		1	0.3	1		18.4	mg/L

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Batch QC Summary

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Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AW25890

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25897	Lead, Total	mg/L	0.0000163	0.0022	0.10	0.114	0.119	0.111	0.085 to 0.115	114	70 to 130	4.43	20
AW25897	Selenium, Total	mg/L	0.0000471	0.0044	0.10	0.101	0.105	0.108	0.085 to 0.115	101	70 to 130	3.56	20
AW25897	Chromium, Total	mg/L	0.0000239	0.0044	0.10	0.105	0.110	0.108	0.085 to 0.115	105	70 to 130	4.62	20
AW25897	Thallium, Total	mg/L	0.0000184	0.00044	0.10	0.114	0.119	0.109	0.085 to 0.115	113	70 to 130	4.70	20
AW25897	Arsenic, Total	mg/L	0.0000320	0.0022	0.10	0.184	0.193	0.109	0.085 to 0.115	101	70 to 130	4.77	20
AW25897	Cadmium, Total	mg/L	0.0000119	0.00044	0.10	0.103	0.109	0.107	0.085 to 0.115	103	70 to 130	5.49	20
AW25898	Boron, Total	mg/L	0.0107	0.044	1.00	1.54	1.54	0.979	0.85 to 1.15	96.8	70 to 130	0.00	20
AW25897	Beryllium, Total	mg/L	0.0000406	0.00132	0.10	0.0996	0.0958	0.106	0.085 to 0.115	99.6	70 to 130	3.92	20
AW25897	Cobalt, Total	mg/L	0.0000147	0.0044	0.10	0.117	0.125	0.109	0.085 to 0.115	102	70 to 130	6.85	20
AW25895	Mercury, Total by CVAA	mg/L	0.0000477	0.0005	0.004	0.00369	0.00321	0.00386	0.0034 to 0.0046	92.2	70 to 130	13.7	20
AW25898	Calcium, Total	mg/L	-0.0305	0.22	5.00	35.8	35.7	4.86	4.25 to 5.75	93.4	70 to 130	0.280	20
AW25897	Antimony, Total	mg/L	0.0000535	0.00132	0.10	0.0980	0.105	0.101	0.085 to 0.115	98.0	70 to 130	6.61	20
AW25898	Lithium, Total	mg/L	0.000217	0.022	0.20	0.591	0.590	0.207	0.17 to 0.23	102	70 to 130	0.169	20
AW25897	Barium, Total	mg/L	0.0000164	0.0044	0.10	0.141	0.152	0.104	0.085 to 0.115	98.1	70 to 130	7.56	20
AW25897	Molybdenum, Total	mg/L	0.0000495	0.0044	0.10	0.107	0.114	0.111	0.085 to 0.115	107	70 to 130	6.26	20

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Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25898	Fluoride, Total	mg/L	0.000	0.3	2.00	2.04	0.114	2.01	1.8 to 2.2	96.2	80 to 120	0.873	20
AW25898	Sulfate, Total	mg/L	-0.401	1.0	20.00	72.4	53.5	20.0	18 to 22	94.5	80 to 120	0.00	20
AW25898	Chloride, Total	mg/L	0.000	0.25	10.00	25.6	16.3	9.90	9 to 11	93.0	80 to 120	0.00	20

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To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW25891

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	10/31/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	10/31/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Beryllium, Total	TAS	10/31/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		1	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	TAS	10/31/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/24/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	10/31/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	10/31/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	10/13/2016	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	10/13/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	10/13/2016	EPA 300.0		1	0.3	1	U	Not Detected	mg/L

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AW25897	Selenium, Total	mg/L	0.0000471	0.0044	0.10	0.101	0.105	0.108	0.085 to 0.115	101	70 to 130	3.56	20
AW25897	Antimony, Total	mg/L	0.0000535	0.00132	0.10	0.0980	0.105	0.101	0.085 to 0.115	98.0	70 to 130	6.61	20
AW25898	Lithium, Total	mg/L	0.000217	0.022	0.20	0.591	0.590	0.207	0.17 to 0.23	102	70 to 130	0.169	20
AW25897	Lead, Total	mg/L	0.0000163	0.0022	0.10	0.114	0.119	0.111	0.085 to 0.115	114	70 to 130	4.43	20
AW25895	Mercury, Total by CVAA	mg/L	0.0000477	0.0005	0.004	0.00369	0.00321	0.00386	0.0034 to 0.0046	92.2	70 to 130	13.7	20
AW25898	Calcium, Total	mg/L	-0.0305	0.22	5.00	35.8	35.7	4.86	4.25 to 5.75	93.4	70 to 130	0.280	20
AW25897	Beryllium, Total	mg/L	0.0000406	0.00132	0.10	0.0996	0.0958	0.106	0.085 to 0.115	99.6	70 to 130	3.92	20
AW25897	Cobalt, Total	mg/L	0.0000147	0.0044	0.10	0.117	0.125	0.109	0.085 to 0.115	102	70 to 130	6.85	20
AW25897	Arsenic, Total	mg/L	0.0000320	0.0022	0.10	0.184	0.193	0.109	0.085 to 0.115	101	70 to 130	4.77	20
AW25897	Cadmium, Total	mg/L	0.0000119	0.00044	0.10	0.103	0.109	0.107	0.085 to 0.115	103	70 to 130	5.49	20
AW25898	Boron, Total	mg/L	0.0107	0.044	1.00	1.54	1.54	0.979	0.85 to 1.15	96.8	70 to 130	0.00	20
AW25897	Barium, Total	mg/L	0.0000164	0.0044	0.10	0.141	0.152	0.104	0.085 to 0.115	98.1	70 to 130	7.56	20
AW25897	Molybdenum, Total	mg/L	0.0000495	0.0044	0.10	0.107	0.114	0.111	0.085 to 0.115	107	70 to 130	6.26	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: REVISED COPY:
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Reported: 7/20/2017
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

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW25891

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25898	Chloride, Total	mg/L	0.000	0.25	10.00	25.6	16.3	9.90	9 to 11	93.0	80 to 120	0.00	20
AW25898	Fluoride, Total	mg/L	0.000	0.3	2.00	2.04	0.114	2.01	1.8 to 2.2	96.2	80 to 120	0.873	20
AW25898	Sulfate, Total	mg/L	-0.401	1.0	20.00	72.4	53.5	20.0	18 to 22	94.5	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: REVISED COPY:
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

CC:

Reported: 7/20/2017
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

Lab & Field SERVICES

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AW25892

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	10/31/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	10/31/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010		0.0420	mg/L
* Beryllium, Total	TAS	10/31/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		1	0.1	0.5		8.84	mg/L
* Cadmium, Total	TAS	10/31/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/24/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	10/31/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	10/31/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	10/13/2016	EPA 300.0		1	0.04	0.25		3.78	mg/L
* Fluoride, Total	SES	10/13/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	10/13/2016	EPA 300.0		1	0.3	1		19.8	mg/L

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

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report
Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: REVISED COPY:
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Reported: 7/20/2017
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

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AW25892

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25897	Lead, Total	mg/L	0.0000163	0.0022	0.10	0.114	0.119	0.111	0.085 to 0.115	114	70 to 130	4.43	20
AW25897	Barium, Total	mg/L	0.0000164	0.0044	0.10	0.141	0.152	0.104	0.085 to 0.115	98.1	70 to 130	7.56	20
AW25897	Molybdenum, Total	mg/L	0.0000495	0.0044	0.10	0.107	0.114	0.111	0.085 to 0.115	107	70 to 130	6.26	20
AW25897	Beryllium, Total	mg/L	0.0000406	0.00132	0.10	0.0996	0.0958	0.106	0.085 to 0.115	99.6	70 to 130	3.92	20
AW25897	Cobalt, Total	mg/L	0.0000147	0.0044	0.10	0.117	0.125	0.109	0.085 to 0.115	102	70 to 130	6.85	20
AW25897	Chromium, Total	mg/L	0.0000239	0.0044	0.10	0.105	0.110	0.108	0.085 to 0.115	105	70 to 130	4.62	20
AW25897	Thallium, Total	mg/L	0.0000184	0.00044	0.10	0.114	0.119	0.109	0.085 to 0.115	113	70 to 130	4.70	20
AW25897	Antimony, Total	mg/L	0.0000535	0.00132	0.10	0.0980	0.105	0.101	0.085 to 0.115	98.0	70 to 130	6.61	20
AW25898	Lithium, Total	mg/L	0.000217	0.022	0.20	0.591	0.590	0.207	0.17 to 0.23	102	70 to 130	0.169	20
AW25897	Selenium, Total	mg/L	0.0000471	0.0044	0.10	0.101	0.105	0.108	0.085 to 0.115	101	70 to 130	3.56	20
AW25897	Arsenic, Total	mg/L	0.0000320	0.0022	0.10	0.184	0.193	0.109	0.085 to 0.115	101	70 to 130	4.77	20
AW25897	Cadmium, Total	mg/L	0.0000119	0.00044	0.10	0.103	0.109	0.107	0.085 to 0.115	103	70 to 130	5.49	20
AW25898	Boron, Total	mg/L	0.0107	0.044	1.00	1.54	1.54	0.979	0.85 to 1.15	96.8	70 to 130	0.00	20
AW25895	Mercury, Total by CVAA	mg/L	0.0000477	0.0005	0.004	0.00369	0.00321	0.00386	0.0034 to 0.0046	92.2	70 to 130	13.7	20
AW25898	Calcium, Total	mg/L	-0.0305	0.22	5.00	35.8	35.7	4.86	4.25 to 5.75	93.4	70 to 130	0.280	20

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report
Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: REVISED COPY:
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Reported: 7/20/2017
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

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AW25892

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25898	Fluoride, Total	mg/L	0.000	0.3	2.00	2.04	0.114	2.01	1.8 to 2.2	96.2	80 to 120	0.873	20
AW25898	Sulfate, Total	mg/L	-0.401	1.0	20.00	72.4	53.5	20.0	18 to 22	94.5	80 to 120	0.00	20
AW25898	Chloride, Total	mg/L	0.000	0.25	10.00	25.6	16.3	9.90	9 to 11	93.0	80 to 120	0.00	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: REVISED COPY:
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

CC:

Reported: 7/20/2017
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

Lab & Field SERVICES

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-24 Dup

Laboratory ID Number: AW25893

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	10/31/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	10/31/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010		0.0434	mg/L
* Beryllium, Total	TAS	10/31/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		1	0.1	0.5		8.85	mg/L
* Cadmium, Total	TAS	10/31/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/24/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	10/31/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	10/31/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	10/13/2016	EPA 300.0		1	0.04	0.25		3.77	mg/L
* Fluoride, Total	SES	10/13/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	10/13/2016	EPA 300.0		1	0.3	1		19.8	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: REVISED COPY:
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Reported: 7/20/2017
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

Revised Copy

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-24 Dup

Laboratory ID Number: AW25893

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25897	Chromium, Total	mg/L	0.0000239	0.0044	0.10	0.105	0.110	0.108	0.085 to 0.115	105	70 to 130	4.62	20
AW25897	Thallium, Total	mg/L	0.0000184	0.00044	0.10	0.114	0.119	0.109	0.085 to 0.115	113	70 to 130	4.70	20
AW25897	Barium, Total	mg/L	0.0000164	0.0044	0.10	0.141	0.152	0.104	0.085 to 0.115	98.1	70 to 130	7.56	20
AW25897	Molybdenum, Total	mg/L	0.0000495	0.0044	0.10	0.107	0.114	0.111	0.085 to 0.115	107	70 to 130	6.26	20
AW25897	Lead, Total	mg/L	0.0000163	0.0022	0.10	0.114	0.119	0.111	0.085 to 0.115	114	70 to 130	4.43	20
AW25897	Antimony, Total	mg/L	0.0000535	0.00132	0.10	0.0980	0.105	0.101	0.085 to 0.115	98.0	70 to 130	6.61	20
AW25898	Lithium, Total	mg/L	0.000217	0.022	0.20	0.591	0.590	0.207	0.17 to 0.23	102	70 to 130	0.169	20
AW25895	Mercury, Total by CVAA	mg/L	0.0000477	0.0005	0.004	0.00369	0.00321	0.00386	0.0034 to 0.0046	92.2	70 to 130	13.7	20
AW25898	Calcium, Total	mg/L	-0.0305	0.22	5.00	35.8	35.7	4.86	4.25 to 5.75	93.4	70 to 130	0.280	20
AW25897	Arsenic, Total	mg/L	0.0000320	0.0022	0.10	0.184	0.193	0.109	0.085 to 0.115	101	70 to 130	4.77	20
AW25897	Cadmium, Total	mg/L	0.0000119	0.00044	0.10	0.103	0.109	0.107	0.085 to 0.115	103	70 to 130	5.49	20
AW25898	Boron, Total	mg/L	0.0107	0.044	1.00	1.54	1.54	0.979	0.85 to 1.15	96.8	70 to 130	0.00	20
AW25897	Beryllium, Total	mg/L	0.0000406	0.00132	0.10	0.0996	0.0958	0.106	0.085 to 0.115	99.6	70 to 130	3.92	20
AW25897	Cobalt, Total	mg/L	0.0000147	0.0044	0.10	0.117	0.125	0.109	0.085 to 0.115	102	70 to 130	6.85	20
AW25897	Selenium, Total	mg/L	0.0000471	0.0044	0.10	0.101	0.105	0.108	0.085 to 0.115	101	70 to 130	3.56	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: REVISED COPY:
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Reported: 7/20/2017
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

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-24 Dup

Laboratory ID Number: AW25893

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25898	Chloride, Total	mg/L	0.000	0.25	10.00	25.6	16.3	9.90	9 to 11	93.0	80 to 120	0.00	20
AW25898	Fluoride, Total	mg/L	0.000	0.3	2.00	2.04	0.114	2.01	1.8 to 2.2	96.2	80 to 120	0.873	20
AW25898	Sulfate, Total	mg/L	-0.401	1.0	20.00	72.4	53.5	20.0	18 to 22	94.5	80 to 120	0.00	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: REVISED COPY:
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

CC:

Reported: 7/20/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AW25894

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	10/31/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	10/31/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010		0.0291	mg/L
* Beryllium, Total	TAS	10/31/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1		0.456	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		10	1.0	5.0		52.7	mg/L
* Cadmium, Total	TAS	10/31/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010		0.0162	mg/L
* Chromium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/24/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05		0.727	mg/L
* Molybdenum, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	10/31/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	10/31/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	10/13/2016	EPA 300.0		1	0.04	0.25		10.2	mg/L
* Fluoride, Total	SES	10/13/2016	EPA 300.0		1	0.01	0.3	J	0.096	mg/L
* Sulfate, Total	SES	10/14/2016	EPA 300.0		10	3.0	10		216	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: 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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AW25894

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25895	Mercury, Total by CVAA	mg/L	0.0000477	0.0005	0.004	0.00369	0.00321	0.00386	0.0034 to 0.0046	92.2	70 to 130	13.7	20
AW25898	Calcium, Total	mg/L	-0.0305	0.22	5.00	35.8	35.7	4.86	4.25 to 5.75	93.4	70 to 130	0.280	20
AW25897	Lead, Total	mg/L	0.0000163	0.0022	0.10	0.114	0.119	0.111	0.085 to 0.115	114	70 to 130	4.43	20
AW25897	Beryllium, Total	mg/L	0.0000406	0.00132	0.10	0.0996	0.0958	0.106	0.085 to 0.115	99.6	70 to 130	3.92	20
AW25897	Cobalt, Total	mg/L	0.0000147	0.0044	0.10	0.117	0.125	0.109	0.085 to 0.115	102	70 to 130	6.85	20
AW25897	Antimony, Total	mg/L	0.0000535	0.00132	0.10	0.0980	0.105	0.101	0.085 to 0.115	98.0	70 to 130	6.61	20
AW25898	Lithium, Total	mg/L	0.000217	0.022	0.20	0.591	0.590	0.207	0.17 to 0.23	102	70 to 130	0.169	20
AW25897	Barium, Total	mg/L	0.0000164	0.0044	0.10	0.141	0.152	0.104	0.085 to 0.115	98.1	70 to 130	7.56	20
AW25897	Molybdenum, Total	mg/L	0.0000495	0.0044	0.10	0.107	0.114	0.111	0.085 to 0.115	107	70 to 130	6.26	20
AW25897	Selenium, Total	mg/L	0.0000471	0.0044	0.10	0.101	0.105	0.108	0.085 to 0.115	101	70 to 130	3.56	20
AW25897	Arsenic, Total	mg/L	0.0000320	0.0022	0.10	0.184	0.193	0.109	0.085 to 0.115	101	70 to 130	4.77	20
AW25897	Cadmium, Total	mg/L	0.0000119	0.00044	0.10	0.103	0.109	0.107	0.085 to 0.115	103	70 to 130	5.49	20
AW25898	Boron, Total	mg/L	0.0107	0.044	1.00	1.54	1.54	0.979	0.85 to 1.15	96.8	70 to 130	0.00	20
AW25897	Chromium, Total	mg/L	0.0000239	0.0044	0.10	0.105	0.110	0.108	0.085 to 0.115	105	70 to 130	4.62	20
AW25897	Thallium, Total	mg/L	0.0000184	0.00044	0.10	0.114	0.119	0.109	0.085 to 0.115	113	70 to 130	4.70	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: 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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AW25894

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25898	Fluoride, Total	mg/L	0.000	0.3	2.00	2.04	0.114	2.01	1.8 to 2.2	96.2	80 to 120	0.873	20
AW25898	Sulfate, Total	mg/L	-0.401	1.0	20.00	72.4	53.5	20.0	18 to 22	94.5	80 to 120	0.00	20
AW25898	Chloride, Total	mg/L	0.000	0.25	10.00	25.6	16.3	9.90	9 to 11	93.0	80 to 120	0.00	20

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The result for Cd has been correctly changed to Not Detected. SGC 3/20/17

CC:

Reported: 7/20/2017
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

Lab & Field SERVICES

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AW25895

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	10/31/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	10/31/2016	EPA 200.8		5	0.0010	0.005		0.109	mg/L
* Barium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010		0.126	mg/L
* Beryllium, Total	TAS	10/31/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1		1.77	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		10	1.0	5.0		82.9	mg/L
* Cadmium, Total	TAS	10/31/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010		0.0206	mg/L
* Chromium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/24/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05		0.560	mg/L
* Molybdenum, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	10/31/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	10/31/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	10/13/2016	EPA 300.0		1	0.04	0.25		22.1	mg/L
* Fluoride, Total	SES	10/13/2016	EPA 300.0		1	0.01	0.3	J	0.120	mg/L
* Sulfate, Total	SES	10/13/2016	EPA 300.0		1	0.3	1		36.6	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: REVISED COPY:
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Reported: 7/20/2017
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

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AW25895

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25897	Selenium, Total	mg/L	0.0000471	0.0044	0.10	0.101	0.105	0.108	0.085 to 0.115	101	70 to 130	3.56	20
AW25895	Mercury, Total by CVAA	mg/L	0.0000477	0.0005	0.004	0.00369	0.00321	0.00386	0.0034 to 0.0046	92.2	70 to 130	13.7	20
AW25898	Calcium, Total	mg/L	-0.0305	0.22	5.00	35.8	35.7	4.86	4.25 to 5.75	93.4	70 to 130	0.280	20
AW25897	Antimony, Total	mg/L	0.0000535	0.00132	0.10	0.0980	0.105	0.101	0.085 to 0.115	98.0	70 to 130	6.61	20
AW25898	Lithium, Total	mg/L	0.000217	0.022	0.20	0.591	0.590	0.207	0.17 to 0.23	102	70 to 130	0.169	20
AW25897	Beryllium, Total	mg/L	0.0000406	0.00132	0.10	0.0996	0.0958	0.106	0.085 to 0.115	99.6	70 to 130	3.92	20
AW25897	Cobalt, Total	mg/L	0.0000147	0.0044	0.10	0.117	0.125	0.109	0.085 to 0.115	102	70 to 130	6.85	20
AW25897	Barium, Total	mg/L	0.0000164	0.0044	0.10	0.141	0.152	0.104	0.085 to 0.115	98.1	70 to 130	7.56	20
AW25897	Molybdenum, Total	mg/L	0.0000495	0.0044	0.10	0.107	0.114	0.111	0.085 to 0.115	107	70 to 130	6.26	20
AW25897	Chromium, Total	mg/L	0.0000239	0.0044	0.10	0.105	0.110	0.108	0.085 to 0.115	105	70 to 130	4.62	20
AW25897	Thallium, Total	mg/L	0.0000184	0.00044	0.10	0.114	0.119	0.109	0.085 to 0.115	113	70 to 130	4.70	20
AW25897	Arsenic, Total	mg/L	0.0000320	0.0022	0.10	0.184	0.193	0.109	0.085 to 0.115	101	70 to 130	4.77	20
AW25897	Cadmium, Total	mg/L	0.0000119	0.00044	0.10	0.103	0.109	0.107	0.085 to 0.115	103	70 to 130	5.49	20
AW25898	Boron, Total	mg/L	0.0107	0.044	1.00	1.54	1.54	0.979	0.85 to 1.15	96.8	70 to 130	0.00	20
AW25897	Lead, Total	mg/L	0.0000163	0.0022	0.10	0.114	0.119	0.111	0.085 to 0.115	114	70 to 130	4.43	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: REVISED COPY:
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Reported: 7/20/2017
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

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AW25895

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25898	Fluoride, Total	mg/L	0.000	0.3	2.00	2.04	0.114	2.01	1.8 to 2.2	96.2	80 to 120	0.873	20
AW25898	Sulfate, Total	mg/L	-0.401	1.0	20.00	72.4	53.5	20.0	18 to 22	94.5	80 to 120	0.00	20
AW25898	Chloride, Total	mg/L	0.000	0.25	10.00	25.6	16.3	9.90	9 to 11	93.0	80 to 120	0.00	20

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AW25896

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	10/31/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	10/31/2016	EPA 200.8		5	0.0010	0.005		0.243	mg/L
* Barium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010		0.0995	mg/L
* Beryllium, Total	TAS	10/31/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1		2.12	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		10	1.0	5.0		57.6	mg/L
* Cadmium, Total	TAS	10/31/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010		0.0204	mg/L
* Chromium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05		0.622	mg/L
* Molybdenum, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010		0.111	mg/L
* Lead, Total	TAS	10/31/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	10/31/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	10/13/2016	EPA 300.0		1	0.04	0.25		18.5	mg/L
* Fluoride, Total	SES	10/13/2016	EPA 300.0		1	0.01	0.3		0.377	mg/L
* Sulfate, Total	SES	10/13/2016	EPA 300.0		1	0.3	1		72.6	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

Revised Copy

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AW25896

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25897	Selenium, Total	mg/L	0.0000471	0.0044	0.10	0.101	0.105	0.108	0.085 to 0.115	101	70 to 130	3.56	20
AW25898	Calcium, Total	mg/L	-0.0305	0.22	5.00	35.8	35.7	4.86	4.25 to 5.75	93.4	70 to 130	0.280	20
AW25897	Antimony, Total	mg/L	0.0000535	0.00132	0.10	0.0980	0.105	0.101	0.085 to 0.115	98.0	70 to 130	6.61	20
AW25898	Lithium, Total	mg/L	0.000217	0.022	0.20	0.591	0.590	0.207	0.17 to 0.23	102	70 to 130	0.169	20
AW25897	Barium, Total	mg/L	0.0000164	0.0044	0.10	0.141	0.152	0.104	0.085 to 0.115	98.1	70 to 130	7.56	20
AW25897	Molybdenum, Total	mg/L	0.0000495	0.0044	0.10	0.107	0.114	0.111	0.085 to 0.115	107	70 to 130	6.26	20
AW25897	Chromium, Total	mg/L	0.0000239	0.0044	0.10	0.105	0.110	0.108	0.085 to 0.115	105	70 to 130	4.62	20
AW25897	Thallium, Total	mg/L	0.0000184	0.00044	0.10	0.114	0.119	0.109	0.085 to 0.115	113	70 to 130	4.70	20
AW25897	Beryllium, Total	mg/L	0.0000406	0.00132	0.10	0.0996	0.0958	0.106	0.085 to 0.115	99.6	70 to 130	3.92	20
AW25897	Cobalt, Total	mg/L	0.0000147	0.0044	0.10	0.117	0.125	0.109	0.085 to 0.115	102	70 to 130	6.85	20
AW25905	Mercury, Total by CVAA	mg/L	0.0000586	0.0005	0.004	0.00386	0.00386	0.00388	0.0034 to 0.0046	96.6	70 to 130	0.150	20
AW25897	Arsenic, Total	mg/L	0.0000320	0.0022	0.10	0.184	0.193	0.109	0.085 to 0.115	101	70 to 130	4.77	20
AW25897	Cadmium, Total	mg/L	0.0000119	0.00044	0.10	0.103	0.109	0.107	0.085 to 0.115	103	70 to 130	5.49	20
AW25898	Boron, Total	mg/L	0.0107	0.044	1.00	1.54	1.54	0.979	0.85 to 1.15	96.8	70 to 130	0.00	20
AW25897	Lead, Total	mg/L	0.0000163	0.0022	0.10	0.114	0.119	0.111	0.085 to 0.115	114	70 to 130	4.43	20

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AW25896

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25898	Chloride, Total	mg/L	0.000	0.25	10.00	25.6	16.3	9.90	9 to 11	93.0	80 to 120	0.00	20
AW25898	Fluoride, Total	mg/L	0.000	0.3	2.00	2.04	0.114	2.01	1.8 to 2.2	96.2	80 to 120	0.873	20
AW25898	Sulfate, Total	mg/L	-0.401	1.0	20.00	72.4	53.5	20.0	18 to 22	94.5	80 to 120	0.00	20

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Certificate Of Analysis

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Lab & Field SERVICES

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AW25897

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	10/31/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	10/31/2016	EPA 200.8		5	0.0010	0.005		0.0831	mg/L
* Barium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010		0.0431	mg/L
* Beryllium, Total	TAS	10/31/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1		1.37	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		10	1.0	5.0		56.6	mg/L
* Cadmium, Total	TAS	10/31/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010		0.0147	mg/L
* Chromium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05		0.589	mg/L
* Molybdenum, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	10/31/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	10/31/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	10/31/2016	EPA 200.8		5	0.00020	0.0010	J	0.000322	mg/L
General Characteristics										
* Chloride, Total	SES	10/13/2016	EPA 300.0		1	0.04	0.25		13.8	mg/L
* Fluoride, Total	SES	10/13/2016	EPA 300.0		1	0.01	0.3	J	0.187	mg/L
* Sulfate, Total	SES	10/14/2016	EPA 300.0		2	0.6	2		99.3	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: REVISED COPY:
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Reported: 7/20/2017
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

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AW25897

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25898	Calcium, Total	mg/L	-0.0305	0.22	5.00	35.8	35.7	4.86	4.25 to 5.75	93.4	70 to 130	0.280	20
AW25897	Lead, Total	mg/L	0.0000163	0.0022	0.10	0.114	0.119	0.111	0.085 to 0.115	114	70 to 130	4.43	20
AW25897	Selenium, Total	mg/L	0.0000471	0.0044	0.10	0.101	0.105	0.108	0.085 to 0.115	101	70 to 130	3.56	20
AW25897	Beryllium, Total	mg/L	0.0000406	0.00132	0.10	0.0996	0.0958	0.106	0.085 to 0.115	99.6	70 to 130	3.92	20
AW25897	Cobalt, Total	mg/L	0.0000147	0.0044	0.10	0.117	0.125	0.109	0.085 to 0.115	102	70 to 130	6.85	20
AW25905	Mercury, Total by CVAA	mg/L	0.0000586	0.0005	0.004	0.00386	0.00386	0.00388	0.0034 to 0.0046	96.6	70 to 130	0.150	20
AW25897	Barium, Total	mg/L	0.0000164	0.0044	0.10	0.141	0.152	0.104	0.085 to 0.115	98.1	70 to 130	7.56	20
AW25897	Molybdenum, Total	mg/L	0.0000495	0.0044	0.10	0.107	0.114	0.111	0.085 to 0.115	107	70 to 130	6.26	20
AW25897	Arsenic, Total	mg/L	0.0000320	0.0022	0.10	0.184	0.193	0.109	0.085 to 0.115	101	70 to 130	4.77	20
AW25897	Cadmium, Total	mg/L	0.0000119	0.00044	0.10	0.103	0.109	0.107	0.085 to 0.115	103	70 to 130	5.49	20
AW25898	Boron, Total	mg/L	0.0107	0.044	1.00	1.54	1.54	0.979	0.85 to 1.15	96.8	70 to 130	0.00	20
AW25897	Chromium, Total	mg/L	0.0000239	0.0044	0.10	0.105	0.110	0.108	0.085 to 0.115	105	70 to 130	4.62	20
AW25897	Thallium, Total	mg/L	0.0000184	0.00044	0.10	0.114	0.119	0.109	0.085 to 0.115	113	70 to 130	4.70	20
AW25897	Antimony, Total	mg/L	0.0000535	0.00132	0.10	0.0980	0.105	0.101	0.085 to 0.115	98.0	70 to 130	6.61	20
AW25898	Lithium, Total	mg/L	0.000217	0.022	0.20	0.591	0.590	0.207	0.17 to 0.23	102	70 to 130	0.169	20

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To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AW25897

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25898	Chloride, Total	mg/L	0.000	0.25	10.00	25.6	16.3	9.90	9 to 11	93.0	80 to 120	0.00	20
AW25898	Fluoride, Total	mg/L	0.000	0.3	2.00	2.04	0.114	2.01	1.8 to 2.2	96.2	80 to 120	0.873	20
AW25898	Sulfate, Total	mg/L	-0.401	1.0	20.00	72.4	53.5	20.0	18 to 22	94.5	80 to 120	0.00	20

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AW25898

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005		0.0254	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0454	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1		0.569	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		1	0.1	0.5		31.1	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	J	0.00497	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05		0.387	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0289	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	10/13/2016	EPA 300.0		1	0.04	0.25		16.3	mg/L
* Fluoride, Total	SES	10/13/2016	EPA 300.0		1	0.01	0.3	J	0.115	mg/L
* Sulfate, Total	SES	10/13/2016	EPA 300.0		1	0.3	1		53.5	mg/L

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Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AW25898

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25898	Calcium, Total	mg/L	-0.0305	0.22	5.00	35.8	35.7	4.86	4.25 to 5.75	93.4	70 to 130	0.280	20
AW25907	Cadmium, Total	mg/L	0.0000175	0.00044	0.10	0.102	0.101	0.0987	0.085 to 0.115	102	70 to 130	1.67	20
AW25907	Antimony, Total	mg/L	0.0000440	0.00132	0.10	0.0967	0.0955	0.0949	0.085 to 0.115	96.7	70 to 130	1.30	20
AW25907	Cobalt, Total	mg/L	0.0000124	0.0044	0.10	0.104	0.104	0.0969	0.085 to 0.115	99.8	70 to 130	0.202	20
AW25898	Lithium, Total	mg/L	0.000217	0.022	0.20	0.591	0.590	0.207	0.17 to 0.23	102	70 to 130	0.169	20
AW25907	Arsenic, Total	mg/L	0.0000245	0.0022	0.10	0.100	0.102	0.0991	0.085 to 0.115	100	70 to 130	1.32	20
AW25907	Barium, Total	mg/L	0.0000154	0.0044	0.10	0.445	0.444	0.0967	0.085 to 0.115	98.3	70 to 130	0.144	20
AW25898	Boron, Total	mg/L	0.0107	0.044	1.00	1.54	1.54	0.979	0.85 to 1.15	96.8	70 to 130	0.00	20
AW25905	Mercury, Total by CVAA	mg/L	0.0000586	0.0005	0.004	0.00386	0.00386	0.00388	0.0034 to 0.0046	96.6	70 to 130	0.150	20
AW25907	Beryllium, Total	mg/L	0.0000761	0.00132	0.10	0.105	0.103	0.0917	0.085 to 0.115	105	70 to 130	2.60	20
AW25907	Selenium, Total	mg/L	0.0000461	0.0044	0.10	0.0987	0.0986	0.0993	0.085 to 0.115	98.7	70 to 130	0.124	20
AW25907	Chromium, Total	mg/L	0.0000215	0.0044	0.10	0.101	0.101	0.0960	0.085 to 0.115	101	70 to 130	0.196	20
AW25907	Lead, Total	mg/L	0.0000137	0.0022	0.10	0.106	0.107	0.101	0.085 to 0.115	106	70 to 130	0.995	20
AW25907	Molybdenum, Total	mg/L	0.0000419	0.0044	0.10	0.0999	0.0998	0.0961	0.085 to 0.115	99.9	70 to 130	0.0834	20
AW25907	Thallium, Total	mg/L	0.0000128	0.00044	0.10	0.106	0.106	0.100	0.085 to 0.115	106	70 to 130	0.0426	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

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Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AW25898

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25898	Fluoride, Total	mg/L	0.000	0.3	2.00	2.04	0.114	2.01	1.8 to 2.2	96.2	80 to 120	0.873	20
AW25898	Sulfate, Total	mg/L	-0.401	1.0	20.00	72.4	53.5	20.0	18 to 22	94.5	80 to 120	0.00	20
AW25898	Chloride, Total	mg/L	0.000	0.25	10.00	25.6	16.3	9.90	9 to 11	93.0	80 to 120	0.00	20

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW25899

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		1	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	10/13/2016	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	10/13/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	10/13/2016	EPA 300.0		1	0.3	1	U	Not Detected	mg/L

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Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW25899

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25907	Cadmium, Total	mg/L	0.0000175	0.00044	0.10	0.102	0.101	0.0987	0.085 to 0.115	102	70 to 130	1.67	20
AW25907	Chromium, Total	mg/L	0.0000215	0.0044	0.10	0.101	0.101	0.0960	0.085 to 0.115	101	70 to 130	0.196	20
AW25907	Lead, Total	mg/L	0.0000137	0.0022	0.10	0.106	0.107	0.101	0.085 to 0.115	106	70 to 130	0.995	20
AW25907	Molybdenum, Total	mg/L	0.0000419	0.0044	0.10	0.0999	0.0998	0.0961	0.085 to 0.115	99.9	70 to 130	0.0834	20
AW25907	Thallium, Total	mg/L	0.0000128	0.00044	0.10	0.106	0.106	0.100	0.085 to 0.115	106	70 to 130	0.0426	20
AW25905	Mercury, Total by CVAA	mg/L	0.0000586	0.0005	0.004	0.00386	0.00386	0.00388	0.0034 to 0.0046	96.6	70 to 130	0.150	20
AW25907	Beryllium, Total	mg/L	0.0000761	0.00132	0.10	0.105	0.103	0.0917	0.085 to 0.115	105	70 to 130	2.60	20
AW25907	Selenium, Total	mg/L	0.0000461	0.0044	0.10	0.0987	0.0986	0.0993	0.085 to 0.115	98.7	70 to 130	0.124	20
AW25907	Antimony, Total	mg/L	0.0000440	0.00132	0.10	0.0967	0.0955	0.0949	0.085 to 0.115	96.7	70 to 130	1.30	20
AW25907	Cobalt, Total	mg/L	0.0000124	0.0044	0.10	0.104	0.104	0.0969	0.085 to 0.115	99.8	70 to 130	0.202	20
AW25908	Boron, Total	mg/L	0.0161	0.044	1.00	0.965	0.983	0.979	0.85 to 1.15	96.5	70 to 130	1.85	20
AW25907	Arsenic, Total	mg/L	0.0000245	0.0022	0.10	0.100	0.102	0.0991	0.085 to 0.115	100	70 to 130	1.32	20
AW25907	Barium, Total	mg/L	0.0000154	0.0044	0.10	0.445	0.444	0.0967	0.085 to 0.115	98.3	70 to 130	0.144	20
AW25908	Calcium, Total	mg/L	-0.0313	0.22	5.00	4.86	4.94	4.85	4.25 to 5.75	97.2	70 to 130	1.63	20
AW25908	Lithium, Total	mg/L	0.000225	0.022	0.20	0.205	0.201	0.205	0.17 to 0.23	102	70 to 130	1.97	20

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Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW25899

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25908	Sulfate, Total	mg/L	-0.400	1.0	20.00	20.6	-0.399	20.8	18 to 22	103	80 to 120	0	20
AW25908	Fluoride, Total	mg/L	0.000	0.3	2.00	2.18	0.000	2.19	1.8 to 2.2	109	80 to 120	0	20
AW25908	Chloride, Total	mg/L	0.000	0.25	10.00	9.78	0.000	9.89	9 to 11	97.8	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: REVISED COPY:
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

CC:

Reported: 7/20/2017
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

Lab & Field SERVICES

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AW25900

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	J	0.00114	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005		0.0117	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.112	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1		0.244	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		1	0.1	0.5		29.5	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05		0.282	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.114	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	J	0.00431	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	J	0.000532	mg/L
General Characteristics										
* Chloride, Total	SES	10/13/2016	EPA 300.0		1	0.04	0.25		18.5	mg/L
* Fluoride, Total	SES	10/13/2016	EPA 300.0		1	0.01	0.3	J	0.149	mg/L
* Sulfate, Total	SES	10/14/2016	EPA 300.0		2	0.6	2		99.3	mg/L

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Expiration: June 30, 2018

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Version: 2.0

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Calera, AL 35040
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FAX (205) 257-1654

Batch QC Summary

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Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AW25900

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25907	Arsenic, Total	mg/L	0.0000245	0.0022	0.10	0.100	0.102	0.0991	0.085 to 0.115	100	70 to 130	1.32	20
AW25907	Barium, Total	mg/L	0.0000154	0.0044	0.10	0.445	0.444	0.0967	0.085 to 0.115	98.3	70 to 130	0.144	20
AW25908	Calcium, Total	mg/L	-0.0313	0.22	5.00	4.86	4.94	4.85	4.25 to 5.75	97.2	70 to 130	1.63	20
AW25908	Lithium, Total	mg/L	0.000225	0.022	0.20	0.205	0.201	0.205	0.17 to 0.23	102	70 to 130	1.97	20
AW25905	Mercury, Total by CVAA	mg/L	0.0000586	0.0005	0.004	0.00386	0.00386	0.00388	0.0034 to 0.0046	96.6	70 to 130	0.150	20
AW25907	Beryllium, Total	mg/L	0.0000761	0.00132	0.10	0.105	0.103	0.0917	0.085 to 0.115	105	70 to 130	2.60	20
AW25907	Selenium, Total	mg/L	0.0000461	0.0044	0.10	0.0987	0.0986	0.0993	0.085 to 0.115	98.7	70 to 130	0.124	20
AW25907	Antimony, Total	mg/L	0.0000440	0.00132	0.10	0.0967	0.0955	0.0949	0.085 to 0.115	96.7	70 to 130	1.30	20
AW25907	Cobalt, Total	mg/L	0.0000124	0.0044	0.10	0.104	0.104	0.0969	0.085 to 0.115	99.8	70 to 130	0.202	20
AW25908	Boron, Total	mg/L	0.0161	0.044	1.00	0.965	0.983	0.979	0.85 to 1.15	96.5	70 to 130	1.85	20
AW25907	Chromium, Total	mg/L	0.0000215	0.0044	0.10	0.101	0.101	0.0960	0.085 to 0.115	101	70 to 130	0.196	20
AW25907	Lead, Total	mg/L	0.0000137	0.0022	0.10	0.106	0.107	0.101	0.085 to 0.115	106	70 to 130	0.995	20
AW25907	Molybdenum, Total	mg/L	0.0000419	0.0044	0.10	0.0999	0.0998	0.0961	0.085 to 0.115	99.9	70 to 130	0.0834	20
AW25907	Thallium, Total	mg/L	0.0000128	0.00044	0.10	0.106	0.106	0.100	0.085 to 0.115	106	70 to 130	0.0426	20
AW25907	Cadmium, Total	mg/L	0.0000175	0.00044	0.10	0.102	0.101	0.0987	0.085 to 0.115	102	70 to 130	1.67	20

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Expiration: June 30, 2018

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Calera, AL 35040
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FAX (205) 257-1654

Batch QC Summary

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Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AW25900

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25908	Chloride, Total	mg/L	0.000	0.25	10.00	9.78	0.000	9.89	9 to 11	97.8	80 to 120	0	20
AW25908	Fluoride, Total	mg/L	0.000	0.3	2.00	2.18	0.000	2.19	1.8 to 2.2	109	80 to 120	0	20
AW25908	Sulfate, Total	mg/L	-0.400	1.0	20.00	20.6	-0.399	20.8	18 to 22	103	80 to 120	0	20

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Calera, AL 35040
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AW25901

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0128	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		1	0.1	0.5		9.31	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	10/13/2016	EPA 300.0		1	0.04	0.25		4.07	mg/L
* Fluoride, Total	SES	10/13/2016	EPA 300.0		1	0.01	0.3	J	0.011	mg/L
* Sulfate, Total	SES	10/13/2016	EPA 300.0		1	0.3	1		1.38	mg/L

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FAX (205) 257-1654

Batch QC Summary

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Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AW25901

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25907	Cadmium, Total	mg/L	0.0000175	0.00044	0.10	0.102	0.101	0.0987	0.085 to 0.115	102	70 to 130	1.67	20
AW25907	Arsenic, Total	mg/L	0.0000245	0.0022	0.10	0.100	0.102	0.0991	0.085 to 0.115	100	70 to 130	1.32	20
AW25907	Barium, Total	mg/L	0.0000154	0.0044	0.10	0.445	0.444	0.0967	0.085 to 0.115	98.3	70 to 130	0.144	20
AW25908	Calcium, Total	mg/L	-0.0313	0.22	5.00	4.86	4.94	4.85	4.25 to 5.75	97.2	70 to 130	1.63	20
AW25908	Lithium, Total	mg/L	0.000225	0.022	0.20	0.205	0.201	0.205	0.17 to 0.23	102	70 to 130	1.97	20
AW25907	Antimony, Total	mg/L	0.0000440	0.00132	0.10	0.0967	0.0955	0.0949	0.085 to 0.115	96.7	70 to 130	1.30	20
AW25907	Cobalt, Total	mg/L	0.0000124	0.0044	0.10	0.104	0.104	0.0969	0.085 to 0.115	99.8	70 to 130	0.202	20
AW25908	Boron, Total	mg/L	0.0161	0.044	1.00	0.965	0.983	0.979	0.85 to 1.15	96.5	70 to 130	1.85	20
AW25905	Mercury, Total by CVAA	mg/L	0.0000586	0.0005	0.004	0.00386	0.00386	0.00388	0.0034 to 0.0046	96.6	70 to 130	0.150	20
AW25907	Beryllium, Total	mg/L	0.0000761	0.00132	0.10	0.105	0.103	0.0917	0.085 to 0.115	105	70 to 130	2.60	20
AW25907	Selenium, Total	mg/L	0.0000461	0.0044	0.10	0.0987	0.0986	0.0993	0.085 to 0.115	98.7	70 to 130	0.124	20
AW25907	Chromium, Total	mg/L	0.0000215	0.0044	0.10	0.101	0.101	0.0960	0.085 to 0.115	101	70 to 130	0.196	20
AW25907	Lead, Total	mg/L	0.0000137	0.0022	0.10	0.106	0.107	0.101	0.085 to 0.115	106	70 to 130	0.995	20
AW25907	Molybdenum, Total	mg/L	0.0000419	0.0044	0.10	0.0999	0.0998	0.0961	0.085 to 0.115	99.9	70 to 130	0.0834	20
AW25907	Thallium, Total	mg/L	0.0000128	0.00044	0.10	0.106	0.106	0.100	0.085 to 0.115	106	70 to 130	0.0426	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

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AW25901

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25908	Sulfate, Total	mg/L	-0.400	1.0	20.00	20.6	-0.399	20.8	18 to 22	103	80 to 120	0	20
AW25908	Chloride, Total	mg/L	0.000	0.25	10.00	9.78	0.000	9.89	9 to 11	97.8	80 to 120	0	20
AW25908	Fluoride, Total	mg/L	0.000	0.3	2.00	2.18	0.000	2.19	1.8 to 2.2	109	80 to 120	0	20

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Alabama Power

Lab & Field SERVICES

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-32 Dup

Laboratory ID Number: AW25902

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0133	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		1	0.1	0.5		9.33	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	10/13/2016	EPA 300.0		1	0.04	0.25		4.08	mg/L
* Fluoride, Total	SES	10/13/2016	EPA 300.0		1	0.01	0.3	J	0.011	mg/L
* Sulfate, Total	SES	10/13/2016	EPA 300.0		1	0.3	1		1.39	mg/L

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Batch QC Summary

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-32 Dup

Laboratory ID Number: AW25902

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25907	Cadmium, Total	mg/L	0.0000175	0.00044	0.10	0.102	0.101	0.0987	0.085 to 0.115	102	70 to 130	1.67	20
AW25905	Mercury, Total by CVAA	mg/L	0.0000586	0.0005	0.004	0.00386	0.00386	0.00388	0.0034 to 0.0046	96.6	70 to 130	0.150	20
AW25907	Beryllium, Total	mg/L	0.0000761	0.00132	0.10	0.105	0.103	0.0917	0.085 to 0.115	105	70 to 130	2.60	20
AW25907	Selenium, Total	mg/L	0.0000461	0.0044	0.10	0.0987	0.0986	0.0993	0.085 to 0.115	98.7	70 to 130	0.124	20
AW25907	Chromium, Total	mg/L	0.0000215	0.0044	0.10	0.101	0.101	0.0960	0.085 to 0.115	101	70 to 130	0.196	20
AW25907	Lead, Total	mg/L	0.0000137	0.0022	0.10	0.106	0.107	0.101	0.085 to 0.115	106	70 to 130	0.995	20
AW25907	Molybdenum, Total	mg/L	0.0000419	0.0044	0.10	0.0999	0.0998	0.0961	0.085 to 0.115	99.9	70 to 130	0.0834	20
AW25907	Thallium, Total	mg/L	0.0000128	0.00044	0.10	0.106	0.106	0.100	0.085 to 0.115	106	70 to 130	0.0426	20
AW25907	Antimony, Total	mg/L	0.0000440	0.00132	0.10	0.0967	0.0955	0.0949	0.085 to 0.115	96.7	70 to 130	1.30	20
AW25907	Cobalt, Total	mg/L	0.0000124	0.0044	0.10	0.104	0.104	0.0969	0.085 to 0.115	99.8	70 to 130	0.202	20
AW25908	Boron, Total	mg/L	0.0161	0.044	1.00	0.965	0.983	0.979	0.85 to 1.15	96.5	70 to 130	1.85	20
AW25907	Arsenic, Total	mg/L	0.0000245	0.0022	0.10	0.100	0.102	0.0991	0.085 to 0.115	100	70 to 130	1.32	20
AW25907	Barium, Total	mg/L	0.0000154	0.0044	0.10	0.445	0.444	0.0967	0.085 to 0.115	98.3	70 to 130	0.144	20
AW25908	Calcium, Total	mg/L	-0.0313	0.22	5.00	4.86	4.94	4.85	4.25 to 5.75	97.2	70 to 130	1.63	20
AW25908	Lithium, Total	mg/L	0.000225	0.022	0.20	0.205	0.201	0.205	0.17 to 0.23	102	70 to 130	1.97	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: REVISED COPY:
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Reported: 7/20/2017
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

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-32 Dup

Laboratory ID Number: AW25902

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25908	Fluoride, Total	mg/L	0.000	0.3	2.00	2.18	0.000	2.19	1.8 to 2.2	109	80 to 120	0	20
AW25908	Sulfate, Total	mg/L	-0.400	1.0	20.00	20.6	-0.399	20.8	18 to 22	103	80 to 120	0	20
AW25908	Chloride, Total	mg/L	0.000	0.25	10.00	9.78	0.000	9.89	9 to 11	97.8	80 to 120	0	20

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CC:

Reported: 7/20/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AW25903

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0236	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1	J	0.0304	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		1	0.1	0.5		2.74	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	J	0.00506	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	10/13/2016	EPA 300.0		1	0.04	0.25		4.36	mg/L
* Fluoride, Total	SES	10/13/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	10/13/2016	EPA 300.0		1	0.3	1		12.6	mg/L

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Calera, AL 35040
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FAX (205) 257-1654

Batch QC Summary

Revised Copy

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AW25903

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25907	Antimony, Total	mg/L	0.0000440	0.00132	0.10	0.0967	0.0955	0.0949	0.085 to 0.115	96.7	70 to 130	1.30	20
AW25907	Cobalt, Total	mg/L	0.0000124	0.0044	0.10	0.104	0.104	0.0969	0.085 to 0.115	99.8	70 to 130	0.202	20
AW25908	Boron, Total	mg/L	0.0161	0.044	1.00	0.965	0.983	0.979	0.85 to 1.15	96.5	70 to 130	1.85	20
AW25905	Mercury, Total by CVAA	mg/L	0.0000586	0.0005	0.004	0.00386	0.00386	0.00388	0.0034 to 0.0046	96.6	70 to 130	0.150	20
AW25907	Beryllium, Total	mg/L	0.0000761	0.00132	0.10	0.105	0.103	0.0917	0.085 to 0.115	105	70 to 130	2.60	20
AW25907	Selenium, Total	mg/L	0.0000461	0.0044	0.10	0.0987	0.0986	0.0993	0.085 to 0.115	98.7	70 to 130	0.124	20
AW25907	Cadmium, Total	mg/L	0.0000175	0.00044	0.10	0.102	0.101	0.0987	0.085 to 0.115	102	70 to 130	1.67	20
AW25907	Arsenic, Total	mg/L	0.0000245	0.0022	0.10	0.100	0.102	0.0991	0.085 to 0.115	100	70 to 130	1.32	20
AW25907	Barium, Total	mg/L	0.0000154	0.0044	0.10	0.445	0.444	0.0967	0.085 to 0.115	98.3	70 to 130	0.144	20
AW25908	Calcium, Total	mg/L	-0.0313	0.22	5.00	4.86	4.94	4.85	4.25 to 5.75	97.2	70 to 130	1.63	20
AW25908	Lithium, Total	mg/L	0.000225	0.022	0.20	0.205	0.201	0.205	0.17 to 0.23	102	70 to 130	1.97	20
AW25907	Chromium, Total	mg/L	0.0000215	0.0044	0.10	0.101	0.101	0.0960	0.085 to 0.115	101	70 to 130	0.196	20
AW25907	Lead, Total	mg/L	0.0000137	0.0022	0.10	0.106	0.107	0.101	0.085 to 0.115	106	70 to 130	0.995	20
AW25907	Molybdenum, Total	mg/L	0.0000419	0.0044	0.10	0.0999	0.0998	0.0961	0.085 to 0.115	99.9	70 to 130	0.0834	20
AW25907	Thallium, Total	mg/L	0.0000128	0.00044	0.10	0.106	0.106	0.100	0.085 to 0.115	106	70 to 130	0.0426	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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Reported: 7/20/2017
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

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AW25903

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25908	Fluoride, Total	mg/L	0.000	0.3	2.00	2.18	0.000	2.19	1.8 to 2.2	109	80 to 120	0	20
AW25908	Chloride, Total	mg/L	0.000	0.25	10.00	9.78	0.000	9.89	9 to 11	97.8	80 to 120	0	20
AW25908	Sulfate, Total	mg/L	-0.400	1.0	20.00	20.6	-0.399	20.8	18 to 22	103	80 to 120	0	20

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Calera, AL 35040
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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AW25904

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	J	0.00111	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0219	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		1	0.1	0.5		32.4	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	J	0.00240	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	10/13/2016	EPA 300.0		1	0.04	0.25		5.26	mg/L
* Fluoride, Total	SES	10/13/2016	EPA 300.0		1	0.01	0.3	J	0.034	mg/L
* Sulfate, Total	SES	10/13/2016	EPA 300.0		1	0.3	1		2.33	mg/L

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Calera, AL 35040
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FAX (205) 257-1654

Batch QC Summary

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Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AW25904

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25907	Cadmium, Total	mg/L	0.0000175	0.00044	0.10	0.102	0.101	0.0987	0.085 to 0.115	102	70 to 130	1.67	20
AW25907	Arsenic, Total	mg/L	0.0000245	0.0022	0.10	0.100	0.102	0.0991	0.085 to 0.115	100	70 to 130	1.32	20
AW25907	Barium, Total	mg/L	0.0000154	0.0044	0.10	0.445	0.444	0.0967	0.085 to 0.115	98.3	70 to 130	0.144	20
AW25908	Calcium, Total	mg/L	-0.0313	0.22	5.00	4.86	4.94	4.85	4.25 to 5.75	97.2	70 to 130	1.63	20
AW25908	Lithium, Total	mg/L	0.000225	0.022	0.20	0.205	0.201	0.205	0.17 to 0.23	102	70 to 130	1.97	20
AW25905	Mercury, Total by CVAA	mg/L	0.0000586	0.0005	0.004	0.00386	0.00386	0.00388	0.0034 to 0.0046	96.6	70 to 130	0.150	20
AW25907	Beryllium, Total	mg/L	0.0000761	0.00132	0.10	0.105	0.103	0.0917	0.085 to 0.115	105	70 to 130	2.60	20
AW25907	Selenium, Total	mg/L	0.0000461	0.0044	0.10	0.0987	0.0986	0.0993	0.085 to 0.115	98.7	70 to 130	0.124	20
AW25907	Antimony, Total	mg/L	0.0000440	0.00132	0.10	0.0967	0.0955	0.0949	0.085 to 0.115	96.7	70 to 130	1.30	20
AW25907	Cobalt, Total	mg/L	0.0000124	0.0044	0.10	0.104	0.104	0.0969	0.085 to 0.115	99.8	70 to 130	0.202	20
AW25908	Boron, Total	mg/L	0.0161	0.044	1.00	0.965	0.983	0.979	0.85 to 1.15	96.5	70 to 130	1.85	20
AW25907	Chromium, Total	mg/L	0.0000215	0.0044	0.10	0.101	0.101	0.0960	0.085 to 0.115	101	70 to 130	0.196	20
AW25907	Lead, Total	mg/L	0.0000137	0.0022	0.10	0.106	0.107	0.101	0.085 to 0.115	106	70 to 130	0.995	20
AW25907	Molybdenum, Total	mg/L	0.0000419	0.0044	0.10	0.0999	0.0998	0.0961	0.085 to 0.115	99.9	70 to 130	0.0834	20
AW25907	Thallium, Total	mg/L	0.0000128	0.00044	0.10	0.106	0.106	0.100	0.085 to 0.115	106	70 to 130	0.0426	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

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AW25904

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25908	Fluoride, Total	mg/L	0.000	0.3	2.00	2.18	0.000	2.19	1.8 to 2.2	109	80 to 120	0	20
AW25908	Chloride, Total	mg/L	0.000	0.25	10.00	9.78	0.000	9.89	9 to 11	97.8	80 to 120	0	20
AW25908	Sulfate, Total	mg/L	-0.400	1.0	20.00	20.6	-0.399	20.8	18 to 22	103	80 to 120	0	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: REVISED COPY:
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Reported: 7/20/2017
Version: 2.0

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AW25905

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0396	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		1	0.1	0.5		1.22	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	J	0.00214	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	10/14/2016	EPA 300.0		1	0.04	0.25		2.34	mg/L
* Fluoride, Total	SES	10/14/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	10/14/2016	EPA 300.0		1	0.3	1	U	Not Detected	mg/L

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* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report
Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: CORRECTED COPY: 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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AW25905

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25907	Cadmium, Total	mg/L	0.0000175	0.00044	0.10	0.102	0.101	0.0987	0.085 to 0.115	102	70 to 130	1.67	20
AW25905	Mercury, Total by CVAA	mg/L	0.0000586	0.0005	0.004	0.00386	0.00386	0.00388	0.0034 to 0.0046	96.6	70 to 130	0.150	20
AW25907	Beryllium, Total	mg/L	0.0000761	0.00132	0.10	0.105	0.103	0.0917	0.085 to 0.115	105	70 to 130	2.60	20
AW25907	Selenium, Total	mg/L	0.0000461	0.0044	0.10	0.0987	0.0986	0.0993	0.085 to 0.115	98.7	70 to 130	0.124	20
AW25907	Arsenic, Total	mg/L	0.0000245	0.0022	0.10	0.100	0.102	0.0991	0.085 to 0.115	100	70 to 130	1.32	20
AW25907	Barium, Total	mg/L	0.0000154	0.0044	0.10	0.445	0.444	0.0967	0.085 to 0.115	98.3	70 to 130	0.144	20
AW25908	Calcium, Total	mg/L	-0.0313	0.22	5.00	4.86	4.94	4.85	4.25 to 5.75	97.2	70 to 130	1.63	20
AW25908	Lithium, Total	mg/L	0.000225	0.022	0.20	0.205	0.201	0.205	0.17 to 0.23	102	70 to 130	1.97	20
AW25907	Chromium, Total	mg/L	0.0000215	0.0044	0.10	0.101	0.101	0.0960	0.085 to 0.115	101	70 to 130	0.196	20
AW25907	Lead, Total	mg/L	0.0000137	0.0022	0.10	0.106	0.107	0.101	0.085 to 0.115	106	70 to 130	0.995	20
AW25907	Molybdenum, Total	mg/L	0.0000419	0.0044	0.10	0.0999	0.0998	0.0961	0.085 to 0.115	99.9	70 to 130	0.0834	20
AW25907	Thallium, Total	mg/L	0.0000128	0.00044	0.10	0.106	0.106	0.100	0.085 to 0.115	106	70 to 130	0.0426	20
AW25907	Antimony, Total	mg/L	0.0000440	0.00132	0.10	0.0967	0.0955	0.0949	0.085 to 0.115	96.7	70 to 130	1.30	20
AW25907	Cobalt, Total	mg/L	0.0000124	0.0044	0.10	0.104	0.104	0.0969	0.085 to 0.115	99.8	70 to 130	0.202	20
AW25908	Boron, Total	mg/L	0.0161	0.044	1.00	0.965	0.983	0.979	0.85 to 1.15	96.5	70 to 130	1.85	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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Reported: 7/20/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AW25905

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25908	Chloride, Total	mg/L	0.000	0.25	10.00	9.78	0.000	9.89	9 to 11	97.8	80 to 120	0	20
AW25908	Fluoride, Total	mg/L	0.000	0.3	2.00	2.18	0.000	2.19	1.8 to 2.2	109	80 to 120	0	20
AW25908	Sulfate, Total	mg/L	-0.400	1.0	20.00	20.6	-0.399	20.8	18 to 22	103	80 to 120	0	20

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Expiration: June 30, 2018

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CC:

Reported: 7/20/2017
Version: 2.0

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Calera, AL 35040
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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AW25906

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	J	0.00231	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0799	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		1	0.1	0.5		1.48	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0135	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	10/14/2016	EPA 300.0		1	0.04	0.25		2.24	mg/L
* Fluoride, Total	SES	10/14/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	10/14/2016	EPA 300.0		1	0.3	1	U	Not Detected	mg/L

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Reported: 7/20/2017
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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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AW25906

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25907	Cadmium, Total	mg/L	0.0000175	0.00044	0.10	0.102	0.101	0.0987	0.085 to 0.115	102	70 to 130	1.67	20
AW25907	Arsenic, Total	mg/L	0.0000245	0.0022	0.10	0.100	0.102	0.0991	0.085 to 0.115	100	70 to 130	1.32	20
AW25907	Barium, Total	mg/L	0.0000154	0.0044	0.10	0.445	0.444	0.0967	0.085 to 0.115	98.3	70 to 130	0.144	20
AW25908	Calcium, Total	mg/L	-0.0313	0.22	5.00	4.86	4.94	4.85	4.25 to 5.75	97.2	70 to 130	1.63	20
AW25908	Lithium, Total	mg/L	0.000225	0.022	0.20	0.205	0.201	0.205	0.17 to 0.23	102	70 to 130	1.97	20
AW25907	Beryllium, Total	mg/L	0.0000761	0.00132	0.10	0.105	0.103	0.0917	0.085 to 0.115	105	70 to 130	2.60	20
AW25907	Selenium, Total	mg/L	0.0000461	0.0044	0.10	0.0987	0.0986	0.0993	0.085 to 0.115	98.7	70 to 130	0.124	20
AW25915	Mercury, Total by CVAA	mg/L	0.0000615	0.0005	0.004	0.00396	0.00381	0.00382	0.0034 to 0.0046	99.0	70 to 130	3.80	20
AW25907	Antimony, Total	mg/L	0.0000440	0.00132	0.10	0.0967	0.0955	0.0949	0.085 to 0.115	96.7	70 to 130	1.30	20
AW25907	Cobalt, Total	mg/L	0.0000124	0.0044	0.10	0.104	0.104	0.0969	0.085 to 0.115	99.8	70 to 130	0.202	20
AW25908	Boron, Total	mg/L	0.0161	0.044	1.00	0.965	0.983	0.979	0.85 to 1.15	96.5	70 to 130	1.85	20
AW25907	Chromium, Total	mg/L	0.0000215	0.0044	0.10	0.101	0.101	0.0960	0.085 to 0.115	101	70 to 130	0.196	20
AW25907	Lead, Total	mg/L	0.0000137	0.0022	0.10	0.106	0.107	0.101	0.085 to 0.115	106	70 to 130	0.995	20
AW25907	Molybdenum, Total	mg/L	0.0000419	0.0044	0.10	0.0999	0.0998	0.0961	0.085 to 0.115	99.9	70 to 130	0.0834	20
AW25907	Thallium, Total	mg/L	0.0000128	0.00044	0.10	0.106	0.106	0.100	0.085 to 0.115	106	70 to 130	0.0426	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: CORRECTED COPY: 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

Reported: 7/20/2017
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

Alabama Power

Corrected Copy

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AW25906

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25908	Chloride, Total	mg/L	0.000	0.25	10.00	9.78	0.000	9.89	9 to 11	97.8	80 to 120	0	20
AW25908	Fluoride, Total	mg/L	0.000	0.3	2.00	2.18	0.000	2.19	1.8 to 2.2	109	80 to 120	0	20
AW25908	Sulfate, Total	mg/L	-0.400	1.0	20.00	20.6	-0.399	20.8	18 to 22	103	80 to 120	0	20

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CC:

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Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AW25907

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.347	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		1	0.1	0.5		2.46	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	J	0.000912	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	J	0.00394	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Chloride, Total	SES	10/14/2016	EPA 300.0		1	0.04	0.25		1.54	mg/L
* Fluoride, Total	SES	10/14/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	10/14/2016	EPA 300.0		1	0.3	1		8.36	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: REVISED COPY:
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Reported: 7/20/2017
Version: 2.0

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

Batch QC Summary

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Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AW25907

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25907	Cadmium, Total	mg/L	0.0000175	0.00044	0.10	0.102	0.101	0.0987	0.085 to 0.115	102	70 to 130	1.67	20
AW25907	Chromium, Total	mg/L	0.0000215	0.0044	0.10	0.101	0.101	0.0960	0.085 to 0.115	101	70 to 130	0.196	20
AW25907	Lead, Total	mg/L	0.0000137	0.0022	0.10	0.106	0.107	0.101	0.085 to 0.115	106	70 to 130	0.995	20
AW25907	Molybdenum, Total	mg/L	0.0000419	0.0044	0.10	0.0999	0.0998	0.0961	0.085 to 0.115	99.9	70 to 130	0.0834	20
AW25907	Thallium, Total	mg/L	0.0000128	0.00044	0.10	0.106	0.106	0.100	0.085 to 0.115	106	70 to 130	0.0426	20
AW25907	Beryllium, Total	mg/L	0.0000761	0.00132	0.10	0.105	0.103	0.0917	0.085 to 0.115	105	70 to 130	2.60	20
AW25907	Selenium, Total	mg/L	0.0000461	0.0044	0.10	0.0987	0.0986	0.0993	0.085 to 0.115	98.7	70 to 130	0.124	20
AW25915	Mercury, Total by CVAA	mg/L	0.0000615	0.0005	0.004	0.00396	0.00381	0.00382	0.0034 to 0.0046	99.0	70 to 130	3.80	20
AW25907	Arsenic, Total	mg/L	0.0000245	0.0022	0.10	0.100	0.102	0.0991	0.085 to 0.115	100	70 to 130	1.32	20
AW25907	Barium, Total	mg/L	0.0000154	0.0044	0.10	0.445	0.444	0.0967	0.085 to 0.115	98.3	70 to 130	0.144	20
AW25908	Calcium, Total	mg/L	-0.0313	0.22	5.00	4.86	4.94	4.85	4.25 to 5.75	97.2	70 to 130	1.63	20
AW25908	Lithium, Total	mg/L	0.000225	0.022	0.20	0.205	0.201	0.205	0.17 to 0.23	102	70 to 130	1.97	20
AW25907	Antimony, Total	mg/L	0.0000440	0.00132	0.10	0.0967	0.0955	0.0949	0.085 to 0.115	96.7	70 to 130	1.30	20
AW25907	Cobalt, Total	mg/L	0.0000124	0.0044	0.10	0.104	0.104	0.0969	0.085 to 0.115	99.8	70 to 130	0.202	20
AW25908	Boron, Total	mg/L	0.0161	0.044	1.00	0.965	0.983	0.979	0.85 to 1.15	96.5	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: REVISED COPY:
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Reported: 7/20/2017
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Alabama Power General Test Laboratory
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Batch QC Summary

Revised Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AW25907

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25908	Sulfate, Total	mg/L	-0.400	1.0	20.00	20.6	-0.399	20.8	18 to 22	103	80 to 120	0	20
AW25908	Fluoride, Total	mg/L	0.000	0.3	2.00	2.18	0.000	2.19	1.8 to 2.2	109	80 to 120	0	20
AW25908	Chloride, Total	mg/L	0.000	0.25	10.00	9.78	0.000	9.89	9 to 11	97.8	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: REVISED COPY:
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

CC:

Reported: 7/20/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW25908

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		1	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	10/17/2016	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	10/14/2016	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	10/14/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	10/14/2016	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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW25908

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25917	Cobalt, Total	mg/L	0.0000124	0.0044	0.10	0.116	0.118	0.0969	0.085 to 0.115	101	70 to 130	1.07	20
AW25917	Cadmium, Total	mg/L	0.0000175	0.00044	0.10	0.0996	0.101	0.0987	0.085 to 0.115	99.6	70 to 130	1.09	20
AW25917	Molybdenum, Total	mg/L	0.0000419	0.0044	0.10	0.109	0.107	0.0961	0.085 to 0.115	104	70 to 130	1.32	20
AW25908	Calcium, Total	mg/L	-0.0313	0.22	5.00	4.86	4.94	4.85	4.25 to 5.75	97.2	70 to 130	1.63	20
AW25908	Lithium, Total	mg/L	0.000225	0.022	0.20	0.205	0.201	0.205	0.17 to 0.23	102	70 to 130	1.97	20
AW25917	Antimony, Total	mg/L	0.0000440	0.00132	0.10	0.0966	0.0986	0.0949	0.085 to 0.115	96.6	70 to 130	2.15	20
AW25915	Mercury, Total by CVAA	mg/L	0.0000615	0.0005	0.004	0.00396	0.00381	0.00382	0.0034 to 0.0046	99.0	70 to 130	3.80	20
AW25917	Chromium, Total	mg/L	0.0000215	0.0044	0.10	0.0896	0.0892	0.0960	0.085 to 0.115	89.6	70 to 130	0.465	20
AW25917	Lead, Total	mg/L	0.0000137	0.0022	0.10	0.110	0.109	0.101	0.085 to 0.115	110	70 to 130	0.574	20
AW25917	Thallium, Total	mg/L	0.0000128	0.00044	0.10	0.109	0.109	0.100	0.085 to 0.115	109	70 to 130	0.205	20
AW25908	Boron, Total	mg/L	0.0161	0.044	1.00	0.965	0.983	0.979	0.85 to 1.15	96.5	70 to 130	1.85	20
AW25917	Arsenic, Total	mg/L	0.0000245	0.0022	0.10	0.460	0.464	0.0991	0.085 to 0.115	81.3	70 to 130	0.996	20
AW25917	Barium, Total	mg/L	0.0000154	0.0044	0.10	0.559	0.566	0.0967	0.085 to 0.115	73.8	70 to 130	1.27	20
AW25917	Beryllium, Total	mg/L	0.0000761	0.00132	0.10	0.106	0.104	0.0917	0.085 to 0.115	106	70 to 130	2.21	20
AW25917	Selenium, Total	mg/L	0.0000461	0.0044	0.10	0.105	0.0984	0.0993	0.085 to 0.115	105	70 to 130	6.04	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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW25908

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25919	Solids, Dissolved	mg/L	1.00	25			644	53.0	40 to 60			0.625	5
AW25908	Sulfate, Total	mg/L	-0.400	1.0	20.00	20.6	-0.399	20.8	18 to 22	103	80 to 120	0	20
AW25908	Chloride, Total	mg/L	0.000	0.25	10.00	9.78	0.000	9.89	9 to 11	97.8	80 to 120	0	20
AW25908	Fluoride, Total	mg/L	0.000	0.3	2.00	2.18	0.000	2.19	1.8 to 2.2	109	80 to 120	0	20

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Expiration: June 30, 2018

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CC:

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Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AW25909

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0644	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1	J	0.0200	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		1	0.1	0.5		0.711	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	10/17/2016	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	10/14/2016	EPA 300.0		1	0.04	0.25		1.51	mg/L
* Fluoride, Total	SES	10/14/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	10/14/2016	EPA 300.0		1	0.3	1	J	0.727	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. The result for TDS has been correctly changed to Not Detected.

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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AW25909

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25917	Antimony, Total	mg/L	0.0000440	0.00132	0.10	0.0966	0.0986	0.0949	0.085 to 0.115	96.6	70 to 130	2.15	20
AW25918	Calcium, Total	mg/L	-0.0293	0.22	5.00	67.1	67.1	4.69	4.25 to 5.75	126	70 to 130	0.00	20
AW25917	Cobalt, Total	mg/L	0.0000124	0.0044	0.10	0.116	0.118	0.0969	0.085 to 0.115	101	70 to 130	1.07	20
AW25915	Mercury, Total by CVAA	mg/L	0.0000615	0.0005	0.004	0.00396	0.00381	0.00382	0.0034 to 0.0046	99.0	70 to 130	3.80	20
AW25917	Chromium, Total	mg/L	0.0000215	0.0044	0.10	0.0896	0.0892	0.0960	0.085 to 0.115	89.6	70 to 130	0.465	20
AW25917	Lead, Total	mg/L	0.0000137	0.0022	0.10	0.110	0.109	0.101	0.085 to 0.115	110	70 to 130	0.574	20
AW25917	Thallium, Total	mg/L	0.0000128	0.00044	0.10	0.109	0.109	0.100	0.085 to 0.115	109	70 to 130	0.205	20
AW25918	Boron, Total	mg/L	0.00898	0.044	1.00	1.47	1.48	0.933	0.85 to 1.15	98.5	70 to 130	0.678	20
AW25917	Arsenic, Total	mg/L	0.0000245	0.0022	0.10	0.460	0.464	0.0991	0.085 to 0.115	81.3	70 to 130	0.996	20
AW25917	Barium, Total	mg/L	0.0000154	0.0044	0.10	0.559	0.566	0.0967	0.085 to 0.115	73.8	70 to 130	1.27	20
AW25917	Beryllium, Total	mg/L	0.0000761	0.00132	0.10	0.106	0.104	0.0917	0.085 to 0.115	106	70 to 130	2.21	20
AW25917	Selenium, Total	mg/L	0.0000461	0.0044	0.10	0.105	0.0984	0.0993	0.085 to 0.115	105	70 to 130	6.04	20
AW25918	Lithium, Total	mg/L	0.0000849	0.022	0.20	0.307	0.306	0.193	0.17 to 0.23	108	70 to 130	0.326	20
AW25917	Cadmium, Total	mg/L	0.0000175	0.00044	0.10	0.0996	0.101	0.0987	0.085 to 0.115	99.6	70 to 130	1.09	20
AW25917	Molybdenum, Total	mg/L	0.0000419	0.0044	0.10	0.109	0.107	0.0961	0.085 to 0.115	104	70 to 130	1.32	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected. The result for TDS has been correctly changed to Not Detected.

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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AW25909

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25918	Solids, Dissolved	mg/L	1.00	25			318	53.0	40 to 60			1.70	5
AW25918	Chloride, Total	mg/L	0.000	0.25	10.00	24.6	15.2	9.89	9 to 11	94.0	80 to 120	0.00	20
AW25918	Fluoride, Total	mg/L	0.000	0.3	2.00	2.10	0.187	2.01	1.8 to 2.2	95.6	80 to 120	0.00	20
AW25918	Sulfate, Total	mg/L	-0.396	1.0	20.00	35.3	15.6	19.8	18 to 22	99.0	80 to 120	0.643	20

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Expiration: June 30, 2018

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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: 7/20/2017
Version: 2.0

Alabama Power General Test Laboratory
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Calera, AL 35040
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AW25910

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	J	0.00218	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0397	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	J	0.00138	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		1	0.1	0.5		6.10	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	J	0.00839	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	10/17/2016	SM 2540C		1		25		54.7	mg/L
* Chloride, Total	SES	10/14/2016	EPA 300.0		1	0.04	0.25		2.67	mg/L
* Fluoride, Total	SES	10/14/2016	EPA 300.0		1	0.01	0.3	J	0.100	mg/L
* Sulfate, Total	SES	10/14/2016	EPA 300.0		1	0.3	1		12.4	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected.

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

Reported: 7/20/2017
Version: 2.0

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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AW25910

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25917	Antimony, Total	mg/L	0.0000440	0.00132	0.10	0.0966	0.0986	0.0949	0.085 to 0.115	96.6	70 to 130	2.15	20
AW25917	Cobalt, Total	mg/L	0.0000124	0.0044	0.10	0.116	0.118	0.0969	0.085 to 0.115	101	70 to 130	1.07	20
AW25915	Mercury, Total by CVAA	mg/L	0.0000615	0.0005	0.004	0.00396	0.00381	0.00382	0.0034 to 0.0046	99.0	70 to 130	3.80	20
AW25917	Chromium, Total	mg/L	0.0000215	0.0044	0.10	0.0896	0.0892	0.0960	0.085 to 0.115	89.6	70 to 130	0.465	20
AW25918	Calcium, Total	mg/L	-0.0293	0.22	5.00	67.1	67.1	4.69	4.25 to 5.75	126	70 to 130	0.00	20
AW25917	Arsenic, Total	mg/L	0.0000245	0.0022	0.10	0.460	0.464	0.0991	0.085 to 0.115	81.3	70 to 130	0.996	20
AW25917	Barium, Total	mg/L	0.0000154	0.0044	0.10	0.559	0.566	0.0967	0.085 to 0.115	73.8	70 to 130	1.27	20
AW25917	Beryllium, Total	mg/L	0.0000761	0.00132	0.10	0.106	0.104	0.0917	0.085 to 0.115	106	70 to 130	2.21	20
AW25917	Selenium, Total	mg/L	0.0000461	0.0044	0.10	0.105	0.0984	0.0993	0.085 to 0.115	105	70 to 130	6.04	20
AW25918	Lithium, Total	mg/L	0.0000849	0.022	0.20	0.307	0.306	0.193	0.17 to 0.23	108	70 to 130	0.326	20
AW25917	Lead, Total	mg/L	0.0000137	0.0022	0.10	0.110	0.109	0.101	0.085 to 0.115	110	70 to 130	0.574	20
AW25917	Thallium, Total	mg/L	0.0000128	0.00044	0.10	0.109	0.109	0.100	0.085 to 0.115	109	70 to 130	0.205	20
AW25918	Boron, Total	mg/L	0.00898	0.044	1.00	1.47	1.48	0.933	0.85 to 1.15	98.5	70 to 130	0.678	20
AW25917	Cadmium, Total	mg/L	0.0000175	0.00044	0.10	0.0996	0.101	0.0987	0.085 to 0.115	99.6	70 to 130	1.09	20
AW25917	Molybdenum, Total	mg/L	0.0000419	0.0044	0.10	0.109	0.107	0.0961	0.085 to 0.115	104	70 to 130	1.32	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. The result for Cd has been correctly changed to Not Detected. SGC 3/20/17

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AW25910

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25918	Fluoride, Total	mg/L	0.000	0.3	2.00	2.10	0.187	2.01	1.8 to 2.2	95.6	80 to 120	0.00	20
AW25918	Chloride, Total	mg/L	0.000	0.25	10.00	24.6	15.2	9.89	9 to 11	94.0	80 to 120	0.00	20
AW25918	Sulfate, Total	mg/L	-0.396	1.0	20.00	35.3	15.6	19.8	18 to 22	99.0	80 to 120	0.643	20
AW25918	Solids, Dissolved	mg/L	1.00	25			318	53.0	40 to 60			1.70	5

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Expiration: June 30, 2018

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CC:

Reported: 7/20/2017
Version: 2.0

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(205) 664-6032 or 6171
FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AW25911

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	J	0.000899	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0221	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1		0.252	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		1	0.1	0.5		27.8	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05		0.217	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.110	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	10/17/2016	SM 2540C		1		25		223	mg/L
* Chloride, Total	SES	10/14/2016	EPA 300.0		1	0.04	0.25		15.7	mg/L
* Fluoride, Total	SES	10/14/2016	EPA 300.0		1	0.01	0.3	J	0.163	mg/L
* Sulfate, Total	SES	10/14/2016	EPA 300.0		1	0.3	1		94.1	mg/L

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Batch QC Summary

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AW25911

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25917	Cobalt, Total	mg/L	0.0000124	0.0044	0.10	0.116	0.118	0.0969	0.085 to 0.115	101	70 to 130	1.07	20
AW25917	Selenium, Total	mg/L	0.0000461	0.0044	0.10	0.105	0.0984	0.0993	0.085 to 0.115	105	70 to 130	6.04	20
AW25918	Lithium, Total	mg/L	0.0000849	0.022	0.20	0.307	0.306	0.193	0.17 to 0.23	108	70 to 130	0.326	20
AW25918	Calcium, Total	mg/L	-0.0293	0.22	5.00	67.1	67.1	4.69	4.25 to 5.75	126	70 to 130	0.00	20
AW25917	Lead, Total	mg/L	0.0000137	0.0022	0.10	0.110	0.109	0.101	0.085 to 0.115	110	70 to 130	0.574	20
AW25917	Thallium, Total	mg/L	0.0000128	0.00044	0.10	0.109	0.109	0.100	0.085 to 0.115	109	70 to 130	0.205	20
AW25918	Boron, Total	mg/L	0.00898	0.044	1.00	1.47	1.48	0.933	0.85 to 1.15	98.5	70 to 130	0.678	20
AW25917	Arsenic, Total	mg/L	0.0000245	0.0022	0.10	0.460	0.464	0.0991	0.085 to 0.115	81.3	70 to 130	0.996	20
AW25917	Barium, Total	mg/L	0.0000154	0.0044	0.10	0.559	0.566	0.0967	0.085 to 0.115	73.8	70 to 130	1.27	20
AW25917	Beryllium, Total	mg/L	0.0000761	0.00132	0.10	0.106	0.104	0.0917	0.085 to 0.115	106	70 to 130	2.21	20
AW25917	Antimony, Total	mg/L	0.0000440	0.00132	0.10	0.0966	0.0986	0.0949	0.085 to 0.115	96.6	70 to 130	2.15	20
AW25917	Cadmium, Total	mg/L	0.0000175	0.00044	0.10	0.0996	0.101	0.0987	0.085 to 0.115	99.6	70 to 130	1.09	20
AW25917	Molybdenum, Total	mg/L	0.0000419	0.0044	0.10	0.109	0.107	0.0961	0.085 to 0.115	104	70 to 130	1.32	20
AW25915	Mercury, Total by CVAA	mg/L	0.0000615	0.0005	0.004	0.00396	0.00381	0.00382	0.0034 to 0.0046	99.0	70 to 130	3.80	20
AW25917	Chromium, Total	mg/L	0.0000215	0.0044	0.10	0.0896	0.0892	0.0960	0.085 to 0.115	89.6	70 to 130	0.465	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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AW25911

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25918	Solids, Dissolved	mg/L	1.00	25			318	53.0	40 to 60			1.70	5
AW25918	Fluoride, Total	mg/L	0.000	0.3	2.00	2.10	0.187	2.01	1.8 to 2.2	95.6	80 to 120	0.00	20
AW25918	Chloride, Total	mg/L	0.000	0.25	10.00	24.6	15.2	9.89	9 to 11	94.0	80 to 120	0.00	20
AW25918	Sulfate, Total	mg/L	-0.396	1.0	20.00	35.3	15.6	19.8	18 to 22	99.0	80 to 120	0.643	20

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AW25912

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0486	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1		0.254	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		1	0.1	0.5		30.7	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05		0.220	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0767	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	10/17/2016	SM 2540C		1		25		225	mg/L
* Chloride, Total	SES	10/14/2016	EPA 300.0		1	0.04	0.25		15.4	mg/L
* Fluoride, Total	SES	10/14/2016	EPA 300.0		1	0.01	0.3	J	0.171	mg/L
* Sulfate, Total	SES	10/14/2016	EPA 300.0		1	0.3	1		93.9	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AW25912

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25918	Calcium, Total	mg/L	-0.0293	0.22	5.00	67.1	67.1	4.69	4.25 to 5.75	126	70 to 130	0.00	20
AW25917	Cobalt, Total	mg/L	0.0000124	0.0044	0.10	0.116	0.118	0.0969	0.085 to 0.115	101	70 to 130	1.07	20
AW25915	Mercury, Total by CVAA	mg/L	0.0000615	0.0005	0.004	0.00396	0.00381	0.00382	0.0034 to 0.0046	99.0	70 to 130	3.80	20
AW25917	Chromium, Total	mg/L	0.0000215	0.0044	0.10	0.0896	0.0892	0.0960	0.085 to 0.115	89.6	70 to 130	0.465	20
AW25917	Cadmium, Total	mg/L	0.0000175	0.00044	0.10	0.0996	0.101	0.0987	0.085 to 0.115	99.6	70 to 130	1.09	20
AW25917	Molybdenum, Total	mg/L	0.0000419	0.0044	0.10	0.109	0.107	0.0961	0.085 to 0.115	104	70 to 130	1.32	20
AW25917	Arsenic, Total	mg/L	0.0000245	0.0022	0.10	0.460	0.464	0.0991	0.085 to 0.115	81.3	70 to 130	0.996	20
AW25917	Barium, Total	mg/L	0.0000154	0.0044	0.10	0.559	0.566	0.0967	0.085 to 0.115	73.8	70 to 130	1.27	20
AW25917	Beryllium, Total	mg/L	0.0000761	0.00132	0.10	0.106	0.104	0.0917	0.085 to 0.115	106	70 to 130	2.21	20
AW25917	Selenium, Total	mg/L	0.0000461	0.0044	0.10	0.105	0.0984	0.0993	0.085 to 0.115	105	70 to 130	6.04	20
AW25918	Lithium, Total	mg/L	0.0000849	0.022	0.20	0.307	0.306	0.193	0.17 to 0.23	108	70 to 130	0.326	20
AW25917	Lead, Total	mg/L	0.0000137	0.0022	0.10	0.110	0.109	0.101	0.085 to 0.115	110	70 to 130	0.574	20
AW25917	Thallium, Total	mg/L	0.0000128	0.00044	0.10	0.109	0.109	0.100	0.085 to 0.115	109	70 to 130	0.205	20
AW25918	Boron, Total	mg/L	0.00898	0.044	1.00	1.47	1.48	0.933	0.85 to 1.15	98.5	70 to 130	0.678	20
AW25917	Antimony, Total	mg/L	0.0000440	0.00132	0.10	0.0966	0.0986	0.0949	0.085 to 0.115	96.6	70 to 130	2.15	20

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Batch QC Summary

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AW25912

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25918	Chloride, Total	mg/L	0.000	0.25	10.00	24.6	15.2	9.89	9 to 11	94.0	80 to 120	0.00	20
AW25918	Fluoride, Total	mg/L	0.000	0.3	2.00	2.10	0.187	2.01	1.8 to 2.2	95.6	80 to 120	0.00	20
AW25918	Sulfate, Total	mg/L	-0.396	1.0	20.00	35.3	15.6	19.8	18 to 22	99.0	80 to 120	0.643	20
AW25918	Solids, Dissolved	mg/L	1.00	25			318	53.0	40 to 60			1.70	5

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AW25913

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005		0.00709	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.113	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1		0.537	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		1	0.1	0.5		17.3	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0489	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05		0.0703	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	J	0.00589	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	10/17/2016	SM 2540C		1		25		173	mg/L
* Chloride, Total	SES	10/14/2016	EPA 300.0		1	0.04	0.25		16.2	mg/L
* Fluoride, Total	SES	10/14/2016	EPA 300.0		1	0.01	0.3	J	0.076	mg/L
* Sulfate, Total	SES	10/14/2016	EPA 300.0		1	0.3	1		38.3	mg/L

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* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report
Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected.
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

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John Pugh

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Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AW25913

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25917	Cobalt, Total	mg/L	0.0000124	0.0044	0.10	0.116	0.118	0.0969	0.085 to 0.115	101	70 to 130	1.07	20
AW25918	Calcium, Total	mg/L	-0.0293	0.22	5.00	67.1	67.1	4.69	4.25 to 5.75	126	70 to 130	0.00	20
AW25917	Antimony, Total	mg/L	0.0000440	0.00132	0.10	0.0966	0.0986	0.0949	0.085 to 0.115	96.6	70 to 130	2.15	20
AW25917	Cadmium, Total	mg/L	0.0000175	0.00044	0.10	0.0996	0.101	0.0987	0.085 to 0.115	99.6	70 to 130	1.09	20
AW25917	Molybdenum, Total	mg/L	0.0000419	0.0044	0.10	0.109	0.107	0.0961	0.085 to 0.115	104	70 to 130	1.32	20
AW25917	Arsenic, Total	mg/L	0.0000245	0.0022	0.10	0.460	0.464	0.0991	0.085 to 0.115	81.3	70 to 130	0.996	20
AW25917	Barium, Total	mg/L	0.0000154	0.0044	0.10	0.559	0.566	0.0967	0.085 to 0.115	73.8	70 to 130	1.27	20
AW25917	Beryllium, Total	mg/L	0.0000761	0.00132	0.10	0.106	0.104	0.0917	0.085 to 0.115	106	70 to 130	2.21	20
AW25917	Selenium, Total	mg/L	0.0000461	0.0044	0.10	0.105	0.0984	0.0993	0.085 to 0.115	105	70 to 130	6.04	20
AW25918	Lithium, Total	mg/L	0.0000849	0.022	0.20	0.307	0.306	0.193	0.17 to 0.23	108	70 to 130	0.326	20
AW25915	Mercury, Total by CVAA	mg/L	0.0000615	0.0005	0.004	0.00396	0.00381	0.00382	0.0034 to 0.0046	99.0	70 to 130	3.80	20
AW25917	Chromium, Total	mg/L	0.0000215	0.0044	0.10	0.0896	0.0892	0.0960	0.085 to 0.115	89.6	70 to 130	0.465	20
AW25917	Lead, Total	mg/L	0.0000137	0.0022	0.10	0.110	0.109	0.101	0.085 to 0.115	110	70 to 130	0.574	20
AW25917	Thallium, Total	mg/L	0.0000128	0.00044	0.10	0.109	0.109	0.100	0.085 to 0.115	109	70 to 130	0.205	20
AW25918	Boron, Total	mg/L	0.00898	0.044	1.00	1.47	1.48	0.933	0.85 to 1.15	98.5	70 to 130	0.678	20

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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

Alabama Power

Lab & Field SERVICES

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Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AW25913

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25918	Fluoride, Total	mg/L	0.000	0.3	2.00	2.10	0.187	2.01	1.8 to 2.2	95.6	80 to 120	0.00	20
AW25918	Sulfate, Total	mg/L	-0.396	1.0	20.00	35.3	15.6	19.8	18 to 22	99.0	80 to 120	0.643	20
AW25918	Solids, Dissolved	mg/L	1.00	25			318	53.0	40 to 60			1.70	5
AW25918	Chloride, Total	mg/L	0.000	0.25	10.00	24.6	15.2	9.89	9 to 11	94.0	80 to 120	0.00	20

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AW25914

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005		0.0186	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0455	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1		0.230	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		10	1.0	5.0		186	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0531	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	J	0.0194	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	10/17/2016	SM 2540C		1		100		1420	mg/L
* Chloride, Total	SES	10/14/2016	EPA 300.0		1	0.04	0.25		22.2	mg/L
* Fluoride, Total	SES	10/14/2016	EPA 300.0		1	0.01	0.3	J	0.049	mg/L
* Sulfate, Total	SES	10/14/2016	EPA 300.0		20	6.0	20		888	mg/L

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John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AW25914

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25918	Calcium, Total	mg/L	-0.0293	0.22	5.00	67.1	67.1	4.69	4.25 to 5.75	126	70 to 130	0.00	20
AW25917	Cobalt, Total	mg/L	0.0000124	0.0044	0.10	0.116	0.118	0.0969	0.085 to 0.115	101	70 to 130	1.07	20
AW25917	Antimony, Total	mg/L	0.0000440	0.00132	0.10	0.0966	0.0986	0.0949	0.085 to 0.115	96.6	70 to 130	2.15	20
AW25917	Selenium, Total	mg/L	0.0000461	0.0044	0.10	0.105	0.0984	0.0993	0.085 to 0.115	105	70 to 130	6.04	20
AW25918	Lithium, Total	mg/L	0.0000849	0.022	0.20	0.307	0.306	0.193	0.17 to 0.23	108	70 to 130	0.326	20
AW25917	Cadmium, Total	mg/L	0.0000175	0.00044	0.10	0.0996	0.101	0.0987	0.085 to 0.115	99.6	70 to 130	1.09	20
AW25917	Molybdenum, Total	mg/L	0.0000419	0.0044	0.10	0.109	0.107	0.0961	0.085 to 0.115	104	70 to 130	1.32	20
AW25917	Arsenic, Total	mg/L	0.0000245	0.0022	0.10	0.460	0.464	0.0991	0.085 to 0.115	81.3	70 to 130	0.996	20
AW25917	Barium, Total	mg/L	0.0000154	0.0044	0.10	0.559	0.566	0.0967	0.085 to 0.115	73.8	70 to 130	1.27	20
AW25917	Beryllium, Total	mg/L	0.0000761	0.00132	0.10	0.106	0.104	0.0917	0.085 to 0.115	106	70 to 130	2.21	20
AW25915	Mercury, Total by CVAA	mg/L	0.0000615	0.0005	0.004	0.00396	0.00381	0.00382	0.0034 to 0.0046	99.0	70 to 130	3.80	20
AW25917	Chromium, Total	mg/L	0.0000215	0.0044	0.10	0.0896	0.0892	0.0960	0.085 to 0.115	89.6	70 to 130	0.465	20
AW25917	Lead, Total	mg/L	0.0000137	0.0022	0.10	0.110	0.109	0.101	0.085 to 0.115	110	70 to 130	0.574	20
AW25917	Thallium, Total	mg/L	0.0000128	0.00044	0.10	0.109	0.109	0.100	0.085 to 0.115	109	70 to 130	0.205	20
AW25918	Boron, Total	mg/L	0.00898	0.044	1.00	1.47	1.48	0.933	0.85 to 1.15	98.5	70 to 130	0.678	20

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John Pugh

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Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AW25914

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25918	Fluoride, Total	mg/L	0.000	0.3	2.00	2.10	0.187	2.01	1.8 to 2.2	95.6	80 to 120	0.00	20
AW25918	Sulfate, Total	mg/L	-0.396	1.0	20.00	35.3	15.6	19.8	18 to 22	99.0	80 to 120	0.643	20
AW25918	Chloride, Total	mg/L	0.000	0.25	10.00	24.6	15.2	9.89	9 to 11	94.0	80 to 120	0.00	20
AW25918	Solids, Dissolved	mg/L	1.00	25			318	53.0	40 to 60			1.70	5

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Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AW25915

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005		0.0113	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0339	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1		0.129	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		10	1.0	5.0		73.8	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0117	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	10/17/2016	SM 2540C		1		50		508	mg/L
* Chloride, Total	SES	10/14/2016	EPA 300.0		1	0.04	0.25		14.8	mg/L
* Fluoride, Total	SES	10/14/2016	EPA 300.0		1	0.01	0.3	J	0.062	mg/L
* Sulfate, Total	SES	10/14/2016	EPA 300.0		10	3.0	10		284	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AW25915

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25917	Antimony, Total	mg/L	0.0000440	0.00132	0.10	0.0966	0.0986	0.0949	0.085 to 0.115	96.6	70 to 130	2.15	20
AW25917	Cobalt, Total	mg/L	0.0000124	0.0044	0.10	0.116	0.118	0.0969	0.085 to 0.115	101	70 to 130	1.07	20
AW25918	Calcium, Total	mg/L	-0.0293	0.22	5.00	67.1	67.1	4.69	4.25 to 5.75	126	70 to 130	0.00	20
AW25915	Mercury, Total by CVAA	mg/L	0.0000615	0.0005	0.004	0.00396	0.00381	0.00382	0.0034 to 0.0046	99.0	70 to 130	3.80	20
AW25917	Chromium, Total	mg/L	0.0000215	0.0044	0.10	0.0896	0.0892	0.0960	0.085 to 0.115	89.6	70 to 130	0.465	20
AW25917	Lead, Total	mg/L	0.0000137	0.0022	0.10	0.110	0.109	0.101	0.085 to 0.115	110	70 to 130	0.574	20
AW25917	Thallium, Total	mg/L	0.0000128	0.00044	0.10	0.109	0.109	0.100	0.085 to 0.115	109	70 to 130	0.205	20
AW25918	Boron, Total	mg/L	0.00898	0.044	1.00	1.47	1.48	0.933	0.85 to 1.15	98.5	70 to 130	0.678	20
AW25917	Selenium, Total	mg/L	0.0000461	0.0044	0.10	0.105	0.0984	0.0993	0.085 to 0.115	105	70 to 130	6.04	20
AW25918	Lithium, Total	mg/L	0.0000849	0.022	0.20	0.307	0.306	0.193	0.17 to 0.23	108	70 to 130	0.326	20
AW25917	Arsenic, Total	mg/L	0.0000245	0.0022	0.10	0.460	0.464	0.0991	0.085 to 0.115	81.3	70 to 130	0.996	20
AW25917	Barium, Total	mg/L	0.0000154	0.0044	0.10	0.559	0.566	0.0967	0.085 to 0.115	73.8	70 to 130	1.27	20
AW25917	Beryllium, Total	mg/L	0.0000761	0.00132	0.10	0.106	0.104	0.0917	0.085 to 0.115	106	70 to 130	2.21	20
AW25917	Cadmium, Total	mg/L	0.0000175	0.00044	0.10	0.0996	0.101	0.0987	0.085 to 0.115	99.6	70 to 130	1.09	20
AW25917	Molybdenum, Total	mg/L	0.0000419	0.0044	0.10	0.109	0.107	0.0961	0.085 to 0.115	104	70 to 130	1.32	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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AW25915

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25918	Fluoride, Total	mg/L	0.000	0.3	2.00	2.10	0.187	2.01	1.8 to 2.2	95.6	80 to 120	0.00	20
AW25918	Solids, Dissolved	mg/L	1.00	25			318	53.0	40 to 60			1.70	5
AW25918	Chloride, Total	mg/L	0.000	0.25	10.00	24.6	15.2	9.89	9 to 11	94.0	80 to 120	0.00	20
AW25918	Sulfate, Total	mg/L	-0.396	1.0	20.00	35.3	15.6	19.8	18 to 22	99.0	80 to 120	0.643	20

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Expiration: June 30, 2018

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CC:

Reported: 7/20/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AW25916

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005		0.00800	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.110	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1	J	0.0328	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		10	1.0	5.0		90.6	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	J	0.00415	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	10/17/2016	SM 2540C		1		25		379	mg/L
* Chloride, Total	SES	10/14/2016	EPA 300.0		1	0.04	0.25		24.4	mg/L
* Fluoride, Total	SES	10/14/2016	EPA 300.0		1	0.01	0.3	J	0.066	mg/L
* Sulfate, Total	SES	10/14/2016	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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Calera, AL 35040
(205) 664-6032 or 6171
FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AW25916

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25917	Chromium, Total	mg/L	0.0000215	0.0044	0.10	0.0896	0.0892	0.0960	0.085 to 0.115	89.6	70 to 130	0.465	20
AW25918	Calcium, Total	mg/L	-0.0293	0.22	5.00	67.1	67.1	4.69	4.25 to 5.75	126	70 to 130	0.00	20
AW25917	Antimony, Total	mg/L	0.0000440	0.00132	0.10	0.0966	0.0986	0.0949	0.085 to 0.115	96.6	70 to 130	2.15	20
AW25917	Cobalt, Total	mg/L	0.0000124	0.0044	0.10	0.116	0.118	0.0969	0.085 to 0.115	101	70 to 130	1.07	20
AW25917	Selenium, Total	mg/L	0.0000461	0.0044	0.10	0.105	0.0984	0.0993	0.085 to 0.115	105	70 to 130	6.04	20
AW25918	Lithium, Total	mg/L	0.0000849	0.022	0.20	0.307	0.306	0.193	0.17 to 0.23	108	70 to 130	0.326	20
AW25917	Cadmium, Total	mg/L	0.0000175	0.00044	0.10	0.0996	0.101	0.0987	0.085 to 0.115	99.6	70 to 130	1.09	20
AW25917	Molybdenum, Total	mg/L	0.0000419	0.0044	0.10	0.109	0.107	0.0961	0.085 to 0.115	104	70 to 130	1.32	20
AW25917	Lead, Total	mg/L	0.0000137	0.0022	0.10	0.110	0.109	0.101	0.085 to 0.115	110	70 to 130	0.574	20
AW25917	Thallium, Total	mg/L	0.0000128	0.00044	0.10	0.109	0.109	0.100	0.085 to 0.115	109	70 to 130	0.205	20
AW25918	Boron, Total	mg/L	0.00898	0.044	1.00	1.47	1.48	0.933	0.85 to 1.15	98.5	70 to 130	0.678	20
AW25917	Arsenic, Total	mg/L	0.0000245	0.0022	0.10	0.460	0.464	0.0991	0.085 to 0.115	81.3	70 to 130	0.996	20
AW25917	Barium, Total	mg/L	0.0000154	0.0044	0.10	0.559	0.566	0.0967	0.085 to 0.115	73.8	70 to 130	1.27	20
AW25917	Beryllium, Total	mg/L	0.0000761	0.00132	0.10	0.106	0.104	0.0917	0.085 to 0.115	106	70 to 130	2.21	20
AW25924	Mercury, Total by CVAA	mg/L	0.0000550	0.0005	0.004	0.00383	0.00384	0.00369	0.0034 to 0.0046	95.8	70 to 130	0.133	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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Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AW25916

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25918	Chloride, Total	mg/L	0.000	0.25	10.00	24.6	15.2	9.89	9 to 11	94.0	80 to 120	0.00	20
AW25918	Sulfate, Total	mg/L	-0.396	1.0	20.00	35.3	15.6	19.8	18 to 22	99.0	80 to 120	0.643	20
AW25918	Fluoride, Total	mg/L	0.000	0.3	2.00	2.10	0.187	2.01	1.8 to 2.2	95.6	80 to 120	0.00	20
AW25918	Solids, Dissolved	mg/L	1.00	25			318	53.0	40 to 60			1.70	5

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CC:

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Version: 2.0

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Calera, AL 35040
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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AW25917

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005		0.378	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.485	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1		0.489	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		10	1.0	5.0		61.3	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0157	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05		0.0928	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	J	0.00410	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	10/17/2016	SM 2540C		1		25		333	mg/L
* Chloride, Total	SES	10/14/2016	EPA 300.0		1	0.04	0.25		15.2	mg/L
* Fluoride, Total	SES	10/14/2016	EPA 300.0		1	0.01	0.3	J	0.190	mg/L
* Sulfate, Total	SES	10/14/2016	EPA 300.0		1	0.3	1		15.6	mg/L

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Calera, AL 35040
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AW25917

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25917	Selenium, Total	mg/L	0.0000461	0.0044	0.10	0.105	0.0984	0.0993	0.085 to 0.115	105	70 to 130	6.04	20
AW25918	Lithium, Total	mg/L	0.0000849	0.022	0.20	0.307	0.306	0.193	0.17 to 0.23	108	70 to 130	0.326	20
AW25917	Chromium, Total	mg/L	0.0000215	0.0044	0.10	0.0896	0.0892	0.0960	0.085 to 0.115	89.6	70 to 130	0.465	20
AW25917	Arsenic, Total	mg/L	0.0000245	0.0022	0.10	0.460	0.464	0.0991	0.085 to 0.115	81.3	70 to 130	0.996	20
AW25917	Barium, Total	mg/L	0.0000154	0.0044	0.10	0.559	0.566	0.0967	0.085 to 0.115	73.8	70 to 130	1.27	20
AW25917	Beryllium, Total	mg/L	0.0000761	0.00132	0.10	0.106	0.104	0.0917	0.085 to 0.115	106	70 to 130	2.21	20
AW25924	Mercury, Total by CVAA	mg/L	0.0000550	0.0005	0.004	0.00383	0.00384	0.00369	0.0034 to 0.0046	95.8	70 to 130	0.133	20
AW25917	Cobalt, Total	mg/L	0.0000124	0.0044	0.10	0.116	0.118	0.0969	0.085 to 0.115	101	70 to 130	1.07	20
AW25917	Lead, Total	mg/L	0.0000137	0.0022	0.10	0.110	0.109	0.101	0.085 to 0.115	110	70 to 130	0.574	20
AW25917	Thallium, Total	mg/L	0.0000128	0.00044	0.10	0.109	0.109	0.100	0.085 to 0.115	109	70 to 130	0.205	20
AW25918	Boron, Total	mg/L	0.00898	0.044	1.00	1.47	1.48	0.933	0.85 to 1.15	98.5	70 to 130	0.678	20
AW25917	Cadmium, Total	mg/L	0.0000175	0.00044	0.10	0.0996	0.101	0.0987	0.085 to 0.115	99.6	70 to 130	1.09	20
AW25917	Molybdenum, Total	mg/L	0.0000419	0.0044	0.10	0.109	0.107	0.0961	0.085 to 0.115	104	70 to 130	1.32	20
AW25917	Antimony, Total	mg/L	0.0000440	0.00132	0.10	0.0966	0.0986	0.0949	0.085 to 0.115	96.6	70 to 130	2.15	20
AW25918	Calcium, Total	mg/L	-0.0293	0.22	5.00	67.1	67.1	4.69	4.25 to 5.75	126	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.
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Reported: 7/20/2017
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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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AW25917

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25918	Sulfate, Total	mg/L	-0.396	1.0	20.00	35.3	15.6	19.8	18 to 22	99.0	80 to 120	0.643	20
AW25918	Chloride, Total	mg/L	0.000	0.25	10.00	24.6	15.2	9.89	9 to 11	94.0	80 to 120	0.00	20
AW25918	Solids, Dissolved	mg/L	1.00	25			318	53.0	40 to 60			1.70	5
AW25918	Fluoride, Total	mg/L	0.000	0.3	2.00	2.10	0.187	2.01	1.8 to 2.2	95.6	80 to 120	0.00	20

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Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

CC:

Reported: 7/20/2017
Version: 2.0

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(205) 664-6032 or 6171
FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-5 Dup

Laboratory ID Number: AW25918

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005		0.370	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.466	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1		0.489	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		10	1.0	5.0		60.8	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0152	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05		0.0920	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	J	0.00367	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	10/17/2016	SM 2540C		1		25		329	mg/L
* Chloride, Total	SES	10/14/2016	EPA 300.0		1	0.04	0.25		15.2	mg/L
* Fluoride, Total	SES	10/14/2016	EPA 300.0		1	0.01	0.3	J	0.187	mg/L
* Sulfate, Total	SES	10/14/2016	EPA 300.0		1	0.3	1		15.5	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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-5 Dup

Laboratory ID Number: AW25918

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25918	Lithium, Total	mg/L	0.0000849	0.022	0.20	0.307	0.306	0.193	0.17 to 0.23	108	70 to 130	0.326	20
AW26443	Lead, Total	mg/L	0.00000860	0.0022	0.10	0.111	0.111	0.108	0.085 to 0.115	111	70 to 130	0.352	20
AW26443	Arsenic, Total	mg/L	0.0000251	0.0022	0.10	0.105	0.105	0.105	0.085 to 0.115	105	70 to 130	0.353	20
AW26443	Cadmium, Total	mg/L	0.00000715	0.00044	0.10	0.106	0.104	0.103	0.085 to 0.115	106	70 to 130	2.04	20
AW26443	Molybdenum, Total	mg/L	0.0000346	0.0044	0.10	0.104	0.103	0.105	0.085 to 0.115	104	70 to 130	0.623	20
AW25918	Calcium, Total	mg/L	-0.0293	0.22	5.00	67.1	67.1	4.69	4.25 to 5.75	126	70 to 130	0.00	20
AW26443	Barium, Total	mg/L	0.0000114	0.0044	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.428	20
AW26443	Beryllium, Total	mg/L	0.0000862	0.00132	0.10	0.103	0.101	0.103	0.085 to 0.115	103	70 to 130	1.68	20
AW26443	Chromium, Total	mg/L	0.0000153	0.0044	0.10	0.106	0.106	0.104	0.085 to 0.115	106	70 to 130	0.473	20
AW26443	Cobalt, Total	mg/L	0.00000523	0.0044	0.10	0.105	0.104	0.105	0.085 to 0.115	105	70 to 130	1.12	20
AW25918	Boron, Total	mg/L	0.00898	0.044	1.00	1.47	1.48	0.933	0.85 to 1.15	98.5	70 to 130	0.678	20
AW26443	Thallium, Total	mg/L	0.00000905	0.00044	0.10	0.110	0.110	0.107	0.085 to 0.115	110	70 to 130	0.0094	20
AW26443	Antimony, Total	mg/L	0.0000396	0.00132	0.10	0.0999	0.0993	0.0998	0.085 to 0.115	99.9	70 to 130	0.614	20
AW26443	Selenium, Total	mg/L	0.0000324	0.0044	0.10	0.104	0.102	0.105	0.085 to 0.115	104	70 to 130	1.34	20
AW25924	Mercury, Total by CVAA	mg/L	0.0000550	0.0005	0.004	0.00383	0.00384	0.00369	0.0034 to 0.0046	95.8	70 to 130	0.133	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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-5 Dup

Laboratory ID Number: AW25918

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25918	Fluoride, Total	mg/L	0.000	0.3	2.00	2.10	0.187	2.01	1.8 to 2.2	95.6	80 to 120	0.00	20
AW25918	Solids, Dissolved	mg/L	1.00	25			318	53.0	40 to 60			1.70	5
AW25918	Sulfate, Total	mg/L	-0.396	1.0	20.00	35.3	15.6	19.8	18 to 22	99.0	80 to 120	0.643	20
AW25918	Chloride, Total	mg/L	0.000	0.25	10.00	24.6	15.2	9.89	9 to 11	94.0	80 to 120	0.00	20

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Expiration: June 30, 2018

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CC:

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Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AW25919

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0514	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1		1.91	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		10	1.0	5.0		119	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	J	0.00202	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	10/17/2016	SM 2540C		1		50		636	mg/L
* Chloride, Total	SES	10/14/2016	EPA 300.0		10	0.40	2.50		34.2	mg/L
* Fluoride, Total	SES	10/14/2016	EPA 300.0		1	0.01	0.3	J	0.150	mg/L
* Sulfate, Total	SES	10/14/2016	EPA 300.0		10	3.0	10		101	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AW25919

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW26443	Thallium, Total	mg/L	0.00000905	0.00044	0.10	0.110	0.110	0.107	0.085 to 0.115	110	70 to 130	0.00944	20
AW26443	Lead, Total	mg/L	0.00000860	0.0022	0.10	0.111	0.111	0.108	0.085 to 0.115	111	70 to 130	0.352	20
AW25924	Mercury, Total by CVAA	mg/L	0.0000550	0.0005	0.004	0.00383	0.00384	0.00369	0.0034 to 0.0046	95.8	70 to 130	0.133	20
AW26443	Calcium, Total	mg/L	-0.0300	0.22				4.72	4.25 to 5.75		70 to 130		20
AW26443	Antimony, Total	mg/L	0.0000396	0.00132	0.10	0.0999	0.0993	0.0998	0.085 to 0.115	99.9	70 to 130	0.614	20
AW26443	Boron, Total	mg/L	0.00901	0.044				0.968	0.85 to 1.15		70 to 130		20
AW26443	Selenium, Total	mg/L	0.0000324	0.0044	0.10	0.104	0.102	0.105	0.085 to 0.115	104	70 to 130	1.34	20
AW26443	Arsenic, Total	mg/L	0.0000251	0.0022	0.10	0.105	0.105	0.105	0.085 to 0.115	105	70 to 130	0.353	20
AW26443	Cadmium, Total	mg/L	0.00000715	0.00044	0.10	0.106	0.104	0.103	0.085 to 0.115	106	70 to 130	2.04	20
AW26443	Molybdenum, Total	mg/L	0.0000346	0.0044	0.10	0.104	0.103	0.105	0.085 to 0.115	104	70 to 130	0.623	20
AW26443	Barium, Total	mg/L	0.0000114	0.0044	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.428	20
AW26443	Beryllium, Total	mg/L	0.0000862	0.00132	0.10	0.103	0.101	0.103	0.085 to 0.115	103	70 to 130	1.68	20
AW26443	Chromium, Total	mg/L	0.0000153	0.0044	0.10	0.106	0.106	0.104	0.085 to 0.115	106	70 to 130	0.473	20
AW26443	Cobalt, Total	mg/L	0.00000523	0.0044	0.10	0.105	0.104	0.105	0.085 to 0.115	105	70 to 130	1.12	20
AW26443	Lithium, Total	mg/L	0.000132	0.022				0.214	0.17 to 0.23		70 to 130		20

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Batch QC Summary

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 11-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AW25919

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25924	Sulfate, Total	mg/L	-0.386	1.0	20.00	20.6	-0.399	20.7	18 to 22	103	80 to 120	0	20
AW25924	Fluoride, Total	mg/L	0.000	0.3	2.00	2.16	0.000	2.20	1.8 to 2.2	108	80 to 120	0	20
AW25919	Solids, Dissolved	mg/L	1.00	25			644	53.0	40 to 60			0.625	5
AW25924	Chloride, Total	mg/L	0.000	0.25	10.00	9.92	0.000	9.89	9 to 11	99.2	80 to 120	0	20

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CC:

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AW25920

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0883	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1		0.487	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		10	1.0	5.0		150	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	J	0.00225	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	10/17/2016	SM 2540C		1		100		1040	mg/L
* Chloride, Total	SES	10/14/2016	EPA 300.0		10	0.40	2.50		51.2	mg/L
* Fluoride, Total	SES	10/14/2016	EPA 300.0		1	0.01	0.3	J	0.041	mg/L
* Sulfate, Total	SES	10/14/2016	EPA 300.0		10	3.0	10		296	mg/L

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Batch QC Summary

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AW25920

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW26443	Thallium, Total	mg/L	0.00000905	0.00044	0.10	0.110	0.110	0.107	0.085 to 0.115	110	70 to 130	0.00944	20
AW26443	Barium, Total	mg/L	0.0000114	0.0044	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.428	20
AW26443	Beryllium, Total	mg/L	0.0000862	0.00132	0.10	0.103	0.101	0.103	0.085 to 0.115	103	70 to 130	1.68	20
AW26443	Chromium, Total	mg/L	0.0000153	0.0044	0.10	0.106	0.106	0.104	0.085 to 0.115	106	70 to 130	0.473	20
AW26443	Cobalt, Total	mg/L	0.00000523	0.0044	0.10	0.105	0.104	0.105	0.085 to 0.115	105	70 to 130	1.12	20
AW26443	Lithium, Total	mg/L	0.000132	0.022				0.214	0.17 to 0.23		70 to 130		20
AW26443	Antimony, Total	mg/L	0.0000396	0.00132	0.10	0.0999	0.0993	0.0998	0.085 to 0.115	99.9	70 to 130	0.614	20
AW26443	Boron, Total	mg/L	0.00901	0.044				0.968	0.85 to 1.15		70 to 130		20
AW26443	Selenium, Total	mg/L	0.0000324	0.0044	0.10	0.104	0.102	0.105	0.085 to 0.115	104	70 to 130	1.34	20
AW26443	Lead, Total	mg/L	0.00000860	0.0022	0.10	0.111	0.111	0.108	0.085 to 0.115	111	70 to 130	0.352	20
AW26443	Arsenic, Total	mg/L	0.0000251	0.0022	0.10	0.105	0.105	0.105	0.085 to 0.115	105	70 to 130	0.353	20
AW26443	Cadmium, Total	mg/L	0.00000715	0.00044	0.10	0.106	0.104	0.103	0.085 to 0.115	106	70 to 130	2.04	20
AW26443	Molybdenum, Total	mg/L	0.0000346	0.0044	0.10	0.104	0.103	0.105	0.085 to 0.115	104	70 to 130	0.623	20
AW25924	Mercury, Total by CVAA	mg/L	0.0000550	0.0005	0.004	0.00383	0.00384	0.00369	0.0034 to 0.0046	95.8	70 to 130	0.133	20
AW26443	Calcium, Total	mg/L	-0.0300	0.22				4.72	4.25 to 5.75		70 to 130		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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AW25920

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25924	Sulfate, Total	mg/L	-0.386	1.0	20.00	20.6	-0.399	20.7	18 to 22	103	80 to 120	0	20
AW25919	Solids, Dissolved	mg/L	1.00	25			644	53.0	40 to 60			0.625	5
AW25924	Chloride, Total	mg/L	0.000	0.25	10.00	9.92	0.000	9.89	9 to 11	99.2	80 to 120	0	20
AW25924	Fluoride, Total	mg/L	0.000	0.3	2.00	2.16	0.000	2.20	1.8 to 2.2	108	80 to 120	0	20

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AW25921

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.111	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1		1.65	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		10	1.0	5.0		75.7	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0138	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	J	0.0166	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	10/17/2016	SM 2540C		1		50		586	mg/L
* Chloride, Total	SES	10/14/2016	EPA 300.0		10	0.40	2.50		56.1	mg/L
* Fluoride, Total	SES	10/14/2016	EPA 300.0		1	0.01	0.3	J	0.048	mg/L
* Sulfate, Total	SES	10/14/2016	EPA 300.0		1	0.3	1		39.5	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AW25921

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW26443	Lead, Total	mg/L	0.00000860	0.0022	0.10	0.111	0.111	0.108	0.085 to 0.115	111	70 to 130	0.352	20
AW26443	Thallium, Total	mg/L	0.00000905	0.00044	0.10	0.110	0.110	0.107	0.085 to 0.115	110	70 to 130	0.00944	20
AW26443	Antimony, Total	mg/L	0.0000396	0.00132	0.10	0.0999	0.0993	0.0998	0.085 to 0.115	99.9	70 to 130	0.614	20
AW26443	Boron, Total	mg/L	0.00901	0.044				0.968	0.85 to 1.15		70 to 130		20
AW26443	Selenium, Total	mg/L	0.0000324	0.0044	0.10	0.104	0.102	0.105	0.085 to 0.115	104	70 to 130	1.34	20
AW25924	Mercury, Total by CVAA	mg/L	0.0000550	0.0005	0.004	0.00383	0.00384	0.00369	0.0034 to 0.0046	95.8	70 to 130	0.133	20
AW26443	Calcium, Total	mg/L	-0.0300	0.22				4.72	4.25 to 5.75		70 to 130		20
AW26443	Arsenic, Total	mg/L	0.0000251	0.0022	0.10	0.105	0.105	0.105	0.085 to 0.115	105	70 to 130	0.353	20
AW26443	Cadmium, Total	mg/L	0.00000715	0.00044	0.10	0.106	0.104	0.103	0.085 to 0.115	106	70 to 130	2.04	20
AW26443	Molybdenum, Total	mg/L	0.0000346	0.0044	0.10	0.104	0.103	0.105	0.085 to 0.115	104	70 to 130	0.623	20
AW26443	Barium, Total	mg/L	0.0000114	0.0044	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.428	20
AW26443	Beryllium, Total	mg/L	0.0000862	0.00132	0.10	0.103	0.101	0.103	0.085 to 0.115	103	70 to 130	1.68	20
AW26443	Chromium, Total	mg/L	0.0000153	0.0044	0.10	0.106	0.106	0.104	0.085 to 0.115	106	70 to 130	0.473	20
AW26443	Cobalt, Total	mg/L	0.00000523	0.0044	0.10	0.105	0.104	0.105	0.085 to 0.115	105	70 to 130	1.12	20
AW26443	Lithium, Total	mg/L	0.000132	0.022				0.214	0.17 to 0.23		70 to 130		20

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Batch QC Summary

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AW25921

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25919	Solids, Dissolved	mg/L	1.00	25			644	53.0	40 to 60			0.625	5
AW25924	Chloride, Total	mg/L	0.000	0.25	10.00	9.92	0.000	9.89	9 to 11	99.2	80 to 120	0	20
AW25924	Fluoride, Total	mg/L	0.000	0.3	2.00	2.16	0.000	2.20	1.8 to 2.2	108	80 to 120	0	20
AW25924	Sulfate, Total	mg/L	-0.386	1.0	20.00	20.6	-0.399	20.7	18 to 22	103	80 to 120	0	20

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Lab & Field SERVICES

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To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AW25922

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005		0.00772	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0897	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	11/16/2016	EPA 200.7		1	0.02	0.1		0.460	mg/L
* Calcium, Total	HRG	11/15/2016	EPA 200.7		10	1.0	5.0		53.3	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0127	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	11/16/2016	EPA 200.7		1	0.01	0.05	J	0.0433	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	10/17/2016	SM 2540C		1		25		315	mg/L
* Chloride, Total	SES	10/14/2016	EPA 300.0		1	0.04	0.25		16.4	mg/L
* Fluoride, Total	SES	10/14/2016	EPA 300.0		1	0.01	0.3	J	0.137	mg/L
* Sulfate, Total	SES	10/14/2016	EPA 300.0		1	0.3	1		39.6	mg/L

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Batch QC Summary

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Lab & Field SERVICES

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Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AW25922

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW26443	Thallium, Total	mg/L	0.00000905	0.00044	0.10	0.110	0.110	0.107	0.085 to 0.115	110	70 to 130	0.00944	20
AW26453	Lithium, Total	mg/L	-0.0000292	0.022	0.20	0.195	0.200	0.202	0.17 to 0.23	97.7	70 to 130	2.53	20
AW26443	Barium, Total	mg/L	0.0000114	0.0044	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.428	20
AW26443	Beryllium, Total	mg/L	0.0000862	0.00132	0.10	0.103	0.101	0.103	0.085 to 0.115	103	70 to 130	1.68	20
AW26443	Chromium, Total	mg/L	0.0000153	0.0044	0.10	0.106	0.106	0.104	0.085 to 0.115	106	70 to 130	0.473	20
AW26443	Cobalt, Total	mg/L	0.00000523	0.0044	0.10	0.105	0.104	0.105	0.085 to 0.115	105	70 to 130	1.12	20
AW25924	Mercury, Total by CVAA	mg/L	0.0000550	0.0005	0.004	0.00383	0.00384	0.00369	0.0034 to 0.0046	95.8	70 to 130	0.133	20
AW26443	Lead, Total	mg/L	0.00000860	0.0022	0.10	0.111	0.111	0.108	0.085 to 0.115	111	70 to 130	0.352	20
AW26443	Arsenic, Total	mg/L	0.0000251	0.0022	0.10	0.105	0.105	0.105	0.085 to 0.115	105	70 to 130	0.353	20
AW26443	Cadmium, Total	mg/L	0.00000715	0.00044	0.10	0.106	0.104	0.103	0.085 to 0.115	106	70 to 130	2.04	20
AW26443	Molybdenum, Total	mg/L	0.0000346	0.0044	0.10	0.104	0.103	0.105	0.085 to 0.115	104	70 to 130	0.623	20
AW26453	Boron, Total	mg/L	-0.0157	0.044	1.00	0.901	0.931	0.930	0.85 to 1.15	90.1	70 to 130	3.28	20
AW26443	Antimony, Total	mg/L	0.0000396	0.00132	0.10	0.0999	0.0993	0.0998	0.085 to 0.115	99.9	70 to 130	0.614	20
AW26443	Selenium, Total	mg/L	0.0000324	0.0044	0.10	0.104	0.102	0.105	0.085 to 0.115	104	70 to 130	1.34	20
AW26453	Calcium, Total	mg/L	-0.108	0.22	5.00	4.65	4.72	4.70	4.25 to 5.75	93.0	70 to 130	1.49	20

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Batch QC Summary

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AW25922

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25924	Sulfate, Total	mg/L	-0.386	1.0	20.00	20.6	-0.399	20.7	18 to 22	103	80 to 120	0	20
AW25924	Fluoride, Total	mg/L	0.000	0.3	2.00	2.16	0.000	2.20	1.8 to 2.2	108	80 to 120	0	20
AW25919	Solids, Dissolved	mg/L	1.00	25			644	53.0	40 to 60			0.625	5
AW25924	Chloride, Total	mg/L	0.000	0.25	10.00	9.92	0.000	9.89	9 to 11	99.2	80 to 120	0	20

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AW25923

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005		0.0145	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.170	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1		1.34	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		10	1.0	5.0		63.4	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010		0.0154	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05		0.101	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	J	0.00919	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	10/17/2016	SM 2540C		1		25		312	mg/L
* Chloride, Total	SES	10/14/2016	EPA 300.0		1	0.04	0.25		16.8	mg/L
* Fluoride, Total	SES	10/14/2016	EPA 300.0		1	0.01	0.3	J	0.198	mg/L
* Sulfate, Total	SES	10/14/2016	EPA 300.0		1	0.3	1		7.24	mg/L

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected.
Cadmium MDL was increased from 0.0001 to 0.0002. SGC 3/20/17

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AW25923

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW26443	Barium, Total	mg/L	0.0000114	0.0044	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.428	20
AW26443	Beryllium, Total	mg/L	0.0000862	0.00132	0.10	0.103	0.101	0.103	0.085 to 0.115	103	70 to 130	1.68	20
AW26443	Chromium, Total	mg/L	0.0000153	0.0044	0.10	0.106	0.106	0.104	0.085 to 0.115	106	70 to 130	0.473	20
AW26443	Cobalt, Total	mg/L	0.00000523	0.0044	0.10	0.105	0.104	0.105	0.085 to 0.115	105	70 to 130	1.12	20
AW26443	Lithium, Total	mg/L	0.000132	0.022				0.214	0.17 to 0.23		70 to 130		20
AW26443	Thallium, Total	mg/L	0.00000905	0.00044	0.10	0.110	0.110	0.107	0.085 to 0.115	110	70 to 130	0.00944	20
AW26443	Antimony, Total	mg/L	0.0000396	0.00132	0.10	0.0999	0.0993	0.0998	0.085 to 0.115	99.9	70 to 130	0.614	20
AW26443	Boron, Total	mg/L	0.00901	0.044				0.968	0.85 to 1.15		70 to 130		20
AW26443	Selenium, Total	mg/L	0.0000324	0.0044	0.10	0.104	0.102	0.105	0.085 to 0.115	104	70 to 130	1.34	20
AW25924	Mercury, Total by CVAA	mg/L	0.0000550	0.0005	0.004	0.00383	0.00384	0.00369	0.0034 to 0.0046	95.8	70 to 130	0.133	20
AW26443	Calcium, Total	mg/L	-0.0300	0.22				4.72	4.25 to 5.75		70 to 130		20
AW26443	Lead, Total	mg/L	0.00000860	0.0022	0.10	0.111	0.111	0.108	0.085 to 0.115	111	70 to 130	0.352	20
AW26443	Arsenic, Total	mg/L	0.0000251	0.0022	0.10	0.105	0.105	0.105	0.085 to 0.115	105	70 to 130	0.353	20
AW26443	Cadmium, Total	mg/L	0.00000715	0.00044	0.10	0.106	0.104	0.103	0.085 to 0.115	106	70 to 130	2.04	20
AW26443	Molybdenum, Total	mg/L	0.0000346	0.0044	0.10	0.104	0.103	0.105	0.085 to 0.115	104	70 to 130	0.623	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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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AW25923

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW25924	Fluoride, Total	mg/L	0.000	0.3	2.00	2.16	0.000	2.20	1.8 to 2.2	108	80 to 120	0	20
AW25919	Solids, Dissolved	mg/L	1.00	25			644	53.0	40 to 60			0.625	5
AW25924	Chloride, Total	mg/L	0.000	0.25	10.00	9.92	0.000	9.89	9 to 11	99.2	80 to 120	0	20
AW25924	Sulfate, Total	mg/L	-0.386	1.0	20.00	20.6	-0.399	20.7	18 to 22	103	80 to 120	0	20

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CC:

Reported: 7/20/2017
Version: 2.0

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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW25924

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	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Arsenic, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Beryllium, Total	TAS	11/3/2016	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	10/31/2016	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	10/31/2016	EPA 200.7		1	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	TAS	11/3/2016	EPA 200.8		5	0.0002	0.0010	U	Not Detected	mg/L
* Cobalt, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Chromium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	10/26/2016	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	10/31/2016	EPA 200.7		1	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Lead, Total	TAS	11/3/2016	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	TAS	11/3/2016	EPA 200.8		5	0.0020	0.010	U	Not Detected	mg/L
* Thallium, Total	TAS	11/3/2016	EPA 200.8		5	0.00020	0.0010	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	10/17/2016	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	10/14/2016	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Fluoride, Total	SES	10/14/2016	EPA 300.0		1	0.01	0.3	U	Not Detected	mg/L
* Sulfate, Total	SES	10/14/2016	EPA 300.0		1	0.3	1	U	Not Detected	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW25924

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW26443	Barium, Total	mg/L	0.0000114	0.0044	0.10	0.103	0.103	0.102	0.085 to 0.115	103	70 to 130	0.428	20
AW26443	Beryllium, Total	mg/L	0.0000862	0.00132	0.10	0.103	0.101	0.103	0.085 to 0.115	103	70 to 130	1.68	20
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AW26443	Lithium, Total	mg/L	0.000132	0.022				0.214	0.17 to 0.23		70 to 130		20
AW25924	Mercury, Total by CVAA	mg/L	0.0000550	0.0005	0.004	0.00383	0.00384	0.00369	0.0034 to 0.0046	95.8	70 to 130	0.133	20
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AW26443	Lead, Total	mg/L	0.00000860	0.0022	0.10	0.111	0.111	0.108	0.085 to 0.115	111	70 to 130	0.352	20
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AW26443	Selenium, Total	mg/L	0.0000324	0.0044	0.10	0.104	0.102	0.105	0.085 to 0.115	104	70 to 130	1.34	20
AW26443	Arsenic, Total	mg/L	0.0000251	0.0022	0.10	0.105	0.105	0.105	0.085 to 0.115	105	70 to 130	0.353	20
AW26443	Cadmium, Total	mg/L	0.00000715	0.00044	0.10	0.106	0.104	0.103	0.085 to 0.115	106	70 to 130	2.04	20
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 12-Oct-16
Customer ID:
Delivery Date: 13-Oct-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW25924

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
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AW25919	Solids, Dissolved	mg/L	1.00	25			644	53.0	40 to 60			0.625	5
AW25924	Chloride, Total	mg/L	0.000	0.25	10.00	9.92	0.000	9.89	9 to 11	99.2	80 to 120	0	20
AW25924	Sulfate, Total	mg/L	-0.386	1.0	20.00	20.6	-0.399	20.7	18 to 22	103	80 to 120	0	20

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CC:

Reported: 7/20/2017
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Alabama Power General Test Laboratory
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Calera, AL 35040
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Definitions

Alabama Power

Lab & Field SERVICES

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: 10/13/2016 12:00

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Jason Rouss	Location	Greene 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	All samples will be reported without TDS, due to QC failure and hold time exceedance. These will be re-sampled. SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-25	10/11/2016	11:05	3	Groundwater		AW25889
MW-23	10/11/2016	12:35	3	Groundwater		AW25890
FB-2	10/11/2016	12:50	3	Field Blank		AW25891
MW-24	10/11/2016	13:50	3	Groundwater		AW25892
MW-24 Dup	10/11/2016	13:50	3	Sample Duplicate		AW25893
MW-15	10/11/2016	15:15	3	Groundwater		AW25894
MW-18	10/12/2016	10:00	3	Groundwater		AW25895
MW-17	10/12/2016	11:00	3	Groundwater		AW25896
MW-16	10/12/2016	12:30	3	Groundwater		AW25897
MW-14	10/12/2016	13:50	3	Groundwater		AW25898
EB-1	10/12/2016	14:13	3	Equipment Blank		AW25899
MW-13	10/12/2016	15:12	3	Groundwater		AW25900

Relinquished By	Received By	Date/Time
	Sarah Copeland Digitally signed by Sarah Copeland Date: 2016.10.13 13:59:41 -05'00'	10/13/2016 13:59

SmarTroll ID	5141-26150-1-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23342-4-1	Cooler Temp	0.5 degrees C
		Thermometer ID	5408-27568-2-2
		pH Strip ID	5521-28275-20-19

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

☑ Field Complete
☑ Lab Complete

Lab ETA: 10/13/2016 11:35

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Greene Ash Pond

Analysis Requested: Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle

Comments: MW-33 Radium Duplicate
Samples AW25901-25907 inclusive will be reported without TDS results due to QC failure and hold time exceedance. These will be re-sampled. SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-32	10/11/2016	10:06	3	Groundwater		AW25901
MW-32DUP	10/11/2016	10:06	3	Sample Duplicate		AW25902
MW-33	10/11/2016	11:28	5	Groundwater		AW25903
MW-31	10/11/2016	12:35	3	Groundwater		AW25904
MW-30	10/11/2016	13:51	3	Groundwater		AW25905
MW-29	10/11/2016	15:12	3	Groundwater		AW25906
MW-28	10/12/2016	09:44	3	Groundwater		AW25907
FB-1	10/12/2016	09:51	3	Field Blank		AW25908
MW-27	10/12/2016	10:37	3	Groundwater		AW25909
MW-26	10/12/2016	11:44	3	Groundwater		AW25910
MW-12	10/12/2016	13:01	3	Groundwater		AW25911
MW-21	10/12/2016	14:16	3	Groundwater		AW25912
MW-11	10/12/2016	15:09	3	Groundwater		AW25913

Relinquished By	Received By	Date/Time
Anthony Goggins		10/12/2016 16:03
	Sarah Copeland Digitally signed by Sarah Copeland Date: 2016.10.13 14:01:57 -05'00'	10/13/2016 14:01

SmarTroll ID: 5151-26193-1-1
Turbidity ID: 5160-26211-1-1

All metals and radiological bottles have pH < 2 ☑

Cooler Temp: 0.5 degrees C
Thermometer ID: 5408-27568-2-2
pH Strip ID: 5521-28275-20-19

Alabama Power Lab & Field SERVICES

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

✔ Field Complete
✔ Lab Complete

Lab ETA 10/13/2016 12:00

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Ben Rothschadl	Location	Greene Ash Pond

Analysis Requested: Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle

Comments: Radium duplicate collected at MW 6

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW1	10/11/2016	10:43	3	Groundwater		AW25914
MW2	10/11/2016	11:50	3	Groundwater		AW25915
MW3	10/11/2016	12:59	3	Groundwater		AW25916
MW5	10/11/2016	14:15	3	Groundwater		AW25917
MW5 DUP	10/11/2016	14:15	3	Sample Duplicate		AW25918
MW6	10/11/2016	15:38	5	Groundwater		AW25919
MW7	10/12/2016	10:30	3	Groundwater		AW25920
MW8	10/12/2016	11:51	3	Groundwater		AW25921
MW9	10/12/2016	13:26	3	Groundwater		AW25922
MW10	10/12/2016	14:36	3	Groundwater		AW25923
FB3	10/12/2016	14:55	3	Field Blank		AW25924

Relinquished By	Received By	Date/Time
Ben Rothschadl		10/12/2016 16:05
	Sarah Copeland Digitally signed by Sarah Copeland Date: 2016.10.13 14:04:27 -05'00'	10/13/2016 14:04

SmarTroll ID: 4696-23441-1-1
Turbidity ID: 3901-20010-2-2

All metals and radiological bottles have pH < 2 ✔

Cooler Temp: 0.5 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: 400-129045-1
TestAmerica Sample Delivery Group: Greene Ash Pond (5)
Client Project/Site: CCR Plant Greene

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

Attn: Sarah Copeland

Authorized for release by:
11/28/2016 11:10:59 AM

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

LINKS

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

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

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

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Certification Summary 62

Job ID: 400-129045-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-129045-1

RAD

Method(s) 9315: Radium-226 Prep Batch 160-276048: The matrix spike (MS) recovery (139%) is outside the upper control limit of 137%. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery is within acceptance limits. The data have been qualified and reported. AW25889 MW-25 (400-129045-1), AW25890 MW-23 (400-129045-2), AW25891 FB-2 (400-129045-3), AW25892 MW-24 (400-129045-4), AW25893 MW-24 DUP (400-129045-5), AW25894 MW-15 (400-129045-6), AW25895 MW-18 (400-129045-7), AW25896 MW-17 (400-129045-8), AW25897 MW-16 (400-129045-9), AW25898 MW-14 (400-129045-10), AW25899 EB-1 (400-129045-11), AW25900 MW-13 (400-129045-12), AW25901 MW-32 (400-129045-13), AW25902 MW-32 DUP (400-129045-14), AW25903 MW-33 (400-129045-15), AW25903 MW-33 (400-129045-15[MS]), AW25903 MW-33 (400-129045-15[MSD]), AW25904 MW-31 (400-129045-16), AW25905 MW-30 (400-129045-17), AW25906 MW-29 (400-129045-18), AW25907 MW-28 (400-129045-19), AW25908 FB-1 (400-129045-20), (LCS 160-276048/2-A) and (MB 160-276048/1-A)

Method(s) PrecSep_0: Radium-228 Prep Batch 160-276123: The following samples were run at a reduced aliquot due to limited sample available: AW25909 MW-27 (400-129045-21), AW25910 MW-26 (400-129045-22), AW25911 MW-12 (400-129045-23), AW25912 MW-21 (400-129045-24), AW25913 MW-11 (400-129045-25), AW25914 MW-1 (400-129045-26), AW25915 MW-2 (400-129045-27), AW25916 MW-3 (400-129045-28), AW25917 MW-5 (400-129045-29), AW25918 MW-5 DUP (400-129045-30), AW25919 MW-6 (400-129045-31), AW25919 MW-6 (400-129045-31[MS]), AW25919 MW-6 (400-129045-31[MSD]), AW25920 MW-7 (400-129045-32), AW25921 MW-8 (400-129045-33), AW25922 MW-9 (400-129045-34), AW25923 MW-10 (400-129045-35) and AW25924 FB-3 (400-129045-36).

Method(s) PrecSep-21: Radium-226 Prep Batch 160-276090: The following samples were run at a reduced aliquot due to limited sample available: AW25909 MW-27 (400-129045-21), AW25910 MW-26 (400-129045-22), AW25911 MW-12 (400-129045-23), AW25912 MW-21 (400-129045-24), AW25913 MW-11 (400-129045-25), AW25914 MW-1 (400-129045-26), AW25915 MW-2 (400-129045-27), AW25916 MW-3 (400-129045-28), AW25917 MW-5 (400-129045-29), AW25918 MW-5 DUP (400-129045-30), AW25919 MW-6 (400-129045-31), AW25919 MW-6 (400-129045-31[MS]), AW25919 MW-6 (400-129045-31[MSD]), AW25920 MW-7 (400-129045-32), AW25921 MW-8 (400-129045-33), AW25922 MW-9 (400-129045-34), AW25923 MW-10 (400-129045-35) and AW25924 FB-3 (400-129045-36).

Method Summary

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

TestAmerica Job ID: 400-129045-1
SDG: Greene 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 Greene

TestAmerica Job ID: 400-129045-1
SDG: Greene Ash Pond (5)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-129045-1	AW25889 MW-25	Water	10/11/16 11:05	10/22/16 09:32
400-129045-2	AW25890 MW-23	Water	10/11/16 12:35	10/22/16 09:32
400-129045-3	AW25891 FB-2	Water	10/11/16 12:50	10/22/16 09:32
400-129045-4	AW25892 MW-24	Water	10/11/16 13:50	10/22/16 09:32
400-129045-5	AW25893 MW-24 DUP	Water	10/11/16 13:50	10/22/16 09:32
400-129045-6	AW25894 MW-15	Water	10/11/16 15:15	10/22/16 09:32
400-129045-7	AW25895 MW-18	Water	10/12/16 10:00	10/22/16 09:32
400-129045-8	AW25896 MW-17	Water	10/12/16 11:00	10/22/16 09:32
400-129045-9	AW25897 MW-16	Water	10/12/16 12:30	10/22/16 09:32
400-129045-10	AW25898 MW-14	Water	10/12/16 13:50	10/22/16 09:32
400-129045-11	AW25899 EB-1	Water	10/12/16 14:13	10/22/16 09:32
400-129045-12	AW25900 MW-13	Water	10/12/16 15:12	10/22/16 09:32
400-129045-13	AW25901 MW-32	Water	10/11/16 10:06	10/22/16 09:32
400-129045-14	AW25902 MW-32 DUP	Water	10/11/16 10:06	10/22/16 09:32
400-129045-15	AW25903 MW-33	Water	10/11/16 11:28	10/22/16 09:32
400-129045-16	AW25904 MW-31	Water	10/11/16 12:35	10/22/16 09:32
400-129045-17	AW25905 MW-30	Water	10/11/16 13:51	10/22/16 09:32
400-129045-18	AW25906 MW-29	Water	10/11/16 15:12	10/22/16 09:32
400-129045-19	AW25907 MW-28	Water	10/12/16 09:44	10/22/16 09:32
400-129045-20	AW25908 FB-1	Water	10/12/16 09:51	10/22/16 09:32
400-129045-21	AW25909 MW-27	Water	10/12/16 10:37	10/22/16 09:32
400-129045-22	AW25910 MW-26	Water	10/12/16 11:44	10/22/16 09:32
400-129045-23	AW25911 MW-12	Water	10/12/16 13:01	10/22/16 09:32
400-129045-24	AW25912 MW-21	Water	10/12/16 14:16	10/22/16 09:32
400-129045-25	AW25913 MW-11	Water	10/12/16 15:09	10/22/16 09:32
400-129045-26	AW25914 MW-1	Water	10/11/16 10:43	10/22/16 09:32
400-129045-27	AW25915 MW-2	Water	10/11/16 11:50	10/22/16 09:32
400-129045-28	AW25916 MW-3	Water	10/11/16 12:59	10/22/16 09:32
400-129045-29	AW25917 MW-5	Water	10/11/16 14:15	10/22/16 09:32
400-129045-30	AW25918 MW-5 DUP	Water	10/11/16 14:15	10/22/16 09:32
400-129045-31	AW25919 MW-6	Water	10/11/16 15:38	10/22/16 09:32
400-129045-32	AW25920 MW-7	Water	10/12/16 10:30	10/22/16 09:32
400-129045-33	AW25921 MW-8	Water	10/12/16 11:51	10/22/16 09:32
400-129045-34	AW25922 MW-9	Water	10/12/16 13:26	10/22/16 09:32
400-129045-35	AW25923 MW-10	Water	10/12/16 14:36	10/22/16 09:32
400-129045-36	AW25924 FB-3	Water	10/12/16 14:55	10/22/16 09:32

Client Sample ID: AW25889 MW-25

Date Collected: 10/11/16 11:05
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-1

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	**0.282**		0.200	0.201	1.00	0.279	pCi/L	10/26/16 10:51	11/19/16 20:25	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.9*		*40 - 110*	*10/26/16 10:51*	*11/19/16 20:25*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.00489	U	0.261	0.261	1.00	0.467	pCi/L	10/26/16 12:09	11/18/16 18:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.9*		*40 - 110*	*10/26/16 12:09*	*11/18/16 18:09*	*1*
Y Carrier	*85.2*		*40 - 110*	*10/26/16 12:09*	*11/18/16 18:09*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.277	U	0.329	0.330	5.00	0.467	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25890 MW-23

Date Collected: 10/11/16 12:35
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-2

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	0.167	U	0.196	0.197	1.00	0.321	pCi/L	10/26/16 10:51	11/19/16 20:25	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.2*		*40 - 110*	*10/26/16 10:51*	*11/19/16 20:25*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0170	U	0.229	0.229	1.00	0.409	pCi/L	10/26/16 12:09	11/18/16 18:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.2*		*40 - 110*	*10/26/16 12:09*	*11/18/16 18:09*	*1*
Y Carrier	*86.4*		*40 - 110*	*10/26/16 12:09*	*11/18/16 18:09*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.184	U	0.301	0.302	5.00	0.409	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25891 FB-2

Date Collected: 10/11/16 12:50
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-3

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	0.0468	U	0.177	0.177	1.00	0.336	pCi/L	10/26/16 10:51	11/19/16 20:25	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*72.9*		*40 - 110*	*10/26/16 10:51*	*11/19/16 20:25*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0661	U	0.301	0.301	1.00	0.527	pCi/L	10/26/16 12:09	11/18/16 18:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*72.9*		*40 - 110*	*10/26/16 12:09*	*11/18/16 18:09*	*1*
Y Carrier	*84.9*		*40 - 110*	*10/26/16 12:09*	*11/18/16 18:09*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.113	U	0.349	0.349	5.00	0.527	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25892 MW-24

Date Collected: 10/11/16 13:50
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-4

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	-0.00406	U	0.170	0.170	1.00	0.343	pCi/L	10/26/16 10:51	11/19/16 20:25	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.9*		*40 - 110*	*10/26/16 10:51*	*11/19/16 20:25*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.849**		0.351	0.360	1.00	0.499	pCi/L	10/26/16 12:09	11/18/16 18:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.9*		*40 - 110*	*10/26/16 12:09*	*11/18/16 18:09*	*1*
Y Carrier	*81.1*		*40 - 110*	*10/26/16 12:09*	*11/18/16 18:09*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.845**		0.390	0.398	5.00	0.499	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25893 MW-24 DUP

Lab Sample ID: 400-129045-5

Date Collected: 10/11/16 13:50
Matrix: Water
Date Received: 10/22/16 09:32

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.359		0.220	0.222	1.00	0.288	pCi/L	10/26/16 10:51	11/19/16 20:25	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.3*		*40 - 110*	*10/26/16 10:51*	*11/19/16 20:25*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.277	U	0.280	0.281	1.00	0.454	pCi/L	10/26/16 12:09	11/18/16 18:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.3*		*40 - 110*	*10/26/16 12:09*	*11/18/16 18:09*	*1*
Y Carrier	*83.0*		*40 - 110*	*10/26/16 12:09*	*11/18/16 18:09*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.637		0.356	0.358	5.00	0.454	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25894 MW-15

Date Collected: 10/11/16 15:15
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-6

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	0.0119	U	0.150	0.150	1.00	0.301	pCi/L	10/26/16 10:51	11/19/16 20:25	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.5*		*40 - 110*	*10/26/16 10:51*	*11/19/16 20:25*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.00803	U	0.238	0.238	1.00	0.434	pCi/L	10/26/16 12:09	11/18/16 18:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.5*		*40 - 110*	*10/26/16 12:09*	*11/18/16 18:09*	*1*
Y Carrier	*78.9*		*40 - 110*	*10/26/16 12:09*	*11/18/16 18:09*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.00389	U	0.282	0.282	5.00	0.434	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25895 MW-18

Date Collected: 10/12/16 10:00
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-7

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	**0.412**		0.220	0.223	1.00	0.273	pCi/L	10/26/16 10:51	11/19/16 20:26	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.6*		*40 - 110*	*10/26/16 10:51*	*11/19/16 20:26*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0684	U	0.219	0.219	1.00	0.383	pCi/L	10/26/16 12:10	11/18/16 18:09	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.6*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:09*	*1*
Y Carrier	*86.0*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:09*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.481**		0.310	0.313	5.00	0.383	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25896 MW-17

Date Collected: 10/12/16 11:00
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-8

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	**0.454**		0.248	0.252	1.00	0.331	pCi/L	10/26/16 10:51	11/19/16 20:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.9*		*40 - 110*	*10/26/16 10:51*	*11/19/16 20:27*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.208	U	0.242	0.243	1.00	0.474	pCi/L	10/26/16 12:10	11/18/16 18:10	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.9*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:10*	*1*
Y Carrier	*80.7*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:10*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.246	U	0.347	0.350	5.00	0.474	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25897 MW-16

Date Collected: 10/12/16 12:30
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-9

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	0.158	U	0.198	0.198	1.00	0.328	pCi/L	10/26/16 10:51	11/19/16 20:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.2*		*40 - 110*	*10/26/16 10:51*	*11/19/16 20:27*	*1*

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	0.274	0.275	1.00	0.451	pCi/L	10/26/16 12:10	11/18/16 18:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*83.2*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:11*	*1*
Y Carrier	*83.4*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:11*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.397	U	0.338	0.339	5.00	0.451	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25898 MW-14

Date Collected: 10/12/16 13:50
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-10

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	0.0998	U	0.195	0.195	1.00	0.345	pCi/L	10/26/16 10:51	11/19/16 20:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.3*		*40 - 110*	*10/26/16 10:51*	*11/19/16 20:27*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.124	U	0.257	0.257	1.00	0.480	pCi/L	10/26/16 12:10	11/18/16 18:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.3*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:11*	*1*
Y Carrier	*85.6*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:11*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0237	U	0.323	0.323	5.00	0.480	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25899 EB-1

Date Collected: 10/12/16 14:13
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-11

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	-0.0650	U	0.146	0.146	1.00	0.334	pCi/L	10/26/16 10:51	11/19/16 20:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*72.4*		*40 - 110*	*10/26/16 10:51*	*11/19/16 20:27*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.167	U	0.299	0.300	1.00	0.563	pCi/L	10/26/16 12:10	11/18/16 18:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*72.4*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:11*	*1*
Y Carrier	*81.1*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:11*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.232	U	0.333	0.333	5.00	0.563	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25900 MW-13

Date Collected: 10/12/16 15:12
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-12

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	0.0151	U	0.147	0.147	1.00	0.293	pCi/L	10/26/16 10:51	11/19/16 20:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.5*		*40 - 110*	*10/26/16 10:51*	*11/19/16 20:27*	*1*

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	0.238	0.238	1.00	0.433	pCi/L	10/26/16 12:10	11/18/16 18:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.5*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:11*	*1*
Y Carrier	*84.5*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:11*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0137	U	0.280	0.280	5.00	0.433	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25901 MW-32

Date Collected: 10/11/16 10:06
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-13

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	-0.121	U	0.118	0.118	1.00	0.308	pCi/L	10/26/16 10:51	11/19/16 20:27	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.5*		*40 - 110*	*10/26/16 10:51*	*11/19/16 20:27*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.461**		0.294	0.297	1.00	0.453	pCi/L	10/26/16 12:10	11/18/16 18:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.5*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:11*	*1*
Y Carrier	*84.5*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:11*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.340	U	0.317	0.320	5.00	0.453	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25902 MW-32 DUP

Date Collected: 10/11/16 10:06
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-14

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	0.0255	U	0.161	0.161	1.00	0.310	pCi/L	10/26/16 10:51	11/19/16 20:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*40 - 110*	*10/26/16 10:51*	*11/19/16 20:28*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.164	U	0.279	0.279	1.00	0.470	pCi/L	10/26/16 12:10	11/18/16 18:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.6*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:11*	*1*
Y Carrier	*84.5*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:11*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.189	U	0.322	0.322	5.00	0.470	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25903 MW-33

Date Collected: 10/11/16 11:28
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-15

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	0.0747	U	0.154	0.154	1.00	0.278	pCi/L	10/26/16 10:51	11/19/16 20:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.0*		*40 - 110*	*10/26/16 10:51*	*11/19/16 20:28*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0832	U	0.288	0.288	1.00	0.500	pCi/L	10/26/16 12:10	11/18/16 18:11	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.0*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:11*	*1*
Y Carrier	*82.2*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:11*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.158	U	0.326	0.326	5.00	0.500	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25904 MW-31

Date Collected: 10/11/16 12:35
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-16

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	0.0334	U	0.137	0.137	1.00	0.271	pCi/L	10/26/16 10:51	11/19/16 20:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.5*		*40 - 110*	*10/26/16 10:51*	*11/19/16 20:28*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0848	U	0.248	0.248	1.00	0.433	pCi/L	10/26/16 12:10	11/18/16 18:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.5*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:12*	*1*
Y Carrier	*83.7*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:12*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.118	U	0.283	0.284	5.00	0.433	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25905 MW-30

Date Collected: 10/11/16 13:51
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-17

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	0.0830	U	0.147	0.148	1.00	0.262	pCi/L	10/26/16 10:51	11/19/16 20:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.1*		*40 - 110*	*10/26/16 10:51*	*11/19/16 20:28*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0829	U	0.293	0.293	1.00	0.509	pCi/L	10/26/16 12:10	11/18/16 18:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.1*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:12*	*1*
Y Carrier	*81.9*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:12*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.166	U	0.328	0.328	5.00	0.509	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25906 MW-29

Date Collected: 10/11/16 15:12
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-18

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	0.0899	U	0.139	0.140	1.00	0.242	pCi/L	10/26/16 10:51	11/19/16 20:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.9*		*40 - 110*	*10/26/16 10:51*	*11/19/16 20:28*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.729**		0.330	0.336	1.00	0.474	pCi/L	10/26/16 12:10	11/18/16 18:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.9*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:12*	*1*
Y Carrier	*81.5*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:12*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.819**		0.358	0.364	5.00	0.474	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25907 MW-28

Date Collected: 10/12/16 09:44
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-19

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	**0.633**		0.251	0.258	1.00	0.260	pCi/L	10/26/16 10:51	11/19/16 20:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.5*		*40 - 110*	*10/26/16 10:51*	*11/19/16 20:28*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.266	U	0.252	0.253	1.00	0.406	pCi/L	10/26/16 12:10	11/18/16 18:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.5*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:12*	*1*
Y Carrier	*81.9*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:12*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.899**		0.356	0.361	5.00	0.406	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25908 FB-1

Date Collected: 10/12/16 09:51
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-20

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	0.0820	U	0.125	0.125	1.00	0.215	pCi/L	10/26/16 10:51	11/19/16 20:28	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*110*		*40 - 110*	*10/26/16 10:51*	*11/19/16 20:28*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.109	U	0.207	0.207	1.00	0.351	pCi/L	10/26/16 12:10	11/18/16 18:12	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*110*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:12*	*1*
Y Carrier	*86.4*		*40 - 110*	*10/26/16 12:10*	*11/18/16 18:12*	*1*

Method: Ra226_Ra228 - Combined Radium-226 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	0.241	0.242	5.00	0.351	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25909 MW-27

Date Collected: 10/12/16 10:37
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-21

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	0.180	U	0.234	0.235	1.00	0.390	pCi/L	10/26/16 13:52	11/19/16 20:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.6*		*40 - 110*	*10/26/16 13:52*	*11/19/16 20:34*	*1*

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	U	0.416	0.420	1.00	0.648	pCi/L	10/26/16 18:24	11/18/16 17:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.6*		*40 - 110*	*10/26/16 18:24*	*11/18/16 17:56*	*1*
Y Carrier	*84.5*		*40 - 110*	*10/26/16 18:24*	*11/18/16 17:56*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.810**		0.477	0.481	5.00	0.648	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25910 MW-26

Date Collected: 10/12/16 11:44
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-22

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	0.240	U	0.262	0.263	1.00	0.418	pCi/L	10/26/16 13:52	11/19/16 20:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*71.2*		*40 - 110*	*10/26/16 13:52*	*11/19/16 20:34*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.424	U	0.484	0.485	1.00	0.909	pCi/L	10/26/16 18:24	11/18/16 17:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*71.2*		*40 - 110*	*10/26/16 18:24*	*11/18/16 17:56*	*1*
Y Carrier	*83.0*		*40 - 110*	*10/26/16 18:24*	*11/18/16 17:56*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.183	U	0.550	0.552	5.00	0.909	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25911 MW-12

Date Collected: 10/12/16 13:01
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-23

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	0.105	U	0.213	0.213	1.00	0.383	pCi/L	10/26/16 13:52	11/19/16 20:34	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.6*		*40 - 110*	*10/26/16 13:52*	*11/19/16 20:34*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.315	U	0.367	0.368	1.00	0.604	pCi/L	10/26/16 18:24	11/18/16 17:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.6*		*40 - 110*	*10/26/16 18:24*	*11/18/16 17:56*	*1*
Y Carrier	*81.1*		*40 - 110*	*10/26/16 18:24*	*11/18/16 17:56*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.421	U	0.424	0.425	5.00	0.604	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25912 MW-21

Date Collected: 10/12/16 14:16
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-24

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	0.0304	U	0.195	0.195	1.00	0.379	pCi/L	10/26/16 13:52	11/20/16 06:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.6*		*40 - 110*	*10/26/16 13:52*	*11/20/16 06:15*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.107	U	0.380	0.380	1.00	0.662	pCi/L	10/26/16 18:24	11/18/16 17:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.6*		*40 - 110*	*10/26/16 18:24*	*11/18/16 17:56*	*1*
Y Carrier	*78.1*		*40 - 110*	*10/26/16 18:24*	*11/18/16 17:56*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.137	U	0.428	0.428	5.00	0.662	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25913 MW-11

Date Collected: 10/12/16 15:09
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-25

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	0.184	U	0.197	0.198	1.00	0.312	pCi/L	10/26/16 13:52	11/20/16 06:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.0*		*40 - 110*	*10/26/16 13:52*	*11/20/16 06:15*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.485	U	0.425	0.427	1.00	0.683	pCi/L	10/26/16 18:24	11/18/16 17:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*88.0*		*40 - 110*	*10/26/16 18:24*	*11/18/16 17:56*	*1*
Y Carrier	*82.2*		*40 - 110*	*10/26/16 18:24*	*11/18/16 17:56*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.669	U	0.468	0.471	5.00	0.683	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25914 MW-1

Date Collected: 10/11/16 10:43
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-26

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	0.680		0.306	0.312	1.00	0.359	pCi/L	10/26/16 13:52	11/20/16 06:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.7*		*40 - 110*	*10/26/16 13:52*	*11/20/16 06:15*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.917		0.396	0.405	1.00	0.568	pCi/L	10/26/16 18:24	11/18/16 17:56	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.7*		*40 - 110*	*10/26/16 18:24*	*11/18/16 17:56*	*1*
Y Carrier	*82.6*		*40 - 110*	*10/26/16 18:24*	*11/18/16 17:56*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.60		0.501	0.511	5.00	0.568	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25915 MW-2

Date Collected: 10/11/16 11:50
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-27

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	0.330	U	0.262	0.264	1.00	0.384	pCi/L	10/26/16 13:52	11/20/16 06:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.1*		*40 - 110*	*10/26/16 13:52*	*11/20/16 06:15*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.370	U	0.415	0.417	1.00	0.682	pCi/L	10/26/16 18:24	11/18/16 17:57	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*76.1*		*40 - 110*	*10/26/16 18:24*	*11/18/16 17:57*	*1*
Y Carrier	*82.2*		*40 - 110*	*10/26/16 18:24*	*11/18/16 17:57*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.701**		0.491	0.493	5.00	0.682	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25916 MW-3

Date Collected: 10/11/16 12:59
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-28

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	**0.617**		0.296	0.301	1.00	0.343	pCi/L	10/26/16 13:52	11/20/16 06:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.6*		*40 - 110*	*10/26/16 13:52*	*11/20/16 06:15*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.185	U	0.375	0.375	1.00	0.640	pCi/L	10/26/16 18:24	11/18/16 18:07	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*80.6*		*40 - 110*	*10/26/16 18:24*	*11/18/16 18:07*	*1*
Y Carrier	*81.1*		*40 - 110*	*10/26/16 18:24*	*11/18/16 18:07*	*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	**0.802**		0.478	0.481	5.00	0.640	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25917 MW-5

Date Collected: 10/11/16 14:15
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-29

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	1.14		0.381	0.394	1.00	0.375	pCi/L	10/26/16 13:52	11/20/16 06:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.8*		*40 - 110*	*10/26/16 13:52*	*11/20/16 06:15*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.696		0.412	0.417	1.00	0.623	pCi/L	10/26/16 18:24	11/18/16 18:07	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*79.8*		*40 - 110*	*10/26/16 18:24*	*11/18/16 18:07*	*1*
Y Carrier	*81.9*		*40 - 110*	*10/26/16 18:24*	*11/18/16 18:07*	*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	1.83		0.561	0.574	5.00	0.623	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25918 MW-5 DUP

Date Collected: 10/11/16 14:15
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-30

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	**1.63**		0.418	0.443	1.00	0.341	pCi/L	10/26/16 13:52	11/20/16 06:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.9*		*40 - 110*	*10/26/16 13:52*	*11/20/16 06:15*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.161	U	0.314	0.315	1.00	0.537	pCi/L	10/26/16 18:24	11/18/16 18:07	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.9*		*40 - 110*	*10/26/16 18:24*	*11/18/16 18:07*	*1*
Y Carrier	*82.2*		*40 - 110*	*10/26/16 18:24*	*11/18/16 18:07*	*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	**1.80**		0.523	0.543	5.00	0.537	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25919 MW-6

Date Collected: 10/11/16 15:38
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-31

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	0.129	U	0.197	0.198	1.00	0.340	pCi/L	10/26/16 13:52	11/20/16 06:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.6*		*40 - 110*	*10/26/16 13:52*	*11/20/16 06:15*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0104	U	0.395	0.395	1.00	0.699	pCi/L	10/26/16 18:24	11/18/16 18:07	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*82.6*		*40 - 110*	*10/26/16 18:24*	*11/18/16 18:07*	*1*
Y Carrier	*83.0*		*40 - 110*	*10/26/16 18:24*	*11/18/16 18:07*	*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	0.139	U	0.441	0.441	5.00	0.699	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25920 MW-7

Date Collected: 10/12/16 10:30
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-32

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	**0.462**		0.310	0.313	1.00	0.438	pCi/L	10/26/16 13:52	11/20/16 06:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.8*		*40 - 110*	*10/26/16 13:52*	*11/20/16 06:16*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.206	U	0.390	0.390	1.00	0.664	pCi/L	10/26/16 18:24	11/18/16 18:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*73.8*		*40 - 110*	*10/26/16 18:24*	*11/18/16 18:08*	*1*
Y Carrier	*83.4*		*40 - 110*	*10/26/16 18:24*	*11/18/16 18:08*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.668**		0.498	0.500	5.00	0.664	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25921 MW-8

Date Collected: 10/12/16 11:51
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-33

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	0.0373	U	0.168	0.168	1.00	0.329	pCi/L	10/26/16 13:52	11/20/16 06:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.8*		*40 - 110*	*10/26/16 13:52*	*11/20/16 06:16*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.231	U	0.334	0.335	1.00	0.560	pCi/L	10/26/16 18:24	11/18/16 18:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*85.8*		*40 - 110*	*10/26/16 18:24*	*11/18/16 18:08*	*1*
Y Carrier	*84.1*		*40 - 110*	*10/26/16 18:24*	*11/18/16 18:08*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.269	U	0.374	0.375	5.00	0.560	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25922 MW-9

Date Collected: 10/12/16 13:26
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-34

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	0.297	U	0.241	0.243	1.00	0.357	pCi/L	10/26/16 13:52	11/20/16 06:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.3*		*40 - 110*	*10/26/16 13:52*	*11/20/16 06:16*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.778**		0.471	0.476	1.00	0.719	pCi/L	10/26/16 18:24	11/18/16 18:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.3*		*40 - 110*	*10/26/16 18:24*	*11/18/16 18:08*	*1*
Y Carrier	*72.1*		*40 - 110*	*10/26/16 18:24*	*11/18/16 18:08*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.07**		0.529	0.534	5.00	0.719	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25923 MW-10

Date Collected: 10/12/16 14:36
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-35

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	**0.392**		0.250	0.253	1.00	0.336	pCi/L	10/26/16 13:52	11/20/16 06:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.9*		*40 - 110*	*10/26/16 13:52*	*11/20/16 06:16*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.529	U	0.462	0.464	1.00	0.744	pCi/L	10/26/16 18:24	11/18/16 18:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*86.9*		*40 - 110*	*10/26/16 18:24*	*11/18/16 18:08*	*1*
Y Carrier	*82.2*		*40 - 110*	*10/26/16 18:24*	*11/18/16 18:08*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.920**		0.525	0.529	5.00	0.744	pCi/L		11/21/16 07:53	1

Client Sample ID: AW25924 FB-3

Date Collected: 10/12/16 14:55
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-36

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	**0.615**		0.300	0.305	1.00	0.365	pCi/L	10/26/16 13:52	11/20/16 06:18	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.8*		*40 - 110*	*10/26/16 13:52*	*11/20/16 06:18*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.472	U	0.405	0.407	1.00	0.648	pCi/L	10/26/16 18:24	11/18/16 18:08	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.8*		*40 - 110*	*10/26/16 18:24*	*11/18/16 18:08*	*1*
Y Carrier	*83.4*		*40 - 110*	*10/26/16 18:24*	*11/18/16 18:08*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.09**		0.504	0.509	5.00	0.648	pCi/L		11/21/16 07:53	1

Qualifiers

Rad

Qualifier	Qualifier Description
U	Result is less than the sample detection limit.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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)

Client Sample ID: AW25889 MW-25

Lab Sample ID: 400-129045-1

Date Collected: 10/11/16 11:05

Matrix: Water

Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276048	10/26/16 10:51	AS	TAL SL
Total/NA	Analysis	9315		1	280039	11/19/16 20:25	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276059	10/26/16 12:09	AS	TAL SL
Total/NA	Analysis	9320		1	280010	11/18/16 18:09	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25890 MW-23

Lab Sample ID: 400-129045-2

Date Collected: 10/11/16 12:35

Matrix: Water

Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276048	10/26/16 10:51	AS	TAL SL
Total/NA	Analysis	9315		1	280039	11/19/16 20:25	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276059	10/26/16 12:09	AS	TAL SL
Total/NA	Analysis	9320		1	280010	11/18/16 18:09	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25891 FB-2

Lab Sample ID: 400-129045-3

Date Collected: 10/11/16 12:50

Matrix: Water

Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276048	10/26/16 10:51	AS	TAL SL
Total/NA	Analysis	9315		1	280039	11/19/16 20:25	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276059	10/26/16 12:09	AS	TAL SL
Total/NA	Analysis	9320		1	280010	11/18/16 18:09	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25892 MW-24

Lab Sample ID: 400-129045-4

Date Collected: 10/11/16 13:50

Matrix: Water

Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276048	10/26/16 10:51	AS	TAL SL
Total/NA	Analysis	9315		1	280039	11/19/16 20:25	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276059	10/26/16 12:09	AS	TAL SL
Total/NA	Analysis	9320		1	280010	11/18/16 18:09	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25893 MW-24 DUP

Lab Sample ID: 400-129045-5
Date Collected: 10/11/16 13:50
Matrix: Water
Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276048	10/26/16 10:51	AS	TAL SL
Total/NA	Analysis	9315		1	280039	11/19/16 20:25	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276059	10/26/16 12:09	AS	TAL SL
Total/NA	Analysis	9320		1	280010	11/18/16 18:09	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25894 MW-15

Lab Sample ID: 400-129045-6
Date Collected: 10/11/16 15:15
Matrix: Water
Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276048	10/26/16 10:51	AS	TAL SL
Total/NA	Analysis	9315		1	280039	11/19/16 20:25	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276059	10/26/16 12:09	AS	TAL SL
Total/NA	Analysis	9320		1	280010	11/18/16 18:09	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25895 MW-18

Lab Sample ID: 400-129045-7
Date Collected: 10/12/16 10:00
Matrix: Water
Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276048	10/26/16 10:51	AS	TAL SL
Total/NA	Analysis	9315		1	280039	11/19/16 20:26	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276059	10/26/16 12:10	AS	TAL SL
Total/NA	Analysis	9320		1	280010	11/18/16 18:09	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25896 MW-17

Lab Sample ID: 400-129045-8
Date Collected: 10/12/16 11:00
Matrix: Water
Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276048	10/26/16 10:51	AS	TAL SL
Total/NA	Analysis	9315		1	280040	11/19/16 20:27	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276059	10/26/16 12:10	AS	TAL SL
Total/NA	Analysis	9320		1	280010	11/18/16 18:10	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25897 MW-16

Lab Sample ID: 400-129045-9

Date Collected: 10/12/16 12:30

Matrix: Water

Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276048	10/26/16 10:51	AS	TAL SL
Total/NA	Analysis	9315		1	280040	11/19/16 20:27	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276059	10/26/16 12:10	AS	TAL SL
Total/NA	Analysis	9320		1	280012	11/18/16 18:11	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25898 MW-14

Lab Sample ID: 400-129045-10

Date Collected: 10/12/16 13:50

Matrix: Water

Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276048	10/26/16 10:51	AS	TAL SL
Total/NA	Analysis	9315		1	280040	11/19/16 20:27	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276059	10/26/16 12:10	AS	TAL SL
Total/NA	Analysis	9320		1	280012	11/18/16 18:11	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25899 EB-1

Lab Sample ID: 400-129045-11

Date Collected: 10/12/16 14:13

Matrix: Water

Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276048	10/26/16 10:51	AS	TAL SL
Total/NA	Analysis	9315		1	280040	11/19/16 20:27	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276059	10/26/16 12:10	AS	TAL SL
Total/NA	Analysis	9320		1	280012	11/18/16 18:11	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25900 MW-13

Lab Sample ID: 400-129045-12

Date Collected: 10/12/16 15:12

Matrix: Water

Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276048	10/26/16 10:51	AS	TAL SL
Total/NA	Analysis	9315		1	280040	11/19/16 20:27	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276059	10/26/16 12:10	AS	TAL SL
Total/NA	Analysis	9320		1	280012	11/18/16 18:11	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25901 MW-32
Date Collected: 10/11/16 10:06
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276048	10/26/16 10:51	AS	TAL SL
Total/NA	Analysis	9315		1	280040	11/19/16 20:27	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276059	10/26/16 12:10	AS	TAL SL
Total/NA	Analysis	9320		1	280012	11/18/16 18:11	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25902 MW-32 DUP
Date Collected: 10/11/16 10:06
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276048	10/26/16 10:51	AS	TAL SL
Total/NA	Analysis	9315		1	280040	11/19/16 20:28	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276059	10/26/16 12:10	AS	TAL SL
Total/NA	Analysis	9320		1	280012	11/18/16 18:11	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25903 MW-33
Date Collected: 10/11/16 11:28
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276048	10/26/16 10:51	AS	TAL SL
Total/NA	Analysis	9315		1	280040	11/19/16 20:28	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276059	10/26/16 12:10	AS	TAL SL
Total/NA	Analysis	9320		1	280012	11/18/16 18:11	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25904 MW-31
Date Collected: 10/11/16 12:35
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276048	10/26/16 10:51	AS	TAL SL
Total/NA	Analysis	9315		1	280040	11/19/16 20:28	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276059	10/26/16 12:10	AS	TAL SL
Total/NA	Analysis	9320		1	280012	11/18/16 18:12	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25905 MW-30

Lab Sample ID: 400-129045-17

Date Collected: 10/11/16 13:51

Matrix: Water

Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276048	10/26/16 10:51	AS	TAL SL
Total/NA	Analysis	9315		1	280040	11/19/16 20:28	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276059	10/26/16 12:10	AS	TAL SL
Total/NA	Analysis	9320		1	280012	11/18/16 18:12	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25906 MW-29

Lab Sample ID: 400-129045-18

Date Collected: 10/11/16 15:12

Matrix: Water

Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276048	10/26/16 10:51	AS	TAL SL
Total/NA	Analysis	9315		1	280040	11/19/16 20:28	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276059	10/26/16 12:10	AS	TAL SL
Total/NA	Analysis	9320		1	280012	11/18/16 18:12	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25907 MW-28

Lab Sample ID: 400-129045-19

Date Collected: 10/12/16 09:44

Matrix: Water

Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276048	10/26/16 10:51	AS	TAL SL
Total/NA	Analysis	9315		1	280040	11/19/16 20:28	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276059	10/26/16 12:10	AS	TAL SL
Total/NA	Analysis	9320		1	280012	11/18/16 18:12	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25908 FB-1

Lab Sample ID: 400-129045-20

Date Collected: 10/12/16 09:51

Matrix: Water

Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276048	10/26/16 10:51	AS	TAL SL
Total/NA	Analysis	9315		1	280040	11/19/16 20:28	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276059	10/26/16 12:10	AS	TAL SL
Total/NA	Analysis	9320		1	280012	11/18/16 18:12	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25909 MW-27

Lab Sample ID: 400-129045-21
Date Collected: 10/12/16 10:37
Matrix: Water
Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276090	10/26/16 13:52	AS	TAL SL
Total/NA	Analysis	9315		1	280039	11/19/16 20:34	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276123	10/26/16 18:24	AS	TAL SL
Total/NA	Analysis	9320		1	280009	11/18/16 17:56	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25910 MW-26

Lab Sample ID: 400-129045-22
Date Collected: 10/12/16 11:44
Matrix: Water
Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276090	10/26/16 13:52	AS	TAL SL
Total/NA	Analysis	9315		1	280039	11/19/16 20:34	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276123	10/26/16 18:24	AS	TAL SL
Total/NA	Analysis	9320		1	280009	11/18/16 17:56	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25911 MW-12

Lab Sample ID: 400-129045-23
Date Collected: 10/12/16 13:01
Matrix: Water
Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276090	10/26/16 13:52	AS	TAL SL
Total/NA	Analysis	9315		1	280039	11/19/16 20:34	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276123	10/26/16 18:24	AS	TAL SL
Total/NA	Analysis	9320		1	280009	11/18/16 17:56	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25912 MW-21

Lab Sample ID: 400-129045-24
Date Collected: 10/12/16 14:16
Matrix: Water
Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276090	10/26/16 13:52	AS	TAL SL
Total/NA	Analysis	9315		1	280044	11/20/16 06:15	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276123	10/26/16 18:24	AS	TAL SL
Total/NA	Analysis	9320		1	280009	11/18/16 17:56	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25913 MW-11

Date Collected: 10/12/16 15:09
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-25

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276090	10/26/16 13:52	AS	TAL SL
Total/NA	Analysis	9315		1	280044	11/20/16 06:15	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276123	10/26/16 18:24	AS	TAL SL
Total/NA	Analysis	9320		1	280009	11/18/16 17:56	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25914 MW-1

Date Collected: 10/11/16 10:43
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-26

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276090	10/26/16 13:52	AS	TAL SL
Total/NA	Analysis	9315		1	280044	11/20/16 06:15	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276123	10/26/16 18:24	AS	TAL SL
Total/NA	Analysis	9320		1	280009	11/18/16 17:56	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25915 MW-2

Date Collected: 10/11/16 11:50
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-27

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276090	10/26/16 13:52	AS	TAL SL
Total/NA	Analysis	9315		1	280044	11/20/16 06:15	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276123	10/26/16 18:24	AS	TAL SL
Total/NA	Analysis	9320		1	280009	11/18/16 17:57	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25916 MW-3

Date Collected: 10/11/16 12:59
Date Received: 10/22/16 09:32

Lab Sample ID: 400-129045-28

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276090	10/26/16 13:52	AS	TAL SL
Total/NA	Analysis	9315		1	280044	11/20/16 06:15	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276123	10/26/16 18:24	AS	TAL SL
Total/NA	Analysis	9320		1	280010	11/18/16 18:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25917 MW-5

Lab Sample ID: 400-129045-29
Date Collected: 10/11/16 14:15
Matrix: Water
Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276090	10/26/16 13:52	AS	TAL SL
Total/NA	Analysis	9315		1	280044	11/20/16 06:15	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276123	10/26/16 18:24	AS	TAL SL
Total/NA	Analysis	9320		1	280010	11/18/16 18:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25918 MW-5 DUP

Lab Sample ID: 400-129045-30
Date Collected: 10/11/16 14:15
Matrix: Water
Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276090	10/26/16 13:52	AS	TAL SL
Total/NA	Analysis	9315		1	280044	11/20/16 06:15	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276123	10/26/16 18:24	AS	TAL SL
Total/NA	Analysis	9320		1	280010	11/18/16 18:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25919 MW-6

Lab Sample ID: 400-129045-31
Date Collected: 10/11/16 15:38
Matrix: Water
Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276090	10/26/16 13:52	AS	TAL SL
Total/NA	Analysis	9315		1	280044	11/20/16 06:15	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276123	10/26/16 18:24	AS	TAL SL
Total/NA	Analysis	9320		1	280010	11/18/16 18:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25920 MW-7

Lab Sample ID: 400-129045-32
Date Collected: 10/12/16 10:30
Matrix: Water
Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276090	10/26/16 13:52	AS	TAL SL
Total/NA	Analysis	9315		1	280044	11/20/16 06:16	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276123	10/26/16 18:24	AS	TAL SL
Total/NA	Analysis	9320		1	280010	11/18/16 18:08	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25921 MW-8

Lab Sample ID: 400-129045-33
Date Collected: 10/12/16 11:51
Matrix: Water
Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276090	10/26/16 13:52	AS	TAL SL
Total/NA	Analysis	9315		1	280044	11/20/16 06:16	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276123	10/26/16 18:24	AS	TAL SL
Total/NA	Analysis	9320		1	280010	11/18/16 18:08	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25922 MW-9

Lab Sample ID: 400-129045-34
Date Collected: 10/12/16 13:26
Matrix: Water
Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276090	10/26/16 13:52	AS	TAL SL
Total/NA	Analysis	9315		1	280044	11/20/16 06:16	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276123	10/26/16 18:24	AS	TAL SL
Total/NA	Analysis	9320		1	280010	11/18/16 18:08	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25923 MW-10

Lab Sample ID: 400-129045-35
Date Collected: 10/12/16 14:36
Matrix: Water
Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276090	10/26/16 13:52	AS	TAL SL
Total/NA	Analysis	9315		1	280044	11/20/16 06:16	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276123	10/26/16 18:24	AS	TAL SL
Total/NA	Analysis	9320		1	280010	11/18/16 18:08	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Client Sample ID: AW25924 FB-3

Lab Sample ID: 400-129045-36
Date Collected: 10/12/16 14:55
Matrix: Water
Date Received: 10/22/16 09:32

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			276090	10/26/16 13:52	AS	TAL SL
Total/NA	Analysis	9315		1	280045	11/20/16 06:18	RTM	TAL SL
Total/NA	Prep	PrecSep_0			276123	10/26/16 18:24	AS	TAL SL
Total/NA	Analysis	9320		1	280010	11/18/16 18:08	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	280189	11/21/16 07:53	RTM	TAL SL

Laboratory References:

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

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Prep Batch: 276048

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-129045-1	AW25889 MW-25	Total/NA	Water	PrecSep-21	
400-129045-2	AW25890 MW-23	Total/NA	Water	PrecSep-21	
400-129045-3	AW25891 FB-2	Total/NA	Water	PrecSep-21	
400-129045-4	AW25892 MW-24	Total/NA	Water	PrecSep-21	
400-129045-5	AW25893 MW-24 DUP	Total/NA	Water	PrecSep-21	
400-129045-6	AW25894 MW-15	Total/NA	Water	PrecSep-21	
400-129045-7	AW25895 MW-18	Total/NA	Water	PrecSep-21	
400-129045-8	AW25896 MW-17	Total/NA	Water	PrecSep-21	
400-129045-9	AW25897 MW-16	Total/NA	Water	PrecSep-21	
400-129045-10	AW25898 MW-14	Total/NA	Water	PrecSep-21	
400-129045-11	AW25899 EB-1	Total/NA	Water	PrecSep-21	
400-129045-12	AW25900 MW-13	Total/NA	Water	PrecSep-21	
400-129045-13	AW25901 MW-32	Total/NA	Water	PrecSep-21	
400-129045-14	AW25902 MW-32 DUP	Total/NA	Water	PrecSep-21	
400-129045-15	AW25903 MW-33	Total/NA	Water	PrecSep-21	
400-129045-16	AW25904 MW-31	Total/NA	Water	PrecSep-21	
400-129045-17	AW25905 MW-30	Total/NA	Water	PrecSep-21	
400-129045-18	AW25906 MW-29	Total/NA	Water	PrecSep-21	
400-129045-19	AW25907 MW-28	Total/NA	Water	PrecSep-21	
400-129045-20	AW25908 FB-1	Total/NA	Water	PrecSep-21	
MB 160-276048/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-276048/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-129045-15 MS	AW25903 MW-33	Total/NA	Water	PrecSep-21	
400-129045-15 MSD	AW25903 MW-33	Total/NA	Water	PrecSep-21	

Prep Batch: 276059

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-129045-1	AW25889 MW-25	Total/NA	Water	PrecSep_0	
400-129045-2	AW25890 MW-23	Total/NA	Water	PrecSep_0	
400-129045-3	AW25891 FB-2	Total/NA	Water	PrecSep_0	
400-129045-4	AW25892 MW-24	Total/NA	Water	PrecSep_0	
400-129045-5	AW25893 MW-24 DUP	Total/NA	Water	PrecSep_0	
400-129045-6	AW25894 MW-15	Total/NA	Water	PrecSep_0	
400-129045-7	AW25895 MW-18	Total/NA	Water	PrecSep_0	
400-129045-8	AW25896 MW-17	Total/NA	Water	PrecSep_0	
400-129045-9	AW25897 MW-16	Total/NA	Water	PrecSep_0	
400-129045-10	AW25898 MW-14	Total/NA	Water	PrecSep_0	
400-129045-11	AW25899 EB-1	Total/NA	Water	PrecSep_0	
400-129045-12	AW25900 MW-13	Total/NA	Water	PrecSep_0	
400-129045-13	AW25901 MW-32	Total/NA	Water	PrecSep_0	
400-129045-14	AW25902 MW-32 DUP	Total/NA	Water	PrecSep_0	
400-129045-15	AW25903 MW-33	Total/NA	Water	PrecSep_0	
400-129045-16	AW25904 MW-31	Total/NA	Water	PrecSep_0	
400-129045-17	AW25905 MW-30	Total/NA	Water	PrecSep_0	
400-129045-18	AW25906 MW-29	Total/NA	Water	PrecSep_0	
400-129045-19	AW25907 MW-28	Total/NA	Water	PrecSep_0	
400-129045-20	AW25908 FB-1	Total/NA	Water	PrecSep_0	
MB 160-276059/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-276059/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-129045-15 MS	AW25903 MW-33	Total/NA	Water	PrecSep_0	
400-129045-15 MSD	AW25903 MW-33	Total/NA	Water	PrecSep_0	

QC Association Summary

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

TestAmerica Job ID: 400-129045-1
SDG: Greene Ash Pond (5)

Prep Batch: 276090

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-129045-21	AW25909 MW-27	Total/NA	Water	PrecSep-21	
400-129045-22	AW25910 MW-26	Total/NA	Water	PrecSep-21	
400-129045-23	AW25911 MW-12	Total/NA	Water	PrecSep-21	
400-129045-24	AW25912 MW-21	Total/NA	Water	PrecSep-21	
400-129045-25	AW25913 MW-11	Total/NA	Water	PrecSep-21	
400-129045-26	AW25914 MW-1	Total/NA	Water	PrecSep-21	
400-129045-27	AW25915 MW-2	Total/NA	Water	PrecSep-21	
400-129045-28	AW25916 MW-3	Total/NA	Water	PrecSep-21	
400-129045-29	AW25917 MW-5	Total/NA	Water	PrecSep-21	
400-129045-30	AW25918 MW-5 DUP	Total/NA	Water	PrecSep-21	
400-129045-31	AW25919 MW-6	Total/NA	Water	PrecSep-21	
400-129045-32	AW25920 MW-7	Total/NA	Water	PrecSep-21	
400-129045-33	AW25921 MW-8	Total/NA	Water	PrecSep-21	
400-129045-34	AW25922 MW-9	Total/NA	Water	PrecSep-21	
400-129045-35	AW25923 MW-10	Total/NA	Water	PrecSep-21	
400-129045-36	AW25924 FB-3	Total/NA	Water	PrecSep-21	
MB 160-276090/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-276090/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-129045-31 MS	AW25919 MW-6	Total/NA	Water	PrecSep-21	
400-129045-31 MSD	AW25919 MW-6	Total/NA	Water	PrecSep-21	

Prep Batch: 276123

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-129045-21	AW25909 MW-27	Total/NA	Water	PrecSep_0	
400-129045-22	AW25910 MW-26	Total/NA	Water	PrecSep_0	
400-129045-23	AW25911 MW-12	Total/NA	Water	PrecSep_0	
400-129045-24	AW25912 MW-21	Total/NA	Water	PrecSep_0	
400-129045-25	AW25913 MW-11	Total/NA	Water	PrecSep_0	
400-129045-26	AW25914 MW-1	Total/NA	Water	PrecSep_0	
400-129045-27	AW25915 MW-2	Total/NA	Water	PrecSep_0	
400-129045-28	AW25916 MW-3	Total/NA	Water	PrecSep_0	
400-129045-29	AW25917 MW-5	Total/NA	Water	PrecSep_0	
400-129045-30	AW25918 MW-5 DUP	Total/NA	Water	PrecSep_0	
400-129045-31	AW25919 MW-6	Total/NA	Water	PrecSep_0	
400-129045-32	AW25920 MW-7	Total/NA	Water	PrecSep_0	
400-129045-33	AW25921 MW-8	Total/NA	Water	PrecSep_0	
400-129045-34	AW25922 MW-9	Total/NA	Water	PrecSep_0	
400-129045-35	AW25923 MW-10	Total/NA	Water	PrecSep_0	
400-129045-36	AW25924 FB-3	Total/NA	Water	PrecSep_0	
MB 160-276123/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-276123/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-129045-31 MS	AW25919 MW-6	Total/NA	Water	PrecSep_0	
400-129045-31 MSD	AW25919 MW-6	Total/NA	Water	PrecSep_0	

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-276048/1-A
Matrix: Water
Analysis Batch: 280039

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276048

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.03439	U	0.142	0.142	1.00	0.309	pCi/L	10/26/16 10:51	11/19/16 20:25	1

Carrier	*MB %Yield*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.2*		*40 - 110*	*10/26/16 10:51*	*11/19/16 20:25*	*1*

Lab Sample ID: LCS 160-276048/2-A
Matrix: Water
Analysis Batch: 280039

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276048

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			11.1	14.87		1.73	1.00	0.297	pCi/L	134	68 - 137		

Carrier	*LCS %Yield*	*LCS Qualifier*	*Limits*
Ba Carrier	*85.5*		*40 - 110*

Lab Sample ID: 400-129045-15 MS
Matrix: Water
Analysis Batch: 280040

Client Sample ID: AW25903 MW-33
Prep Type: Total/NA
Prep Batch: 276048

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.0747	U	11.1	15.42	F1	1.79	1.00	0.300	pCi/L	139	75 - 138		

Carrier	*MS %Yield*	*MS Qualifier*	*Limits*
Ba Carrier	*78.9*		*40 - 110*

Lab Sample ID: 400-129045-15 MSD
Matrix: Water
Analysis Batch: 280040

Client Sample ID: AW25903 MW-33
Prep Type: Total/NA
Prep Batch: 276048

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	0.0747	U	11.1	14.87		1.74	1.00	0.296	pCi/L	134	75 - 138	0.15	1

Carrier	*MSD %Yield*	*MSD Qualifier*	*Limits*
Ba Carrier	*78.1*		*40 - 110*

Lab Sample ID: MB 160-276090/1-A
Matrix: Water
Analysis Batch: 280039

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276090

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1231	U	0.194	0.194	1.00	0.337	pCi/L	10/26/16 13:52	11/19/16 20:33	1

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

Lab Sample ID: MB 160-276090/1-A
Matrix: Water
Analysis Batch: 280039

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276090

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110	10/26/16 13:52	11/19/16 20:33	1

Lab Sample ID: LCS 160-276090/2-A
Matrix: Water
Analysis Batch: 280039

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276090

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			14.8	18.93		2.26	1.00	0.447	pCi/L	128	68 - 137		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	77.8		40 - 110

Lab Sample ID: 400-129045-31 MS
Matrix: Water
Analysis Batch: 280044

Client Sample ID: AW25919 MW-6
Prep Type: Total/NA
Prep Batch: 276090

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226	0.129	U	14.8	18.43		2.13	1.00	0.388	pCi/L	125	75 - 138		

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	83.8		40 - 110

Lab Sample ID: 400-129045-31 MSD
Matrix: Water
Analysis Batch: 280044

Client Sample ID: AW25919 MW-6
Prep Type: Total/NA
Prep Batch: 276090

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	0.129	U	14.8	18.94		2.17	1.00	0.367	pCi/L	128	75 - 138	0.12	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	82.6		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-276059/1-A
Matrix: Water
Analysis Batch: 280010

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276059

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1205	U	0.259	0.259	1.00	0.445	pCi/L	10/26/16 12:09	11/18/16 18:09	1

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

Lab Sample ID: MB 160-276059/1-A
Matrix: Water
Analysis Batch: 280010

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276059

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	81.2		40 - 110	10/26/16 12:09	11/18/16 18:09	1
Y Carrier	84.1		40 - 110	10/26/16 12:09	11/18/16 18:09	1

Lab Sample ID: LCS 160-276059/2-A
Matrix: Water
Analysis Batch: 280010

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276059

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			14.3	15.38		1.69	1.00	0.444	pCi/L	108	56 - 140		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	85.5		40 - 110
Y Carrier	82.2		40 - 110

Lab Sample ID: 400-129045-15 MS
Matrix: Water
Analysis Batch: 280012

Client Sample ID: AW25903 MW-33
Prep Type: Total/NA
Prep Batch: 276059

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	0.0832	U	14.3	18.18		1.96	1.00	0.516	pCi/L	127	45 - 150		

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	78.9		40 - 110
Y Carrier	83.4		40 - 110

Lab Sample ID: 400-129045-15 MSD
Matrix: Water
Analysis Batch: 280012

Client Sample ID: AW25903 MW-33
Prep Type: Total/NA
Prep Batch: 276059

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	0.0832	U	14.3	20.09		2.15	1.00	0.562	pCi/L	141	45 - 150	0.47	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	78.1		40 - 110
Y Carrier	82.2		40 - 110

Lab Sample ID: MB 160-276123/1-A
Matrix: Water
Analysis Batch: 280009

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276123

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.05285	U	0.389	0.389	1.00	0.694	pCi/L	10/26/16 18:24	11/18/16 17:56	1

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

Lab Sample ID: MB 160-276123/1-A
Matrix: Water
Analysis Batch: 280009

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 276123

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110	10/26/16 18:24	11/18/16 17:56	1
Y Carrier	81.9		40 - 110	10/26/16 18:24	11/18/16 17:56	1

Lab Sample ID: LCS 160-276123/2-A
Matrix: Water
Analysis Batch: 280009

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 276123

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			19.0	25.36		2.73	1.00	0.669	pCi/L	133	56 - 140		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	77.8		40 - 110
Y Carrier	82.6		40 - 110

Lab Sample ID: 400-129045-31 MS
Matrix: Water
Analysis Batch: 280010

Client Sample ID: AW25919 MW-6
Prep Type: Total/NA
Prep Batch: 276123

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228	0.0104	U	19.0	20.38		2.23	1.00	0.553	pCi/L	107	45 - 150		

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	83.8		40 - 110
Y Carrier	83.0		40 - 110

Lab Sample ID: 400-129045-31 MSD
Matrix: Water
Analysis Batch: 280010

Client Sample ID: AW25919 MW-6
Prep Type: Total/NA
Prep Batch: 276123

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	0.0104	U	19.0	21.45		2.34	1.00	0.618	pCi/L	113	45 - 150	0.23	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	82.6		40 - 110
Y Carrier	82.2		40 - 110

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Jason Rouss	Lab PM: Whitmire, 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 3
Company: Alabama Power General Test Laboratory		Analysis Requested		Job #: 400-129045
Address: 744 County Rd 87 GSC #8	Due Date Requested:			Preservation Codes:
City: Calera	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, 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)
State, Zip: AL, 35040				Other:
Phone: 205-664-6121(Tel)	PO #:			
Email: sgcopela@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Greene Ash Pond (5)	SSOW#:			

400-129045 COC

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D		
AW25889	10/11/16	1105	G	Water			X	1	MW-25
AW25890	10/11/16	1235	G	Water			X	1	MW-23
AW25891	10/11/16	1250	G	Water			X	1	FB-2 (Field Blank)
AW25892	10/11/16	1350	G	Water			X	1	MW-24
AW25893	10/11/16	1350	G	Water			X	1	MW-24 Dup (Sample Duplicate)
AW25894	10/11/16	1515	G	Water			X	1	MW-15
AW25895	10/12/16	1000	G	Water			X	1	MW-18
AW25896	10/12/16	1100	G	Water			X	1	MW-17
AW25897	10/12/16	1230	G	Water			X	1	MW-16
AW25898	10/12/16	1350	G	Water			X	1	MW-14
AW25899	10/12/16	1413	G	Water			X	1	EB-1 (Equipment Blank)
AW25900	10/12/16	1512	G	Water			X	1	MW-13

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Sarah Copeland	Date/Time: 10/18/2016; 0930	Company APC	Received by:	Date/Time: 10-18-16 0932	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 25.6, 26.0, 24.5° IR-5

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Anthony Goggins	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 2 of 3
Company: Alabama Power General Test Laboratory		Analysis Requested		Job #:
Address: 744 County Rd 87 GSC #8	Due Date Requested:			Preservation Codes:
City: Calera	TAT Requested (days): Routine			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 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) Other:
State, Zip: AL, 35040				
Phone: 205-664-6121(Tel)	PO #:			
Email: sgcopela@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Greene Ash Pond (5)	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228, Ra226Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D		
AW25901	10/11/16	1006	G	Water			X	1	MW-32
AW25902	10/11/16	1006	G	Water			X	1	MW-32 Dup (Sample Duplicate)
AW25903	10/11/16	1128	G	Water		X	X	3	MW-33
AW25904	10/11/16	1235	G	Water			X	1	MW-31
AW25905	10/11/16	1351	G	Water			X	1	MW-30
AW25906	10/11/16	1512	G	Water			X	1	MW-29
AW25907	10/12/16	0944	G	Water			X	1	MW-28
AW25908	10/12/16	0951	G	Water			X	1	FB-1 (Field Blank)
AW25909	10/12/16	1037	G	Water			X	1	MW-27
AW25910	10/12/16	1144	G	Water			X	1	MW-26
AW25911	10/12/16	1301	G	Water			X	1	MW-12
AW25912	10/12/16	1416	G	Water			X	1	MW-21

Possible Hazard Identification
☐ *Non-Hazard* ☐ *Flammable* ☐ *Skin Irritant* ☐ *Poison B* ☐ *Unknown* ☐ *Radiological*

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Sarah Copeland	Date/Time: 10/18/2016; 0930	Company APC	Received by:	Date/Time: 10-18-16 0932	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ 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	Sampler: Anthony Goggins/ Ben Rothschadl	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 3 of 3
Company: Alabama Power General Test Laboratory		Analysis Requested		Job #:
Address: 744 County Rd 87 GSC #8	Due Date Requested:			Preservation Codes:
City: Calera	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; 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); Other:
State, Zip: AL, 35040				
Phone: 205-664-6121(Tel)	PO #:			
Email: sgcopela@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Greene Ash Pond (5)	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra226, Ra226Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:				D		
AW25913	10/12/16	1509	G	Water			X	1	MW-11
AW25914	10/11/16	1043	G	Water			X	1	MW-11
AW25915	10/11/16	1150	G	Water			X	1	MW-2
AW25916	10/11/16	1259	G	Water			X	1	MW-3
AW25917	10/11/16	1415	G	Water			X	1	MW-5
AW25918	10/11/16	1415	G	Water			X	1	MW-5 Dup (Sample Duplicate)
AW25919	10/11/16	1538	G	Water		X	X	1	MW-6
AW25920	10/12/16	1030	G	Water			X	1	MW-7
AW25921	10/12/16	1151	G	Water			X	1	MW-8
AW25922	10/12/16	1326	G	Water			X	1	MW-9
AW25923	10/12/16	1436	G	Water			X	1	MW-10
AW25924	10/12/16	1455	G	Water			X	1	FB-3 (Field Blank)

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time	Company	Received by:	Date/Time	Company
Relinquished by: Sarah Copeland	Date/Time: 10/18/2016; 0930	Company APC	Received by:	Date/Time: 10/18/16 0932	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-129045-1
SDG Number: Greene Ash Pond (5)

Login Number: 129045
List Number: 1
Creator: Siddoway, Benjamin

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	N/A	Thermal preservation not required.
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	25.6°C, 26.0°C, 24.5°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.	False	Sample #26 should be "MW-1" not "MW-11."
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

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

TestAmerica Job ID: 400-129045-1
SDG: Greene 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 Greene

TestAmerica Job ID: 400-129045-1
SDG: Greene 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

Lab & Field SERVICES

Sample Group : WMWGREAP_1055

Project/Site : Greene County Ash Pond
Demopolis, AL 36732

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

Alabama Power

Lab & Field SERVICES

TDS

Greene County Ash Pond

WMWGREAP_1055

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

Sample ID	Batch ID	Project ID
AW27529	581220	WMWGREAP_1055
AW27530	581220	WMWGREAP_1055
AW27531	581220	WMWGREAP_1055
AW27532	581220	WMWGREAP_1055
AW27533	581220	WMWGREAP_1055
AW27534	581220	WMWGREAP_1055
AW27535	581220	WMWGREAP_1055
AW27536	581220	WMWGREAP_1055
AW27537	580942	WMWGREAP_1055
AW27538	580942	WMWGREAP_1055
AW27539	580942	WMWGREAP_1055
AW27540	580942	WMWGREAP_1055
AW27541	580942	WMWGREAP_1055
AW27687	580898	WMWGREAP_1055
AW27688	580898	WMWGREAP_1055
AW27689	580898	WMWGREAP_1055
AW27690	580898	WMWGREAP_1055
AW27691	580898	WMWGREAP_1055
AW27692	580898	WMWGREAP_1055
AW27693	580898	WMWGREAP_1055

4. All of the above samples were analyzed by Standard Method 2540C.
5. All samples were analyzed within the established hold times.
6. All in house quality control procedures were followed, as described below.
7. The reporting limit for TDS was incorrectly listed as 2.5mg/L. It has been corrected based on filter volume and project limits.
8. The samples listed above are a re-sample due to QC failure and hold time exceedance.

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 AW27530, AW27536 and AW27541 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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-Oct-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AW27529

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	DLJ	11/8/2016	SM 2540C		1		25		25.3	mg/L

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

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 to 25 mg/L.
SGC 3/20/17

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-Oct-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AW27529

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	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.

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 to 25 mg/L.
SGC 3/20/17

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-Oct-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AW27529

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW27432	Solids, Dissolved	mg/L	-2.0	25			403	46.0	40 to 60			0.624	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: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected to 25 mg/L.
SGC 3/20/17

CC:

Reported: 7/20/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 31-Oct-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW27530

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	DLJ	11/8/2016	SM 2540C		1		25	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 to 25 mg/L.
SGC 3/20/17

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 31-Oct-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW27530

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	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.

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 to 25 mg/L.
SGC 3/20/17

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 31-Oct-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW27530

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW27432	Solids, Dissolved	mg/L	-2.0	25			403	46.0	40 to 60			0.624	5

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected to 25 mg/L.
SGC 3/20/17

CC:

Reported: 7/20/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-Oct-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AW27531

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	DLJ	11/8/2016	SM 2540C		1		25		140	mg/L

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Sample Date: 31-Oct-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AW27531

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AW27531

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AW27432	Solids, Dissolved	mg/L	-2.0	25			403	46.0	40 to 60			0.624	5

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To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 31-Oct-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AW27532

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	DLJ	11/8/2016	SM 2540C		1		25		38.7	mg/L

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Customer Account: WMWGREAP
Sample Date: 31-Oct-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AW27532

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AW27532

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AW27432	Solids, Dissolved	mg/L	-2.0	25			403	46.0	40 to 60			0.624	5

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Customer Account: WMWGREAP
Sample Date: 01-Nov-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AW27533

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	DLJ	11/8/2016	SM 2540C		1		25		48.0	mg/L

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Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AW27533

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AW27533

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AW27432	Solids, Dissolved	mg/L	-2.0	25			403	46.0	40 to 60			0.624	5

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Customer Account: WMWGREAP
Sample Date: 01-Nov-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-32 Dup

Laboratory ID Number: AW27534

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	DLJ	11/8/2016	SM 2540C		1		25		50.0	mg/L

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Customer Account: WMWGREAP
Sample Date: 01-Nov-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-32 Dup

Laboratory ID Number: AW27534

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Laboratory ID Number: AW27534

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To: Dustin Brooks
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John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Nov-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AW27535

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	DLJ	11/8/2016	SM 2540C		1		25		78.0	mg/L

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Laboratory ID Number: AW27535

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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AW27432	Solids, Dissolved	mg/L	-2.0	25			403	46.0	40 to 60			0.624	5

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To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 01-Nov-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW27536

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	DLJ	11/8/2016	SM 2540C		1		25	U	Not Detected	mg/L

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Customer Account: WMWGREAPFB
Sample Date: 01-Nov-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AW27536

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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AW27432	Solids, Dissolved	mg/L	-2.0	25			403	46.0	40 to 60			0.624	5

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To: Dustin Brooks
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John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Nov-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AW27537

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	DLJ	11/7/2016	SM 2540C		1		25		103	mg/L

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Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AW27537

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Sample Date: 01-Nov-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AW27537

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW27556	Solids, Dissolved	mg/L	-2.0	25			1160	49.0	40 to 60			0.172	5

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected to 25 mg/L.
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Reported: 7/20/2017
Version: 2.0

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Calera, AL 35040
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FAX (205) 257-1654

Certificate Of Analysis

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Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Nov-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AW27538

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	DLJ	11/7/2016	SM 2540C		1		25		244	mg/L

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To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Nov-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AW27538

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Sample Date: 01-Nov-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AW27538

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW27556	Solids, Dissolved	mg/L	-2.0	25			1160	49.0	40 to 60			0.172	5

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To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Nov-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AW27539

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	DLJ	11/7/2016	SM 2540C		1		25		252	mg/L

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John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Nov-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AW27539

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Nov-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AW27539

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW27556	Solids, Dissolved	mg/L	-2.0	25			1160	49.0	40 to 60			0.172	5

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To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 01-Nov-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AW27540

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	DLJ	11/7/2016	SM 2540C		1		25		372	mg/L

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To: Dustin Brooks
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Customer Account: WMWGREAP
Sample Date: 01-Nov-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AW27540

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Sample Date: 01-Nov-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AW27540

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW27556	Solids, Dissolved	mg/L	-2.0	25			1160	49.0	40 to 60			0.172	5

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To: Dustin Brooks
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John Pugh

Customer Account: WMWGREAPEB
Sample Date: 01-Nov-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW27541

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	DLJ	11/7/2016	SM 2540C		1		25	U	Not Detected	mg/L

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To: Dustin Brooks
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John Pugh

Customer Account: WMWGREAPEB
Sample Date: 01-Nov-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW27541

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Sample Date: 01-Nov-16
Customer ID:
Delivery Date: 02-Nov-16

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AW27541

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW27556	Solids, Dissolved	mg/L	-2.0	25			1160	49.0	40 to 60			0.172	5

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To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 02-Nov-16
Customer ID:
Delivery Date: 03-Nov-16

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AW27687

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	KRC	11/7/2016	SM 2540C		1		25		374	mg/L

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To: Dustin Brooks
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John Pugh

Customer Account: WMWGREAP
Sample Date: 02-Nov-16
Customer ID:
Delivery Date: 03-Nov-16

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AW27687

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Customer Account: WMWGREAP
Sample Date: 02-Nov-16
Customer ID:
Delivery Date: 03-Nov-16

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AW27687

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW27693	Solids, Dissolved	mg/L	-4.0	25			128	41.0	40 to 60			0.00	5

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Customer Account: WMWGREAP
Sample Date: 02-Nov-16
Customer ID:
Delivery Date: 03-Nov-16

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AW27688

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	KRC	11/7/2016	SM 2540C		1		25		469	mg/L

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Customer Account: WMWGREAP
Sample Date: 02-Nov-16
Customer ID:
Delivery Date: 03-Nov-16

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AW27688

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Customer Account: WMWGREAP
Sample Date: 02-Nov-16
Customer ID:
Delivery Date: 03-Nov-16

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AW27688

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW27693	Solids, Dissolved	mg/L	-4.0	25			128	41.0	40 to 60			0.00	5

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To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 02-Nov-16
Customer ID:
Delivery Date: 03-Nov-16

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AW27689

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	KRC	11/7/2016	SM 2540C		1		25		422	mg/L

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Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 02-Nov-16
Customer ID:
Delivery Date: 03-Nov-16

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AW27689

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 02-Nov-16
Customer ID:
Delivery Date: 03-Nov-16

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AW27689

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW27693	Solids, Dissolved	mg/L	-4.0	25			128	41.0	40 to 60			0.00	5

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* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report
Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: CORRECTED COPY: Reporting Limit for TDS was incorrectly listed as 2.5 mg/L. The RL has now been corrected to 25 mg/L.
SGC 3/20/17

CC:

Reported: 7/20/2017
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

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 02-Nov-16
Customer ID:
Delivery Date: 03-Nov-16

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AW27690

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	KRC	11/7/2016	SM 2540C		1		25		66.7	mg/L

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Expiration: June 30, 2018

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SGC 3/20/17

Reported: 7/20/2017
Version: 2.0

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Calera, AL 35040
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 02-Nov-16
Customer ID:
Delivery Date: 03-Nov-16

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AW27690

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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SGC 3/20/17

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 02-Nov-16
Customer ID:
Delivery Date: 03-Nov-16

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AW27690

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW27693	Solids, Dissolved	mg/L	-4.0	25			128	41.0	40 to 60			0.00	5

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SGC 3/20/17

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 02-Nov-16
Customer ID:
Delivery Date: 03-Nov-16

Description: Greene County Ash Pond - MW-24 Dup

Laboratory ID Number: AW27691

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	KRC	11/7/2016	SM 2540C		1		25		72.0	mg/L

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Batch QC Summary

Alabama Power

Corrected Copy

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 02-Nov-16
Customer ID:
Delivery Date: 03-Nov-16

Description: Greene County Ash Pond - MW-24 Dup

Laboratory ID Number: AW27691

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	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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To: Dustin Brooks
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John Pugh

Customer Account: WMWGREAP
Sample Date: 02-Nov-16
Customer ID:
Delivery Date: 03-Nov-16

Description: Greene County Ash Pond - MW-24 Dup

Laboratory ID Number: AW27691

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW27693	Solids, Dissolved	mg/L	-4.0	25			128	41.0	40 to 60			0.00	5

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Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 02-Nov-16
Customer ID:
Delivery Date: 03-Nov-16

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AW27692

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	KRC	11/7/2016	SM 2540C		1		25		115	mg/L

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Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Corrected Copy

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 02-Nov-16
Customer ID:
Delivery Date: 03-Nov-16

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AW27692

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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John Pugh

Customer Account: WMWGREAP
Sample Date: 02-Nov-16
Customer ID:
Delivery Date: 03-Nov-16

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AW27692

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW27693	Solids, Dissolved	mg/L	-4.0	25			128	41.0	40 to 60			0.00	5

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 02-Nov-16
Customer ID:
Delivery Date: 03-Nov-16

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AW27693

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Solids, Dissolved	KRC	11/7/2016	SM 2540C		1		25		128	mg/L

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Expiration: June 30, 2018

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SGC 3/20/17

Reported: 7/20/2017
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 02-Nov-16
Customer ID:
Delivery Date: 03-Nov-16

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AW27693

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

Corrected Copy

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 02-Nov-16
Customer ID:
Delivery Date: 03-Nov-16

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AW27693

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AW27693	Solids, Dissolved	mg/L	-4.0	25			128	41.0	40 to 60			0.00	5

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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	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Greene Ash Pond

Analysis Requested: Bottle 1: TDS (1) 500 mL bottle

Comments: There is no pH requirement for TDS.
Re-sample event for TDS due to QC failure and hold time exceedance. SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-30	10/31/2016	16:27	1	Groundwater		AW27529
FB-2	10/31/2016	16:29	1	Field Blank		AW27530
MW-29	10/31/2016	17:23	1	Groundwater		AW27531
MW-28	10/31/2016	18:02	1	Groundwater		AW27532
MW-32	11/01/2016	09:23	1	Groundwater		AW27533
MW-32DUP	11/01/2016	09:23	1	Sample Duplicate		AW27534
MW-33	11/01/2016	10:07	1	Groundwater		AW27535
FB-1	11/01/2016	10:09	1	Field Blank		AW27536
MW-31	11/01/2016	11:17	1	Groundwater		AW27537
MW-13	11/01/2016	12:33	1	Groundwater		AW27538
MW-14	11/01/2016	13:51	1	Groundwater		AW27539
MW-15	11/01/2016	14:56	1	Groundwater		AW27540
EB-1	11/01/2016	15:00	1	Equipment Blank		AW27541

Relinquished By	Received By	Date/Time
Anthony Goggins		11/02/2016 09:03
	Sarah Copeland Digitally signed by Sarah Copeland Date: 2016.11.02 12:28:36 -05'00'	11/02/2016 11:34

SmarTroll ID: 5151-26193-1-1
Turbidity ID: 5160-26211-1-1

All metals and radiological bottles have pH < 2 ☐

Cooler Temp: 2.4 degrees C
Thermometer ID: 5408-27568-2-2
pH Strip ID: NA

Alabama Power Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

✔ Field Complete
✔ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Greene Ash Pond

Analysis Requested	Bottle 1: TDS (1) 500 mL bottle
Comments	There is no pH requirement for TDS. Re-sample event for TDS due to QC failure and hold time exceedance. SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-16	11/02/2016	10:13	1	Groundwater		AW27687
MW-17	11/02/2016	10:56	1	Groundwater		AW27688
MW-18	11/02/2016	11:34	1	Groundwater		AW27689
MW-24	11/02/2016	12:20	1	Groundwater		AW27690
MW-24DUP	11/02/2016	12:20	1	Sample Duplicate		AW27691
MW-23	11/02/2016	13:09	1	Groundwater		AW27692
MW-25	11/02/2016	14:05	1	Groundwater		AW27693

Relinquished By	Received By	Date/Time
Anthony Goggins		11/03/2016 10:40

SmarTroll ID	5151-26193-1-1
Turbidity ID	5160-26211-1-1

All metals and radiological bottles have pH < 2 ☐

Cooler Temp	0.4 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	NA

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

Lab & Field SERVICES

Sample Group : WMWGREAP_1080

Project/Site : Greene County Ash Pond
Demopolis, AL 36732

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

Alabama Power

Anions

Greene County Ash Pond

WMWGREAP_1080

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. This is a re-sample event for Fluoride only due to hold time exceedance. All samples were outsourced to Test America, Pensacola for analysis. Listed below is the job narrative provided for these samples.

Job Narrative
400-135340-1
General Chemistry

Method(s) SM 4500 F C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 347511 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 F C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 347847 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. Same was re-ran at a 5X dilution.

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AX06142

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
General Characteristics											
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C			1	0.032	0.10	U	<0.032	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

Alabama Power General Test Laboratory
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AX06142

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Expiration: June 30, 2018

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Reported: 7/20/2017
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AX06142

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

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Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

CC:

Reported: 7/20/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-31 Dup

Laboratory ID Number: AX06143

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
General Characteristics											
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C			1	0.032	0.10	U	<0.032	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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-31 Dup

Laboratory ID Number: AX06143

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

Alabama Power General Test Laboratory
744 County Road 87, GSC#8
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-31 Dup

Laboratory ID Number: AX06143

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

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Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

CC:

Reported: 7/20/2017
Version: 2.0

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Calera, AL 35040
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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AX06144

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
General Characteristics											
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C			1	0.032	0.10	U	<0.032	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

Alabama Power General Test Laboratory
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AX06144

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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(205) 664-6032 or 6171
FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AX06144

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

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Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

CC:

Reported: 7/20/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX06145

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
General Characteristics											
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C			1	0.032	0.10	U	<0.032	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX06145

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

Alabama Power General Test Laboratory
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX06145

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

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Comments: Test America Pensacola NELAP ID: E81010

CC:

Reported: 7/20/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AX06146

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
General Characteristics											
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C			1	0.032	0.10	U	<0.032	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

Alabama Power General Test Laboratory
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AX06146

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	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

Reported: 7/20/2017
Version: 2.0

Alabama Power General Test Laboratory
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AX06146

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

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Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

CC:

Reported: 7/20/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AX06147

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
General Characteristics											
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C			1	0.032	0.10	J	0.040	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AX06147

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	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

Reported: 7/20/2017
Version: 2.0

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AX06147

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	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

CC:

Reported: 7/20/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AX06148

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
General Characteristics											
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C			1	0.032	0.10	U	<0.032	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

Alabama Power General Test Laboratory
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Calera, AL 35040
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AX06148

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	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

Reported: 7/20/2017
Version: 2.0

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AX06148

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

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Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AX06149

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
General Characteristics											
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C			1	0.032	0.10	J	0.070	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

Reported: 7/20/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AX06149

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AX06149

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

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Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

CC:

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AX06150

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
General Characteristics											
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C			1	0.032	0.10	U	<0.032	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

Alabama Power General Test Laboratory
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AX06150

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	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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Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AX06150

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	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.

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:

Reported: 7/20/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AX06151

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C		1	0.032	0.10	J	0.070	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

Reported: 7/20/2017
Version: 2.0

Alabama Power General Test Laboratory
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AX06151

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AX06151

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

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Comments: Test America Pensacola NELAP ID: E81010

CC:

Reported: 7/20/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AX06152

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C		1	0.032	0.10	J	0.090	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

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AX06152

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AX06152

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

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Comments: Test America Pensacola NELAP ID: E81010

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Reported: 7/20/2017
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AX06153

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C		1	0.032	0.10		0.22	mg/L

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Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AX06153

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	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

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AX06153

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

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Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

CC:

Reported: 7/20/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AX06154

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C		1	0.032	0.10		0.13	mg/L

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Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AX06154

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AX06154

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

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Expiration: June 30, 2018

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Reported: 7/20/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AX06155

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C		1	0.032	0.10		0.23	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AX06155

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	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

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AX06155

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

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Comments: Test America Pensacola NELAP ID: E81010

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Reported: 7/20/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AX06156

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C		1	0.032	0.10		0.41	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

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AX06156

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	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

Reported: 7/20/2017
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AX06156

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

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Reported: 7/20/2017
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AX06157

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C		1	0.032	0.10		0.17	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

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AX06157

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	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

Reported: 7/20/2017
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Batch QC Summary

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Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AX06157

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	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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Comments: Test America Pensacola NELAP ID: E81010

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Reported: 7/20/2017
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AX06158

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
General Characteristics											
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C			1	0.032	0.10	U	<0.032	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AX06158

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Expiration: June 30, 2018

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Batch QC Summary

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Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AX06158

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

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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:

Reported: 7/20/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AX06159

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C		1	0.032	0.10		0.11	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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AX06159

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	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

Reported: 7/20/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AX06159

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	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

CC:

Reported: 7/20/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AX06160

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
General Characteristics											
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C			1	0.032	0.10	J	0.090	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

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

Alabama Power General Test Laboratory
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AX06160

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	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

Reported: 7/20/2017
Version: 2.0

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AX06160

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	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

CC:

Reported: 7/20/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AX06161

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C		1	0.032	0.10		0.16	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

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AX06161

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	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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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AX06161

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

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Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

CC:

Reported: 7/20/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-21 Dup

Laboratory ID Number: AX06162

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
General Characteristics											
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C			1	0.032	0.10		0.16	mg/L

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Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-21 Dup

Laboratory ID Number: AX06162

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-21 Dup

Laboratory ID Number: AX06162

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

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Reported: 7/20/2017
Version: 2.0

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AX06163

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C		1	0.032	0.10		0.16	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AX06163

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	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

Reported: 7/20/2017
Version: 2.0

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(205) 664-6032 or 6171
FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AX06163

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

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Reported: 7/20/2017
Version: 2.0

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX06164

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
General Characteristics											
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C			1	0.032	0.10	U	<0.032	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

Reported: 7/20/2017
Version: 2.0

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(205) 664-6032 or 6171
FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX06164

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	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

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX06164

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

CC:

Reported: 7/20/2017
Version: 2.0

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPEB
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AX06165

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
General Characteristics											
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C			1	0.032	0.10	U	<0.032	mg/L

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

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPEB
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AX06165

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	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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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPEB
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AX06165

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	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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Comments: Test America Pensacola NELAP ID: E81010

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 13-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AX06166

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C		1	0.032	0.10		0.31	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

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 13-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AX06166

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Comments: Test America Pensacola NELAP ID: E81010

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 13-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AX06166

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	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

CC:

Reported: 7/20/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 13-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-26 Dup

Laboratory ID Number: AX06167

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
General Characteristics											
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C			1	0.032	0.10		0.39	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

Reported: 7/20/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 13-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-26 Dup

Laboratory ID Number: AX06167

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	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

Reported: 7/20/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 13-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-26 Dup

Laboratory ID Number: AX06167

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

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Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

CC:

Reported: 7/20/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 13-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX06168

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
General Characteristics											
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C			1	0.032	0.10	U	<0.032	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 13-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX06168

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	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

Reported: 7/20/2017
Version: 2.0

Alabama Power General Test Laboratory
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 13-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX06168

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

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

CC:

Reported: 7/20/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 13-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AX06169

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
General Characteristics											
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C			1	0.032	0.10	U	<0.032	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 13-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AX06169

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	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

Reported: 7/20/2017
Version: 2.0

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Calera, AL 35040
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 13-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AX06169

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

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Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

CC:

Reported: 7/20/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AX06170

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
General Characteristics											
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C			1	0.032	0.10	U	<0.032	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AX06170

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	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

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AX06170

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	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

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Reported: 7/20/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AX06171

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C		1	0.032	0.10	U	<0.032	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AX06171

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	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

Reported: 7/20/2017
Version: 2.0

Alabama Power General Test Laboratory
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AX06171

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	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

CC:

Reported: 7/20/2017
Version: 2.0

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AX06172

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
General Characteristics											
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C			1	0.032	0.10	U	<0.032	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AX06172

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AX06172

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

CC:

Reported: 7/20/2017
Version: 2.0

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AX06173

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
General Characteristics											
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C			1	0.032	0.10		0.22	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

Reported: 7/20/2017
Version: 2.0

Alabama Power General Test Laboratory
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AX06173

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	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

Reported: 7/20/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AX06173

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	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.

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:

Reported: 7/20/2017
Version: 2.0

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AX06174

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C		1	0.032	0.10		0.18	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

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AX06174

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AX06174

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	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.

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:

Reported: 7/20/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AX06175

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C		1	0.032	0.10	J	0.070	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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AX06175

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 14-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AX06175

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

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Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

CC:

Reported: 7/20/2017
Version: 2.0

Alabama Power General Test Laboratory
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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AX06176

Name	Analyst	Test Date	Reference	Vio	Spec	DF	MDL	RL	Q	Results	Units
General Characteristics											
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C			1	0.032	0.10	J	0.080	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America Pensacola NELAP ID: E81010

Reported: 7/20/2017
Version: 2.0

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AX06176

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	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

Reported: 7/20/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AX06176

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

CC:

Reported: 7/20/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AX06177

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
General Characteristics										
* Fluoride, Total, by Test America	SGC	4/3/2017	SM 4500 F_C		1	0.032	0.10		0.15	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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AX06177

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit

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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

Reported: 7/20/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 15-Mar-17
Customer ID:
Delivery Date: 15-Mar-17

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AX06177

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	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

CC:

Reported: 7/20/2017
Version: 2.0

Alabama Power General Test Laboratory
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Definitions

Alabama Power

Lab & Field SERVICES

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

Alabama Power Lab & Field SERVICES

Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

✔ Field Complete
✔ Lab Complete

Lab ETA 03/15/2017 13:00

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Greene Ash Pond

Analysis Requested	Bottle 1 (250ml) Anions
Comments	Re-sample event due to hold time exceedance. Samples will be outsourced to Test America for analysis. SGC Anions do not require preservation, therefore pH was not checked upon receipt.

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-31	03/14/2017	09:19	1	Groundwater		AX06142
MW-31DUP	03/14/2017	09:19	1	Sample Duplicate		AX06143
MW-33	03/14/2017	09:59	1	Groundwater		AX06144
FB-3	03/14/2017	09:53	1	Field Blank		AX06145
MW-32	03/14/2017	10:41	1	Groundwater		AX06146
MW-1	03/14/2017	11:26	1	Groundwater		AX06147
MW-2	03/14/2017	12:01	1	Groundwater		AX06148
MW-3	03/14/2017	12:39	1	Groundwater		AX06149
MW-24	03/14/2017	13:24	1	Groundwater		AX06150
MW-23	03/14/2017	13:59	1	Groundwater		AX06151
MW-11	03/14/2017	14:43	1	Groundwater		AX06152
MW-10	03/15/2017	09:51	1	Groundwater		AX06153
MW-12	03/15/2017	10:33	1	Groundwater		AX06154

Relinquished By	Received By	Date/Time
Anthony Goggins	Sarah Copeland Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US Date: 2017.03.15 15:05:09 -05'00'	03/15/2017 15:05

SmarTroll ID	4696-23444-3-3
Turbidity ID	3901-20009-2-1

All metals and radiological bottles have pH < 2 ☐

Cooler Temp	1.4 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	NA

Alabama Power Lab & Field SERVICES

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

✔ Field Complete
✔ Lab Complete

Lab ETA 03/15/2017 15:00

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Jason Rouss	Location	Greene Ash Pond

Analysis Requested	Bottle 1 (250 mL): Anions
Comments	Re-sample event due to hold time exceedance. Samples will be outsourced to Test America for analysis. SGC Anions do not require preservation, therefore pH was not checked upon receipt.

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-16	03/14/2017	09:34	1	Groundwater		AX06155
MW-17	03/14/2017	10:30	1	Groundwater		AX06156
MW-18	03/14/2017	11:29	1	Groundwater		AX06157
MW-25	03/14/2017	12:52	1	Groundwater		AX06158
MW-14	03/14/2017	14:06	1	Groundwater		AX06159
MW-15	03/14/2017	15:15	1	Groundwater		AX06160
MW-21	03/15/2017	10:00	1	Groundwater		AX06161
MW-21 Dup	03/15/2017	10:00	1	Sample Duplicate		AX06162
MW-13	03/15/2017	10:50	1	Groundwater		AX06163
FB-2	03/15/2017	10:53	1	Field Blank		AX06164
EB-1	03/15/2017	11:03	1	Equipment Blank		AX06165

Relinquished By	Received By	Date/Time
	Sarah Copeland Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US Date: 2017.03.15 15:09:09 -05'00'	03/15/2017 15:09

SmarTroll ID	4696-23443-3-2
Turbidity ID	4677-23342-4-1

All metals and radiological bottles have pH < 2 ☐

Cooler Temp	1.0 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	NA

Alabama Power Lab & Field SERVICES

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

✔ Field Complete
✔ Lab Complete

Lab ETA 03/15/2017 15:00

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Ben Rothschadl	Location	Greene Ash Pond

Analysis Requested: Bottle 1 (250mL):Anions

Comments: Re-sample event due to hold time exceedance. Samples will be outsourced to Test America for analysis. SGC Anions do not require preservation, therefore pH was not checked upon receipt.

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-26	03/13/2017	14:10	1	Groundwater		AX06166
MW-26 DUP	03/13/2017	14:10	1	Sample Duplicate		AX06167
FB-1	03/13/2017	14:15	1	Field Blank		AX06168
MW-29	03/13/2017	15:05	1	Groundwater		AX06169
MW-30	03/14/2017	09:40	1	Groundwater		AX06170
MW-27	03/14/2017	10:50	1	Groundwater		AX06171
MW-28	03/14/2017	11:53	1	Groundwater		AX06172
MW-5	03/14/2017	13:10	1	Groundwater		AX06173
MW-6	03/14/2017	14:05	1	Groundwater		AX06174
MW-7	03/14/2017	15:05	1	Groundwater		AX06175
MW-8	03/15/2017	10:15	1	Groundwater		AX06176
MW-9	03/15/2017	11:02	1	Groundwater		AX06177

Relinquished By	Received By	Date/Time
Ben Rothschadl	Sarah Copeland Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US Date: 2017.03.15 15:11:11 -05'00'	03/15/2017 15:11

SmarTroll ID: 4696-23441-1-1
Turbidity ID: 3901-20010-2-2

All metals and radiological bottles have pH < 2 ☐

Cooler Temp: 1.0 degrees C
Thermometer ID: 5408-27568-2-2
pH Strip ID: 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: 400-135340-1
TestAmerica Sample Delivery Group: Greene Ash Pond (6)
Client Project/Site: CCR Plant Greene
Revision: 1

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

Attn: Sarah Copeland

Cheyenne Whitmire

Authorized for release by:
4/3/2017 10:57:21 AM

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

LINKS

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Have a Question? Ask The Expert

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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Job ID: 400-135340-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-135340-1

General Chemistry
Method(s) SM 4500 F C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 347511 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 F C: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 347847 were outside control limits. Sample matrix interference is suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits. Same was re-ran at a 5X dilution.

Detection Summary

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

TestAmerica Job ID: 400-135340-1
SDG: Greene Ash Pond (6)

Client Sample ID: AX06142 MW-31 — Lab Sample ID: 400-135340-1

No Detections.

Client Sample ID: AX06143 MW-31 DUP — Lab Sample ID: 400-135340-2

No Detections.

Client Sample ID: AX06144 MW-33 — Lab Sample ID: 400-135340-3

No Detections.

Client Sample ID: AX06145 FB-3 — Lab Sample ID: 400-135340-4

No Detections.

Client Sample ID: AX06146 MW-32 — Lab Sample ID: 400-135340-5

No Detections.

Client Sample ID: AX06147 MW-1 — Lab Sample ID: 400-135340-6

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

Client Sample ID: AX06148 MW-2 — Lab Sample ID: 400-135340-7

No Detections.

Client Sample ID: AX06149 MW-3 — Lab Sample ID: 400-135340-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.070	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX06150 MW-24 — Lab Sample ID: 400-135340-9

No Detections.

Client Sample ID: AX06151 MW-23 — Lab Sample ID: 400-135340-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.070	J F2	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX06152 MW-11 — Lab Sample ID: 400-135340-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.090	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX06153 MW-10 — Lab Sample ID: 400-135340-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.22		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX06154 MW-12 — Lab Sample ID: 400-135340-13

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 400-135340-1
SDG: Greene Ash Pond (6)

Client Sample ID: AX06154 MW-12 (Continued) — Lab Sample ID: 400-135340-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.13		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX06155 MW-16 — Lab Sample ID: 400-135340-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.23		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX06156 MW-17 — Lab Sample ID: 400-135340-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.41		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX06157 MW-18 — Lab Sample ID: 400-135340-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.17		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX06158 MW-25 — Lab Sample ID: 400-135340-17

No Detections.

Client Sample ID: AX06159 MW-14 — Lab Sample ID: 400-135340-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.11		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX06160 MW-15 — Lab Sample ID: 400-135340-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.090	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX06161 MW-21 — Lab Sample ID: 400-135340-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.16		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX06162 MW-21 DUP — Lab Sample ID: 400-135340-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.16		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX06163 MW-13 — Lab Sample ID: 400-135340-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.16		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX06164 FB-2 — Lab Sample ID: 400-135340-23

No Detections.

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 400-135340-1
SDG: Greene Ash Pond (6)

Client Sample ID: AX06165 EB-1 — Lab Sample ID: 400-135340-24

No Detections.

Client Sample ID: AX06166 MW-26 — Lab Sample ID: 400-135340-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.31		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX06167 MW-26 DUP — Lab Sample ID: 400-135340-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.39		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX06168 FB-1 — Lab Sample ID: 400-135340-27

No Detections.

Client Sample ID: AX06169 MW-29 — Lab Sample ID: 400-135340-28

No Detections.

Client Sample ID: AX06170 MW-30 — Lab Sample ID: 400-135340-29

No Detections.

Client Sample ID: AX06171 MW-27 — Lab Sample ID: 400-135340-30

No Detections.

Client Sample ID: AX06172 MW-28 — Lab Sample ID: 400-135340-31

No Detections.

Client Sample ID: AX06173 MW-5 — Lab Sample ID: 400-135340-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.22		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX06174 MW-6 — Lab Sample ID: 400-135340-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.18		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX06175 MW-7 — Lab Sample ID: 400-135340-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.070	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX06176 MW-8 — Lab Sample ID: 400-135340-35

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

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 400-135340-1
SDG: Greene Ash Pond (6)

Client Sample ID: AX06177 MW-9

Lab Sample ID: 400-135340-36

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

This Detection Summary does not include radiochemical test results.

Method Summary

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

TestAmerica Job ID: 400-135340-1
SDG: Greene Ash Pond (6)

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

Protocol References:

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

Laboratory References:

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

Sample Summary

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

TestAmerica Job ID: 400-135340-1
SDG: Greene Ash Pond (6)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-135340-1	AX06142 MW-31	Water	03/14/17 09:19	03/17/17 09:01
400-135340-2	AX06143 MW-31 DUP	Water	03/14/17 09:19	03/17/17 09:01
400-135340-3	AX06144 MW-33	Water	03/14/17 09:59	03/17/17 09:01
400-135340-4	AX06145 FB-3	Water	03/14/17 09:53	03/17/17 09:01
400-135340-5	AX06146 MW-32	Water	03/14/17 10:41	03/17/17 09:01
400-135340-6	AX06147 MW-1	Water	03/14/17 11:26	03/17/17 09:01
400-135340-7	AX06148 MW-2	Water	03/14/17 12:01	03/17/17 09:01
400-135340-8	AX06149 MW-3	Water	03/14/17 12:39	03/17/17 09:01
400-135340-9	AX06150 MW-24	Water	03/14/17 13:24	03/17/17 09:01
400-135340-10	AX06151 MW-23	Water	03/14/17 13:59	03/17/17 09:01
400-135340-11	AX06152 MW-11	Water	03/14/17 14:43	03/17/17 09:01
400-135340-12	AX06153 MW-10	Water	03/15/17 09:51	03/17/17 09:01
400-135340-13	AX06154 MW-12	Water	03/15/17 10:33	03/17/17 09:01
400-135340-14	AX06155 MW-16	Water	03/14/17 09:34	03/17/17 09:01
400-135340-15	AX06156 MW-17	Water	03/14/17 10:30	03/17/17 09:01
400-135340-16	AX06157 MW-18	Water	03/14/17 11:29	03/17/17 09:01
400-135340-17	AX06158 MW-25	Water	03/14/17 12:52	03/17/17 09:01
400-135340-18	AX06159 MW-14	Water	03/14/17 14:06	03/17/17 09:01
400-135340-19	AX06160 MW-15	Water	03/14/17 15:15	03/17/17 09:01
400-135340-20	AX06161 MW-21	Water	03/15/17 10:00	03/17/17 09:01
400-135340-21	AX06162 MW-21 DUP	Water	03/15/17 10:00	03/17/17 09:01
400-135340-22	AX06163 MW-13	Water	03/15/17 10:50	03/17/17 09:01
400-135340-23	AX06164 FB-2	Water	03/15/17 10:53	03/17/17 09:01
400-135340-24	AX06165 EB-1	Water	03/15/17 11:03	03/17/17 09:01
400-135340-25	AX06166 MW-26	Water	03/13/17 14:10	03/17/17 09:01
400-135340-26	AX06167 MW-26 DUP	Water	03/13/17 14:10	03/17/17 09:01
400-135340-27	AX06168 FB-1	Water	03/13/17 14:15	03/17/17 09:01
400-135340-28	AX06169 MW-29	Water	03/13/17 15:05	03/17/17 09:01
400-135340-29	AX06170 MW-30	Water	03/14/17 09:40	03/17/17 09:01
400-135340-30	AX06171 MW-27	Water	03/14/17 10:50	03/17/17 09:01
400-135340-31	AX06172 MW-28	Water	03/14/17 11:53	03/17/17 09:01
400-135340-32	AX06173 MW-5	Water	03/14/17 13:10	03/17/17 09:01
400-135340-33	AX06174 MW-6	Water	03/14/17 14:05	03/17/17 09:01
400-135340-34	AX06175 MW-7	Water	03/14/17 15:05	03/17/17 09:01
400-135340-35	AX06176 MW-8	Water	03/15/17 10:15	03/17/17 09:01
400-135340-36	AX06177 MW-9	Water	03/15/17 11:02	03/17/17 09:01

Client Sample ID: AX06142 MW-31
Lab Sample ID: 400-135340-1
Date Collected: 03/14/17 09:19
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			03/23/17 18:58	1

Client Sample ID: AX06143 MW-31 DUP
Lab Sample ID: 400-135340-2
Date Collected: 03/14/17 09:19
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			03/28/17 17:02	1

Client Sample ID: AX06144 MW-33
Lab Sample ID: 400-135340-3
Date Collected: 03/14/17 09:59
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			03/28/17 17:04	1

Client Sample ID: AX06145 FB-3
Lab Sample ID: 400-135340-4
Date Collected: 03/14/17 09:53
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			03/28/17 17:07	1

Client Sample ID: AX06146 MW-32
Lab Sample ID: 400-135340-5
Date Collected: 03/14/17 10:41
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			03/28/17 17:09	1

Client Sample ID: AX06147 MW-1
Lab Sample ID: 400-135340-6
Date Collected: 03/14/17 11:26
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	**0.040**	**J**	0.10	0.032	mg/L			03/28/17 17:11	1

Client Sample ID: AX06148 MW-2
Lab Sample ID: 400-135340-7
Date Collected: 03/14/17 12:01
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			03/28/17 17:25	1

Client Sample ID: AX06149 MW-3
Lab Sample ID: 400-135340-8
Date Collected: 03/14/17 12:39
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.070	J	0.10	0.032	mg/L			03/28/17 17:28	1

Client Sample ID: AX06150 MW-24
Lab Sample ID: 400-135340-9
Date Collected: 03/14/17 13:24
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			03/28/17 17:44	1

Client Sample ID: AX06151 MW-23
Lab Sample ID: 400-135340-10
Date Collected: 03/14/17 13:59
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.070	J F2	0.10	0.032	mg/L			03/28/17 16:56	1

Client Sample ID: AX06152 MW-11
Lab Sample ID: 400-135340-11
Date Collected: 03/14/17 14:43
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.090	J	0.10	0.032	mg/L			03/28/17 17:51	1

Client Sample ID: AX06153 MW-10
Lab Sample ID: 400-135340-12
Date Collected: 03/15/17 09:51
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.22		0.10	0.032	mg/L			03/28/17 17:53	1

Client Sample ID: AX06154 MW-12
Lab Sample ID: 400-135340-13
Date Collected: 03/15/17 10:33
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.13		0.10	0.032	mg/L			03/28/17 17:55	1

Client Sample ID: AX06155 MW-16
Lab Sample ID: 400-135340-14
Date Collected: 03/14/17 09:34
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.23		0.10	0.032	mg/L			03/28/17 17:57	1

Client Sample ID: AX06156 MW-17
Lab Sample ID: 400-135340-15
Date Collected: 03/14/17 10:30
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.41		0.10	0.032	mg/L			03/28/17 18:56	1

Client Sample ID: AX06157 MW-18
Lab Sample ID: 400-135340-16
Date Collected: 03/14/17 11:29
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.17		0.10	0.032	mg/L			03/28/17 18:58	1

Client Sample ID: AX06158 MW-25
Lab Sample ID: 400-135340-17
Date Collected: 03/14/17 12:52
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			03/28/17 19:00	1

Client Sample ID: AX06159 MW-14
Lab Sample ID: 400-135340-18
Date Collected: 03/14/17 14:06
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.11		0.10	0.032	mg/L			03/28/17 19:02	1

Client Sample ID: AX06160 MW-15
Lab Sample ID: 400-135340-19
Date Collected: 03/14/17 15:15
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.090	J	0.10	0.032	mg/L			03/28/17 19:04	1

Client Sample ID: AX06161 MW-21
Lab Sample ID: 400-135340-20
Date Collected: 03/15/17 10:00
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.16		0.10	0.032	mg/L			03/28/17 17:37	1

Client Sample ID: AX06162 MW-21 DUP
Lab Sample ID: 400-135340-21
Date Collected: 03/15/17 10:00
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.16		0.10	0.032	mg/L			03/28/17 19:06	1

Client Sample ID: AX06163 MW-13
Lab Sample ID: 400-135340-22
Date Collected: 03/15/17 10:50
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.16		0.10	0.032	mg/L			03/28/17 19:08	1

Client Sample ID: AX06164 FB-2
Lab Sample ID: 400-135340-23
Date Collected: 03/15/17 10:53
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			03/28/17 19:21	1

Client Sample ID: AX06165 EB-1
Lab Sample ID: 400-135340-24
Date Collected: 03/15/17 11:03
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			03/28/17 19:42	1

Client Sample ID: AX06166 MW-26
Lab Sample ID: 400-135340-25
Date Collected: 03/13/17 14:10
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.31		0.10	0.032	mg/L			03/28/17 19:27	1

Client Sample ID: AX06167 MW-26 DUP
Lab Sample ID: 400-135340-26
Date Collected: 03/13/17 14:10
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.39		0.10	0.032	mg/L			03/28/17 19:33	1

Client Sample ID: AX06168 FB-1
Lab Sample ID: 400-135340-27
Date Collected: 03/13/17 14:15
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			03/28/17 19:39	1

Client Sample ID: AX06169 MW-29
Lab Sample ID: 400-135340-28
Date Collected: 03/13/17 15:05
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			03/30/17 08:23	1

Client Sample ID: AX06170 MW-30
Lab Sample ID: 400-135340-29
Date Collected: 03/14/17 09:40
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			03/30/17 08:28	1

Client Sample ID: AX06171 MW-27
Lab Sample ID: 400-135340-30
Date Collected: 03/14/17 10:50
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			03/28/17 18:42	1

Client Sample ID: AX06172 MW-28
Lab Sample ID: 400-135340-31
Date Collected: 03/14/17 11:53
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			03/30/17 08:30	1

Client Sample ID: AX06173 MW-5
Lab Sample ID: 400-135340-32
Date Collected: 03/14/17 13:10
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.22		0.10	0.032	mg/L			03/30/17 08:32	1

Client Sample ID: AX06174 MW-6
Lab Sample ID: 400-135340-33
Date Collected: 03/14/17 14:05
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.18		0.10	0.032	mg/L			03/30/17 08:34	1

Client Sample ID: AX06175 MW-7
Lab Sample ID: 400-135340-34
Date Collected: 03/14/17 15:05
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.070	J	0.10	0.032	mg/L			03/30/17 17:39	1

Client Sample ID: AX06176 MW-8
Lab Sample ID: 400-135340-35
Date Collected: 03/15/17 10:15
Matrix: Water
Date Received: 03/17/17 09:01

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.080	J	0.10	0.032	mg/L			03/30/17 17:41	1

Client Sample Results

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

TestAmerica Job ID: 400-135340-1
SDG: Greene Ash Pond (6)

Client Sample ID: AX06177 MW-9
Date Collected: 03/15/17 11:02
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-36
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.15		0.10	0.032	mg/L			03/28/17 19:15	1

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

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 Greene

TestAmerica Job ID: 400-135340-1
SDG: Greene Ash Pond (6)

Client Sample ID: AX06142 MW-31
Date Collected: 03/14/17 09:19
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	346971	03/23/17 18:58	SLT	TAL PEN

Client Sample ID: AX06143 MW-31 DUP
Date Collected: 03/14/17 09:19
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347511	03/28/17 17:02	CAC	TAL PEN

Client Sample ID: AX06144 MW-33
Date Collected: 03/14/17 09:59
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347511	03/28/17 17:04	CAC	TAL PEN

Client Sample ID: AX06145 FB-3
Date Collected: 03/14/17 09:53
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347511	03/28/17 17:07	CAC	TAL PEN

Client Sample ID: AX06146 MW-32
Date Collected: 03/14/17 10:41
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347511	03/28/17 17:09	CAC	TAL PEN

Client Sample ID: AX06147 MW-1
Date Collected: 03/14/17 11:26
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347511	03/28/17 17:11	CAC	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-135340-1
SDG: Greene Ash Pond (6)

Client Sample ID: AX06148 MW-2
Date Collected: 03/14/17 12:01
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347511	03/28/17 17:25	CAC	TAL PEN

Client Sample ID: AX06149 MW-3
Date Collected: 03/14/17 12:39
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347511	03/28/17 17:28	CAC	TAL PEN

Client Sample ID: AX06150 MW-24
Date Collected: 03/14/17 13:24
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347511	03/28/17 17:44	CAC	TAL PEN

Client Sample ID: AX06151 MW-23
Date Collected: 03/14/17 13:59
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347511	03/28/17 16:56	CAC	TAL PEN

Client Sample ID: AX06152 MW-11
Date Collected: 03/14/17 14:43
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347511	03/28/17 17:51	CAC	TAL PEN

Client Sample ID: AX06153 MW-10
Date Collected: 03/15/17 09:51
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347511	03/28/17 17:53	CAC	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-135340-1
SDG: Greene Ash Pond (6)

Client Sample ID: AX06154 MW-12
Date Collected: 03/15/17 10:33
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347511	03/28/17 17:55	CAC	TAL PEN

Client Sample ID: AX06155 MW-16
Date Collected: 03/14/17 09:34
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347511	03/28/17 17:57	CAC	TAL PEN

Client Sample ID: AX06156 MW-17
Date Collected: 03/14/17 10:30
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347517	03/28/17 18:56	SLT	TAL PEN

Client Sample ID: AX06157 MW-18
Date Collected: 03/14/17 11:29
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347517	03/28/17 18:58	SLT	TAL PEN

Client Sample ID: AX06158 MW-25
Date Collected: 03/14/17 12:52
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347517	03/28/17 19:00	SLT	TAL PEN

Client Sample ID: AX06159 MW-14
Date Collected: 03/14/17 14:06
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-18
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347517	03/28/17 19:02	SLT	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-135340-1
SDG: Greene Ash Pond (6)

Client Sample ID: AX06160 MW-15
Lab Sample ID: 400-135340-19
Date Collected: 03/14/17 15:15
Matrix: Water
Date Received: 03/17/17 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347517	03/28/17 19:04	SLT	TAL PEN

Client Sample ID: AX06161 MW-21
Lab Sample ID: 400-135340-20
Date Collected: 03/15/17 10:00
Matrix: Water
Date Received: 03/17/17 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347511	03/28/17 17:37	CAC	TAL PEN

Client Sample ID: AX06162 MW-21 DUP
Lab Sample ID: 400-135340-21
Date Collected: 03/15/17 10:00
Matrix: Water
Date Received: 03/17/17 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347517	03/28/17 19:06	SLT	TAL PEN

Client Sample ID: AX06163 MW-13
Lab Sample ID: 400-135340-22
Date Collected: 03/15/17 10:50
Matrix: Water
Date Received: 03/17/17 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347517	03/28/17 19:08	SLT	TAL PEN

Client Sample ID: AX06164 FB-2
Lab Sample ID: 400-135340-23
Date Collected: 03/15/17 10:53
Matrix: Water
Date Received: 03/17/17 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347517	03/28/17 19:21	SLT	TAL PEN

Client Sample ID: AX06165 EB-1
Lab Sample ID: 400-135340-24
Date Collected: 03/15/17 11:03
Matrix: Water
Date Received: 03/17/17 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347517	03/28/17 19:42	SLT	TAL PEN

Client Sample ID: AX06166 MW-26
Lab Sample ID: 400-135340-25
Date Collected: 03/13/17 14:10
Matrix: Water
Date Received: 03/17/17 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347517	03/28/17 19:27	SLT	TAL PEN

Client Sample ID: AX06167 MW-26 DUP
Lab Sample ID: 400-135340-26
Date Collected: 03/13/17 14:10
Matrix: Water
Date Received: 03/17/17 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347517	03/28/17 19:33	SLT	TAL PEN

Client Sample ID: AX06168 FB-1
Lab Sample ID: 400-135340-27
Date Collected: 03/13/17 14:15
Matrix: Water
Date Received: 03/17/17 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347517	03/28/17 19:39	SLT	TAL PEN

Client Sample ID: AX06169 MW-29
Lab Sample ID: 400-135340-28
Date Collected: 03/13/17 15:05
Matrix: Water
Date Received: 03/17/17 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347709	03/30/17 08:23	SLT	TAL PEN

Client Sample ID: AX06170 MW-30
Lab Sample ID: 400-135340-29
Date Collected: 03/14/17 09:40
Matrix: Water
Date Received: 03/17/17 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347709	03/30/17 08:28	SLT	TAL PEN

Client Sample ID: AX06171 MW-27
Lab Sample ID: 400-135340-30
Date Collected: 03/14/17 10:50
Matrix: Water
Date Received: 03/17/17 09:01

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347517	03/28/17 18:42	SLT	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-135340-1
SDG: Greene Ash Pond (6)

Client Sample ID: AX06172 MW-28
Date Collected: 03/14/17 11:53
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-31
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347709	03/30/17 08:30	SLT	TAL PEN

Client Sample ID: AX06173 MW-5
Date Collected: 03/14/17 13:10
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-32
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347709	03/30/17 08:32	SLT	TAL PEN

Client Sample ID: AX06174 MW-6
Date Collected: 03/14/17 14:05
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-33
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347709	03/30/17 08:34	SLT	TAL PEN

Client Sample ID: AX06175 MW-7
Date Collected: 03/14/17 15:05
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-34
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347847	03/30/17 17:39	SLT	TAL PEN

Client Sample ID: AX06176 MW-8
Date Collected: 03/15/17 10:15
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-35
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347847	03/30/17 17:41	SLT	TAL PEN

Client Sample ID: AX06177 MW-9
Date Collected: 03/15/17 11:02
Date Received: 03/17/17 09:01

Lab Sample ID: 400-135340-36
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	347517	03/28/17 19:15	SLT	TAL PEN

Laboratory References:

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

General Chemistry

Analysis Batch: 346971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135340-1	AX06142 MW-31	Total/NA	Water	SM 4500 F C	
MB 400-346971/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-346971/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-135255-A-8 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-135255-A-8 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-135326-A-7 DU	Duplicate	Total/NA	Water	SM 4500 F C	

Analysis Batch: 347511

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135340-2	AX06143 MW-31 DUP	Total/NA	Water	SM 4500 F C	
400-135340-3	AX06144 MW-33	Total/NA	Water	SM 4500 F C	
400-135340-4	AX06145 FB-3	Total/NA	Water	SM 4500 F C	
400-135340-5	AX06146 MW-32	Total/NA	Water	SM 4500 F C	
400-135340-6	AX06147 MW-1	Total/NA	Water	SM 4500 F C	
400-135340-7	AX06148 MW-2	Total/NA	Water	SM 4500 F C	
400-135340-8	AX06149 MW-3	Total/NA	Water	SM 4500 F C	
400-135340-9	AX06150 MW-24	Total/NA	Water	SM 4500 F C	
400-135340-10	AX06151 MW-23	Total/NA	Water	SM 4500 F C	
400-135340-11	AX06152 MW-11	Total/NA	Water	SM 4500 F C	
400-135340-12	AX06153 MW-10	Total/NA	Water	SM 4500 F C	
400-135340-13	AX06154 MW-12	Total/NA	Water	SM 4500 F C	
400-135340-14	AX06155 MW-16	Total/NA	Water	SM 4500 F C	
400-135340-20	AX06161 MW-21	Total/NA	Water	SM 4500 F C	
MB 400-347511/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-347511/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-135340-10 MS	AX06151 MW-23	Total/NA	Water	SM 4500 F C	
400-135340-10 MSD	AX06151 MW-23	Total/NA	Water	SM 4500 F C	
400-135340-20 MS	AX06161 MW-21	Total/NA	Water	SM 4500 F C	
400-135340-20 MSD	AX06161 MW-21	Total/NA	Water	SM 4500 F C	
400-135340-9 DU	AX06150 MW-24	Total/NA	Water	SM 4500 F C	

Analysis Batch: 347517

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135340-15	AX06156 MW-17	Total/NA	Water	SM 4500 F C	
400-135340-16	AX06157 MW-18	Total/NA	Water	SM 4500 F C	
400-135340-17	AX06158 MW-25	Total/NA	Water	SM 4500 F C	
400-135340-18	AX06159 MW-14	Total/NA	Water	SM 4500 F C	
400-135340-19	AX06160 MW-15	Total/NA	Water	SM 4500 F C	
400-135340-21	AX06162 MW-21 DUP	Total/NA	Water	SM 4500 F C	
400-135340-22	AX06163 MW-13	Total/NA	Water	SM 4500 F C	
400-135340-23	AX06164 FB-2	Total/NA	Water	SM 4500 F C	
400-135340-24	AX06165 EB-1	Total/NA	Water	SM 4500 F C	
400-135340-25	AX06166 MW-26	Total/NA	Water	SM 4500 F C	
400-135340-26	AX06167 MW-26 DUP	Total/NA	Water	SM 4500 F C	
400-135340-27	AX06168 FB-1	Total/NA	Water	SM 4500 F C	
400-135340-30	AX06171 MW-27	Total/NA	Water	SM 4500 F C	
400-135340-36	AX06177 MW-9	Total/NA	Water	SM 4500 F C	
MB 400-347517/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-347517/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-135340-30 MS	AX06171 MW-27	Total/NA	Water	SM 4500 F C	
400-135340-30 MSD	AX06171 MW-27	Total/NA	Water	SM 4500 F C	

General Chemistry (Continued)

Analysis Batch: 347517 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135340-36 MS	AX06177 MW-9	Total/NA	Water	SM 4500 F C	
400-135340-36 MSD	AX06177 MW-9	Total/NA	Water	SM 4500 F C	
400-135340-23 DU	AX06164 FB-2	Total/NA	Water	SM 4500 F C	

Analysis Batch: 347709

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135340-28	AX06169 MW-29	Total/NA	Water	SM 4500 F C	
400-135340-29	AX06170 MW-30	Total/NA	Water	SM 4500 F C	
400-135340-31	AX06172 MW-28	Total/NA	Water	SM 4500 F C	
400-135340-32	AX06173 MW-5	Total/NA	Water	SM 4500 F C	
400-135340-33	AX06174 MW-6	Total/NA	Water	SM 4500 F C	
MB 400-347709/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-347709/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
660-79509-E-11 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
660-79509-E-11 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-135340-28 DU	AX06169 MW-29	Total/NA	Water	SM 4500 F C	

Analysis Batch: 347847

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135340-34	AX06175 MW-7	Total/NA	Water	SM 4500 F C	
400-135340-35	AX06176 MW-8	Total/NA	Water	SM 4500 F C	
MB 400-347847/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-347847/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
660-79573-J-3 DU	Duplicate	Total/NA	Water	SM 4500 F C	

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-346971/3
Matrix: Water
Analysis Batch: 346971

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			03/23/17 17:59	1

Lab Sample ID: LCS 400-346971/4
Matrix: Water
Analysis Batch: 346971

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: 400-135255-A-8 MS
Matrix: Water
Analysis Batch: 346971

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	<0.032		1.00	1.02		mg/L		102	75 - 125

Lab Sample ID: 400-135255-A-8 MSD
Matrix: Water
Analysis Batch: 346971

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	2	4

Lab Sample ID: 400-135326-A-7 DU
Matrix: Water
Analysis Batch: 346971

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride	0.040	J	0.0400	J	mg/L		0	4

Lab Sample ID: MB 400-347511/3
Matrix: Water
Analysis Batch: 347511

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			03/28/17 16:44	1

Lab Sample ID: LCS 400-347511/4
Matrix: Water
Analysis Batch: 347511

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	3.90		mg/L		98	90 - 110

Lab Sample ID: 400-135340-10 MS
Matrix: Water
Analysis Batch: 347511

Client Sample ID: AX06151 MW-23
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.070	J F2	1.00	1.04		mg/L		97	75 - 125

Lab Sample ID: 400-135340-10 MSD
Matrix: Water
Analysis Batch: 347511

Client Sample ID: AX06151 MW-23
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 F2	1.00	1.10	F2	mg/L		103	75 - 125	6	4

Lab Sample ID: 400-135340-20 MS
Matrix: Water
Analysis Batch: 347511

Client Sample ID: AX06161 MW-21
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride	0.16		1.00	1.17		mg/L		101	75 - 125		

Lab Sample ID: 400-135340-20 MSD
Matrix: Water
Analysis Batch: 347511

Client Sample ID: AX06161 MW-21
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.16		1.00	1.12		mg/L		96	75 - 125	4	4

Lab Sample ID: 400-135340-9 DU
Matrix: Water
Analysis Batch: 347511

Client Sample ID: AX06150 MW-24
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 400-347517/3
Matrix: Water
Analysis Batch: 347517

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			03/28/17 18:34	1

Lab Sample ID: LCS 400-347517/4
Matrix: Water
Analysis Batch: 347517

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	3.90		mg/L		98	90 - 110		

Lab Sample ID: 400-135340-30 MS
Matrix: Water
Analysis Batch: 347517

Client Sample ID: AX06171 MW-27
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: 400-135340-30 MSD
Matrix: Water
Analysis Batch: 347517

Client Sample ID: AX06171 MW-27
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	0.970		mg/L		97	75 - 125	2	4

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: 400-135340-36 MS
Matrix: Water
Analysis Batch: 347517

Client Sample ID: AX06177 MW-9
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.15		1.00	1.12		mg/L		97	75 - 125

Lab Sample ID: 400-135340-36 MSD
Matrix: Water
Analysis Batch: 347517

Client Sample ID: AX06177 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	0.15		1.00	1.12		mg/L		97	75 - 125	0	4

Lab Sample ID: 400-135340-23 DU
Matrix: Water
Analysis Batch: 347517

Client Sample ID: AX06164 FB-2
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 400-347709/3
Matrix: Water
Analysis Batch: 347709

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			03/30/17 07:13	1

Lab Sample ID: LCS 400-347709/4
Matrix: Water
Analysis Batch: 347709

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: 660-79509-E-11 MS
Matrix: Water
Analysis Batch: 347709

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	0.950		mg/L		84	75 - 125

Lab Sample ID: 660-79509-E-11 MSD
Matrix: Water
Analysis Batch: 347709

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	0.950		mg/L		84	75 - 125	0	4

Lab Sample ID: 400-135340-28 DU
Matrix: Water
Analysis Batch: 347709

Client Sample ID: AX06169 MW-29
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

QC Sample Results

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

TestAmerica Job ID: 400-135340-1
SDG: Greene Ash Pond (6)

Lab Sample ID: MB 400-347847/3
Matrix: Water
Analysis Batch: 347847

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			03/30/17 17:14	1

Lab Sample ID: LCS 400-347847/4
Matrix: Water
Analysis Batch: 347847

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: 660-79573-J-3 DU
Matrix: Water
Analysis Batch: 347847

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Fluoride	0.50			0.500		mg/L				0	4

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Anthony Goggins	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 3
Company: Alabama Power General Test Laboratory				Job #:

Address: 744 County Rd 87 GSC #8	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Calera	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, 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)
State, Zip: AL, 35040			
Phone: 205-664-6121(Tel)	PO #:		
Email: sgcopela@southernco.com	WO #:		
Project Name: CCR	Project #: 40007143		
Site: Greene Ash Pond (6)	SSOW#:		Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 CL_E	SM 4500 SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N				
AX06142	3/14/17	0919	G	Water			X	X	X		MW-31
AX06143	3/14/17	0919	G	Water			X	X	X		MW-31 Dup (Sample Duplicate)
AX06144	3/14/17	0959	G	Water			X	X	X		MW-33
AX06145	3/14/17	0953	G	Water			X	X	X		FB-3 (Field Blank)
AX06146	3/14/17	1041	G	Water			X	X	X		MW-32
AX06147	3/14/17	1126	G	Water			X	X	X		MW-1
AX06148	3/14/17	1201	G	Water			X	X	X		MW-2
AX06149	3/14/17	1239	G	Water			X	X	X		MW-3
AX06150	3/14/17	1324	G	Water			X	X	X		MW-24
AX06151	3/14/17	1359	G	Water		Y	X	X	X		MW-23
AX06152	3/14/17	1443	G	Water			X	X	X		MW-11
AX06153	3/15/17	0951	G	Water			X	X	X		MW-10
AX06154	3/15/17	1033	G	Water			X	X	X		MW-12

400-135340 COC

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Sarah Copeland	Date/Time: 03/15/2017; 1415	Company APC	Received by:	Date/Time: 3/17/17 0901	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 0.0 IR2

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Jason Rouss	Lab PM: Whitmire, 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 2 of 3
Company: Alabama Power General Test Laboratory		Analysis Requested		Job #:
Address: 744 County Rd 87 GSC #8	Due Date Requested:			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, 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), Other:
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040	PO #:			
Phone: 205-664-6121(Tel)	WO #:			
Email: sgcopela@southernco.com	Project #: 40007143			
Project Name: CCR	SSOW#:			
Site: Greene Ash Pond (6)				

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 Cl_E	SM 4500 SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N				
AX06155	3/14/17	0934	G	Water			X	X	X		MW-16
AX06156	3/14/17	1030	G	Water			X	X	X		MW-17
AX06157	3/14/17	1129	G	Water			X	X	X		MW-18
AX06158	3/14/17	1252	G	Water			X	X	X		MW-25
AX06159	3/14/17	1406	G	Water			X	X	X		MW-14
AX06160	3/14/17	1515	G	Water			X	X	X		MW-15
AX06161	3/15/17	1000	G	Water		Y	X	X	X		MW-21
AX06162	3/15/17	1000	G	Water			X	X	X		MW-21 Dup (Sample Duplicate)
AX06163	3/15/17	1050	G	Water			X	X	X		MW-13
AX06164	3/15/17	1053	G	Water			X	X	X		FB-2 (Field Blank)
AX06165	3/15/17	1103	G	Water			X	X	X		EB-1 (Equipment Blank)

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:		
Relinquished by: Sarah Copeland	Date/Time: 03/15/2017; 1415	Company APC	Received by:	Date/Time: 3/17/17 0900	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ 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	Sampler: Ben Rothschadl	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 3 of 3
Company: Alabama Power General Test Laboratory				Job #:

Address: 744 County Rd 87 GSC #8	Due Date Requested:	Analysis Requested	Preservation Codes:
City: Calera	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, 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), Other:
State, Zip: AL, 35040			
Phone: 205-664-6121(Tel)	PO #:		
Email: sgcopela@southernco.com	WO #:		
Project Name: CCR	Project #: 40007143		
Site: Greene Ash Pond (6)	SSOW#:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 CL_E	SM 4500 SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N				
AX06166	3/13/17	1410	G	Water			X	X	X		MW-26
AX06167	3/13/17	1410	G	Water			X	X	X		MW-26 Dup (Sample Duplicate)
AX06168	3/13/17	1415	G	Water			X	X	X		FB-1 (Field Blank)
AX06169	3/13/17	1505	G	Water			X	X	X		MW-29
AX06170	3/14/17	0940	G	Water			X	X	X		MW-30
AX06171	3/14/17	1050	G	Water		Y	X	X	X		MW-27
AX06172	3/14/17	1153	G	Water			X	X	X		MW-28
AX06173	3/14/17	1310	G	Water			X	X	X		MW-5
AX06174	3/14/17	1405	G	Water			X	X	X		MW-6
AX06175	3/14/17	1505	G	Water			X	X	X		MW-7
AX06176	3/15/17	1015	G	Water			X	X	X		MW-8
AX06177	3/15/17	1102	G	Water		Y	X	X	X		MW-9

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Sarah Copeland	Date/Time: 03/15/2017; 1415	Company APC	Received by:	Date/Time: 3/17/17 0901	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-135340-1
SDG Number: Greene Ash Pond (6)

Login Number: 135340
List Number: 1
Creator: Franklin, Justin H

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C IR-2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

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

TestAmerica Job ID: 400-135340-1
SDG: Greene 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

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

Lab & Field SERVICES

Sample Group : WMWGREAP_1072

Project/Site : Greene County Ash Pond
Demopolis, AL 36732

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

Alabama Power

Lab & Field SERVICES

Anions

Greene County Ash Pond

WMWGREAP_1072

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

Sample ID	Chloride Batch ID	Sulfate Batch ID	Project ID
AX01892	586053	586057	WMWGREAP_1072
AX01893	586053	586057	WMWGREAP_1072
AX01894	586053	586057	WMWGREAP_1072
AX01895	586053	586057	WMWGREAP_1072
AX01896	586053	586057	WMWGREAP_1072
AX01897	586053	586057	WMWGREAP_1072
AX01898	586053	586057	WMWGREAP_1072
AX01899	586053	586057	WMWGREAP_1072
AX01900	586053	586057	WMWGREAP_1072
AX01901	586053	586057	WMWGREAP_1072
AX01902	586054	586058	WMWGREAP_1072
AX01904	586054	586058	WMWGREAP_1072
AX01905	586054	586058	WMWGREAP_1072
AX01906	586054	586058	WMWGREAP_1072
AX01907	586054	586058	WMWGREAP_1072
AX01908	586054	586058	WMWGREAP_1072
AX02030	586054	586058	WMWGREAP_1072
AX02031	586054	586058	WMWGREAP_1072
AX02032	586054	586058	WMWGREAP_1072
AX02033	586054	586058	WMWGREAP_1072
AX02034	586055	586059	WMWGREAP_1072
AX02035	586055	586059	WMWGREAP_1072
AX02036	586055	586059	WMWGREAP_1072
AX02037	586055	586059	WMWGREAP_1072
AX02038	586055	586059	WMWGREAP_1072
AX02039	586055	586059	WMWGREAP_1072
AX02040	586055	586059	WMWGREAP_1072
AX02041	586055	586059	WMWGREAP_1072
AX02042	586055	586059	WMWGREAP_1072
AX02043	586055	586059	WMWGREAP_1072
AX02044	586056	586060	WMWGREAP_1072
AX02045	586056	586060	WMWGREAP_1072

Alabama Power General Test Laboratory
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Calera, AL 35040
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Case Narrative

Alabama Power

Lab & Field Services

AX02046	586056	586060	WMWGREAP_1072
AX02047	586056	586060	WMWGREAP_1072
AX02048	586056	586060	WMWGREAP_1072
AX02087	586056	586060	WMWGREAP_1072

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. There are no results for Fluoride for the samples listed above due to hold time exceedance. All Fluoride will be re-sampled.

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, with the following exceptions:
    1. No closing LFB was listed or run for the dilution re-analyses for sulfate in batches 586058 and 586059. Due to absence of a closing LFB, results for the following sample dilution re-analyses for sulfate are qualified as quantitatively estimated with indeterminate bias direction and magnitude: AX01904, AX01905, AX02037, AX02039, AX02041 and AX02042.
    2. No closing LFB was listed or run for the dilution re-analyses for chloride or for sulfate in batches 586056 and 586060. Due to absence of a closing LFB, results for the following sample dilution re-analyses are qualified as quantitatively estimated with indeterminate bias direction and magnitude: for chloride, AX02045, AX02046 and AX02047; for sulfate, AX02045 and AX02046.
- It is noted that the QC summary page typically provides the QC results from the original batch analytical sequence. If dilutions were subsequently performed to bring sample concentrations within the calibration range, any additional QC data from the dilution analyses may need to be obtained from the laboratory. Any qualifications applied to original analyses or dilution re-analyses are based upon QC data available at the time of review.

Matrix Specific Quality Control Procedures:

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

- A laboratory fortified matrix (LFM) sample was analyzed with each batch. All acceptance criteria for accuracy were met. It is noted that the LFM for the sample dilution sequence for sulfate in batch 586059 was diluted 10x prior to spiking, and the diluted LFM sample spiked at 10x normal concentration, with acceptable recovery.

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

- 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.

8. Samples AX01904, AX01905, AX02037, AX02039, AX02041 and AX02042 were re-analyzed for sulfate at a 10x dilution, samples AX02045 and AX02046 were re-analyzed for chloride and for sulfate at a 10x dilution, and sample AX02047 was re-analyzed for chloride at a 5x dilution, due to the undiluted results exceeding the calibrated range of the detector. The dilution results for sulfate for these samples should be used; reporting limit (RL) values are adjusted upward to reflect the dilution factor applied.

Sample ID		Analyte		Dilution Factor
AX01904		Sulfate		10X
AX01905		Sulfate		10X
AX02037		Sulfate		10X
AX02039		Sulfate		10X
AX02041		Sulfate		10X
AX02042		Sulfate		10X
AX02045		Chloride, Sulfate		10X
AX02046		Chloride, Sulfate		10X
AX02047		Chloride		5X

9. 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.

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

Lab & Field SERVICES

Metals ICP

Greene County Ash Pond

WMWGREAP_1072

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

Sample ID	Batch ID	Project ID
AX01892	20170214B	WMWGREAP_1072
AX01893	20170214B	WMWGREAP_1072
AX01894	20170214B	WMWGREAP_1072
AX01895	20170214B	WMWGREAP_1072
AX01896	20170214B	WMWGREAP_1072
AX01897	20170214B	WMWGREAP_1072
AX01898	20170214B	WMWGREAP_1072
AX01899	20170214B	WMWGREAP_1072
AX01900	20170214B	WMWGREAP_1072
AX01901	20170214B	WMWGREAP_1072
AX01902	20170228B_20170301A	WMWGREAP_1072
AX01904	20170228B_20170301A	WMWGREAP_1072
AX01905	20170228B_20170301A	WMWGREAP_1072
AX01906	20170228B_20170301A	WMWGREAP_1072
AX01907	20170228B_20170301A	WMWGREAP_1072
AX01908	20170228B_20170301A	WMWGREAP_1072
AX02030	20170228B_20170301A	WMWGREAP_1072
AX02031	20170228B_20170301A	WMWGREAP_1072
AX02032	20170228B_20170301A	WMWGREAP_1072
AX02033	20170228B_20170301A	WMWGREAP_1072
AX02034	20170228C_20170301B	WMWGREAP_1072
AX02035	20170228C_20170301B	WMWGREAP_1072
AX02036	20170228C_20170301B	WMWGREAP_1072
AX02037	20170228C_20170301B	WMWGREAP_1072
AX02038	20170228C_20170301B	WMWGREAP_1072
AX02039	20170228C_20170301B	WMWGREAP_1072
AX02040	20170228C_20170301B	WMWGREAP_1072
AX02041	20170228C_20170301B	WMWGREAP_1072
AX02042	20170228C_20170301B	WMWGREAP_1072
AX02043	20170228C_20170301B	WMWGREAP_1072
AX02044	20170228D/20170301C	WMWGREAP_1072
AX02045	20170228D/20170301C	WMWGREAP_1072

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AX02046	20170228D/20170301C	WMWGREAP_1072
AX02047	20170228D/20170301C	WMWGREAP_1072
AX02048	20170228D/20170301C	WMWGREAP_1072
AX02087	20170303	WMWGREAP_1072

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

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

Analyte	Sample ID
Calcium	AX01901

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

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- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution with the following exceptions: The following samples were diluted due to sample concentrations from the undiluted analysis were over the high standard of the calibration curve. Batches 20170214B and 20170303 were analyzed at a 2X dilution to compensate for any matrix effects.

Sample ID	**Analyte**	**Dilution Factor**
AX01904	Calcium	10X
AX01905	Calcium	10X
AX01906	Calcium	10X
AX01907	Calcium	10X
AX02034	Calcium	10X
AX02037	Calcium	10X
AX02038	Calcium	10X
AX02044	Calcium	10x
AX02045	Calcium	10x
AX02046	Calcium	10x
AX02047	Calcium	10x
AX02048	Calcium	10x
AX02048MS	Calcium	10x
AX02048MSD	Calcium	10x

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

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Case Narrative

Alabama Power

Lab & Field SERVICES

Metals ICPMS

Greene County Ash Pond

WMWGREAP_1072

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

Sample ID	Batch ID	Project ID
AX01892	587216	WMWGREAP_1072
AX01893	587216	WMWGREAP_1072
AX01894	587216	WMWGREAP_1072
AX01895	587216	WMWGREAP_1072
AX01896	587216	WMWGREAP_1072
AX01897	587216	WMWGREAP_1072
AX01898	587216	WMWGREAP_1072
AX01899	587216	WMWGREAP_1072
AX01900	587216	WMWGREAP_1072
AX01901	587216	WMWGREAP_1072
AX01902	587217	WMWGREAP_1072
AX01904	587217	WMWGREAP_1072
AX01905	587217	WMWGREAP_1072
AX01906	587217	WMWGREAP_1072
AX01907	587217	WMWGREAP_1072
AX01908	587217	WMWGREAP_1072
AX02030	587217	WMWGREAP_1072
AX02031	587217	WMWGREAP_1072
AX02032	587217	WMWGREAP_1072
AX02033	587217	WMWGREAP_1072
AX02034	587218	WMWGREAP_1072
AX02035	587218	WMWGREAP_1072
AX02036	587218	WMWGREAP_1072
AX02037	587218	WMWGREAP_1072
AX02038	587218	WMWGREAP_1072
AX02039	587218	WMWGREAP_1072
AX02040	587218	WMWGREAP_1072
AX02041	587218	WMWGREAP_1072
AX02042	587218	WMWGREAP_1072
AX02043	587218	WMWGREAP_1072
AX02044	587219	WMWGREAP_1072
AX02045	587219	WMWGREAP_1072

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AX02046	587219	WMWGREAP_1072
AX02047	587219	WMWGREAP_1072
AX02048	587219	WMWGREAP_1072
AX02087	587219	WMWGREAP_1072

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.

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Case Narrative

Alabama Power

Lab & Field SERVICES

Mercury

Greene County Ash Pond

WMWGREAP_1072

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

Sample ID	Batch ID	Project ID
AX01892	586357	WMWGREAP_1072
AX01893	586357	WMWGREAP_1072
AX01894	586357	WMWGREAP_1072
AX01895	586357	WMWGREAP_1072
AX01896	586357	WMWGREAP_1072
AX01897	586357	WMWGREAP_1072
AX01898	586357	WMWGREAP_1072
AX01899	586357	WMWGREAP_1072
AX01900	586357	WMWGREAP_1072
AX01901	586357	WMWGREAP_1072
AX01902	586358	WMWGREAP_1072
AX01904	586358	WMWGREAP_1072
AX01905	586358	WMWGREAP_1072
AX01906	586358	WMWGREAP_1072
AX01907	586358	WMWGREAP_1072
AX01908	586358	WMWGREAP_1072
AX02030	586358	WMWGREAP_1072
AX02031	586358	WMWGREAP_1072
AX02032	586358	WMWGREAP_1072
AX02033	586358	WMWGREAP_1072
AX02034	586473	WMWGREAP_1072
AX02035	586473	WMWGREAP_1072
AX02036	586473	WMWGREAP_1072
AX02037	586473	WMWGREAP_1072
AX02038	586473	WMWGREAP_1072
AX02039	586473	WMWGREAP_1072
AX02040	586473	WMWGREAP_1072
AX02041	586473	WMWGREAP_1072
AX02042	586473	WMWGREAP_1072
AX02043	586473	WMWGREAP_1072
AX02044	586474	WMWGREAP_1072
AX02045	586474	WMWGREAP_1072

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AX02046	586474	WMWGREAP_1072
AX02047	586474	WMWGREAP_1072
AX02048	586474	WMWGREAP_1072
AX02087	586474	WMWGREAP_1072

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.

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TDS

Greene County Ash Pond

WMWGREAP_1072

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

Sample ID	Batch ID	Project ID
AX01892	586339	WMWGREAP_1072
AX01893	586339	WMWGREAP_1072
AX01894	586339	WMWGREAP_1072
AX01895	586339	WMWGREAP_1072
AX01896	586339	WMWGREAP_1072
AX01897	586339	WMWGREAP_1072
AX01898	586339	WMWGREAP_1072
AX01899	586339	WMWGREAP_1072
AX01900	586339	WMWGREAP_1072
AX01901	586339	WMWGREAP_1072
AX01902	586340	WMWGREAP_1072
AX01904	586340	WMWGREAP_1072
AX01905	586340	WMWGREAP_1072
AX01906	586340	WMWGREAP_1072
AX01907	586340	WMWGREAP_1072
AX01908	586340	WMWGREAP_1072
AX02030	586047	WMWGREAP_1072
AX02031	586047	WMWGREAP_1072
AX02032	586047	WMWGREAP_1072
AX02033	586349	WMWGREAP_1072
AX02034	586349	WMWGREAP_1072
AX02035	586349	WMWGREAP_1072
AX02036	586047	WMWGREAP_1072
AX02037	586047	WMWGREAP_1072
AX02038	586349	WMWGREAP_1072
AX02039	586349	WMWGREAP_1072
AX02040	586349	WMWGREAP_1072
AX02041	586349	WMWGREAP_1072
AX02042	586349	WMWGREAP_1072
AX02043	586349	WMWGREAP_1072
AX02044	586047	WMWGREAP_1072
AX02045	586047	WMWGREAP_1072

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AX02046	586349	WMWGREAP_1072
AX02047	586350	WMWGREAP_1072
AX02048	586350	WMWGREAP_1072
AX02087	586350	WMWGREAP_1072

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

General Quality Control Procedures:

- A blank was analyzed with each batch. All criteria were met.
- All final weights of samples, standards, and blanks agreed within 0.5 mg of the previous weight.
- A sample duplicate was analyzed with each batch. RPD/2 was not less than 5% for batch 586340.
  The QC sample AX01908 did not meet the 2.5 mg requirements resulting in the RPD falling outside the necessary scope.
- 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 AX01894, AX01908, AX02040 and AX02043 which were <2.5mg.

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 23-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AX01892

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	0.00100	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	J	0.00257	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.0662	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	J	0.00171	mg/L
* Boron, Total	HRG	2/14/2017	EPA 200.7		2	0.02	0.1	J	0.0217	mg/L
* Calcium, Total	HRG	2/14/2017	EPA 200.7		2	0.1	0.5		5.17	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		0.0116	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	MCW	2/2/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/14/2017	EPA 200.7		2	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	J	0.00247	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	2/2/2017	SM 2540C		1		25		50.7	mg/L
* Chloride, Total	SES	1/26/2017	EPA 300.0		1	0.04	0.25		3.21	mg/L
* Sulfate, Total	SES	1/26/2017	EPA 300.0		1	0.3	1		16.0	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:

Reported: 7/24/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 23-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AX01892

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01900	Cobalt, Total	mg/L	0.00000235	0.0044	0.10	0.114	0.114	0.0945	0.085 to 0.115	98.7	70 to 130	0.0591	20
AX01900	Cadmium, Total	mg/L	0.00000541	0.00044	0.10	0.0926	0.0922	0.0983	0.085 to 0.115	92.6	70 to 130	0.346	20
AX01900	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.455	0.453	0.107	0.085 to 0.115	103	70 to 130	0.232	20
AX01901	Boron, Total	mg/L	0.00597	0.044	1.00	2.32	2.37	0.945	0.85 to 1.15	94.2	70 to 130	2.11	20
AX01900	Lead, Total	mg/L	0.00000787	0.0022	0.10	0.100	0.0999	0.101	0.085 to 0.115	100	70 to 130	0.427	20
AX01900	Molybdenum, Total	mg/L	0.0000127	0.0044	0.10	0.200	0.201	0.0942	0.085 to 0.115	92.5	70 to 130	0.224	20
AX01900	Thallium, Total	mg/L	0.0000452	0.00044	0.10	0.102	0.102	0.0973	0.085 to 0.115	102	70 to 130	0.220	20
AX01901	Calcium, Total	mg/L	-0.00342	0.22	5.00	64.4	66.1	4.73	4.25 to 5.75	105	70 to 130	2.64	20
AX01901	Mercury, Total by CVAA	mg/L	0.000130	0.0005	0.004	0.00394	0.00391	0.00394	0.0034 to 0.0046	98.6	70 to 130	0.840	20
AX01900	Antimony, Total	mg/L	0.000180	0.00132	0.10	0.0896	0.0898	0.0951	0.085 to 0.115	88.7	70 to 130	0.162	20
AX01900	Barium, Total	mg/L	0.00000150	0.0044	0.10	0.206	0.205	0.0915	0.085 to 0.115	90.9	70 to 130	0.235	20
AX01900	Chromium, Total	mg/L	0.0000154	0.0044	0.10	0.0967	0.0967	0.0989	0.085 to 0.115	96.7	70 to 130	0.0977	20
AX01900	Beryllium, Total	mg/L	0.0000467	0.00132	0.10	0.0969	0.0961	0.108	0.085 to 0.115	96.9	70 to 130	0.858	20
AX01900	Selenium, Total	mg/L	0.0000216	0.0044	0.10	0.0922	0.0926	0.105	0.085 to 0.115	92.2	70 to 130	0.364	20
AX01901	Lithium, Total	mg/L	0.000400	0.022	0.20	0.731	0.752	0.192	0.17 to 0.23	105	70 to 130	2.79	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:

Reported: 7/24/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 23-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AX01892

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01901	Chloride, Total	mg/L	0.000	0.25	10.00	23.2	14.2	10.6	9 to 11	90.0	80 to 120	0.00	20
AX01901	Solids, Dissolved	mg/L	2.00	25			388	42.0	40 to 60			1.04	5
AX01901	Sulfate, Total	mg/L	0.047	1.0	20.00	104	85.6	20.0	18 to 22	93.0	80 to 120	0.234	20

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report
Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

CC:

Reported: 7/24/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 23-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AX01893

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	0.000830	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		0.0482	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/14/2017	EPA 200.7		2	0.02	0.1	J	0.0287	mg/L
* Calcium, Total	HRG	2/14/2017	EPA 200.7		2	0.1	0.5		0.655	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	J	0.000231	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	J	0.00203	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	MCW	2/2/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/14/2017	EPA 200.7		2	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	2/2/2017	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	1/26/2017	EPA 300.0		1	0.04	0.25		1.62	mg/L
* Sulfate, Total	SES	1/26/2017	EPA 300.0		1	0.3	1		1.34	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:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 23-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AX01893

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01900	Cobalt, Total	mg/L	0.00000235	0.0044	0.10	0.114	0.114	0.0945	0.085 to 0.115	98.7	70 to 130	0.0591	20
AX01900	Cadmium, Total	mg/L	0.00000541	0.00044	0.10	0.0926	0.0922	0.0983	0.085 to 0.115	92.6	70 to 130	0.346	20
AX01900	Beryllium, Total	mg/L	0.0000467	0.00132	0.10	0.0969	0.0961	0.108	0.085 to 0.115	96.9	70 to 130	0.858	20
AX01900	Selenium, Total	mg/L	0.0000216	0.0044	0.10	0.0922	0.0926	0.105	0.085 to 0.115	92.2	70 to 130	0.364	20
AX01901	Lithium, Total	mg/L	0.000400	0.022	0.20	0.731	0.752	0.192	0.17 to 0.23	105	70 to 130	2.79	20
AX01901	Calcium, Total	mg/L	-0.00342	0.22	5.00	64.4	66.1	4.73	4.25 to 5.75	105	70 to 130	2.64	20
AX01901	Mercury, Total by CVAA	mg/L	0.000130	0.0005	0.004	0.00394	0.00391	0.00394	0.0034 to 0.0046	98.6	70 to 130	0.840	20
AX01900	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.455	0.453	0.107	0.085 to 0.115	103	70 to 130	0.232	20
AX01901	Boron, Total	mg/L	0.00597	0.044	1.00	2.32	2.37	0.945	0.85 to 1.15	94.2	70 to 130	2.11	20
AX01900	Lead, Total	mg/L	0.00000787	0.0022	0.10	0.100	0.0999	0.101	0.085 to 0.115	100	70 to 130	0.427	20
AX01900	Molybdenum, Total	mg/L	0.0000127	0.0044	0.10	0.200	0.201	0.0942	0.085 to 0.115	92.5	70 to 130	0.224	20
AX01900	Thallium, Total	mg/L	0.0000452	0.00044	0.10	0.102	0.102	0.0973	0.085 to 0.115	102	70 to 130	0.220	20
AX01900	Antimony, Total	mg/L	0.000180	0.00132	0.10	0.0896	0.0898	0.0951	0.085 to 0.115	88.7	70 to 130	0.162	20
AX01900	Barium, Total	mg/L	0.00000150	0.0044	0.10	0.206	0.205	0.0915	0.085 to 0.115	90.9	70 to 130	0.235	20
AX01900	Chromium, Total	mg/L	0.0000154	0.0044	0.10	0.0967	0.0967	0.0989	0.085 to 0.115	96.7	70 to 130	0.0977	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 23-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AX01893

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01901	Chloride, Total	mg/L	0.000	0.25	10.00	23.2	14.2	10.6	9 to 11	90.0	80 to 120	0.00	20
AX01901	Solids, Dissolved	mg/L	2.00	25			388	42.0	40 to 60			1.04	5
AX01901	Sulfate, Total	mg/L	0.047	1.0	20.00	104	85.6	20.0	18 to 22	93.0	80 to 120	0.234	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

CC:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 23-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX01894

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	0.000869	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	2/14/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	2/14/2017	EPA 200.7		2	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	MCW	2/2/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/14/2017	EPA 200.7		2	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	2/2/2017	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	1/26/2017	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Sulfate, Total	SES	1/26/2017	EPA 300.0		1	0.3	1	U	Not Detected	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 23-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX01894

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01900	Cobalt, Total	mg/L	0.00000235	0.0044	0.10	0.114	0.114	0.0945	0.085 to 0.115	98.7	70 to 130	0.0591	20
AX01900	Cadmium, Total	mg/L	0.00000541	0.00044	0.10	0.0926	0.0922	0.0983	0.085 to 0.115	92.6	70 to 130	0.346	20
AX01901	Calcium, Total	mg/L	-0.00342	0.22	5.00	64.4	66.1	4.73	4.25 to 5.75	105	70 to 130	2.64	20
AX01901	Mercury, Total by CVAA	mg/L	0.000130	0.0005	0.004	0.00394	0.00391	0.00394	0.0034 to 0.0046	98.6	70 to 130	0.840	20
AX01900	Lead, Total	mg/L	0.00000787	0.0022	0.10	0.100	0.0999	0.101	0.085 to 0.115	100	70 to 130	0.427	20
AX01900	Molybdenum, Total	mg/L	0.0000127	0.0044	0.10	0.200	0.201	0.0942	0.085 to 0.115	92.5	70 to 130	0.224	20
AX01900	Thallium, Total	mg/L	0.0000452	0.00044	0.10	0.102	0.102	0.0973	0.085 to 0.115	102	70 to 130	0.220	20
AX01900	Beryllium, Total	mg/L	0.0000467	0.00132	0.10	0.0969	0.0961	0.108	0.085 to 0.115	96.9	70 to 130	0.858	20
AX01900	Selenium, Total	mg/L	0.0000216	0.0044	0.10	0.0922	0.0926	0.105	0.085 to 0.115	92.2	70 to 130	0.364	20
AX01901	Lithium, Total	mg/L	0.000400	0.022	0.20	0.731	0.752	0.192	0.17 to 0.23	105	70 to 130	2.79	20
AX01900	Antimony, Total	mg/L	0.000180	0.00132	0.10	0.0896	0.0898	0.0951	0.085 to 0.115	88.7	70 to 130	0.162	20
AX01900	Barium, Total	mg/L	0.00000150	0.0044	0.10	0.206	0.205	0.0915	0.085 to 0.115	90.9	70 to 130	0.235	20
AX01900	Chromium, Total	mg/L	0.0000154	0.0044	0.10	0.0967	0.0967	0.0989	0.085 to 0.115	96.7	70 to 130	0.0977	20
AX01900	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.455	0.453	0.107	0.085 to 0.115	103	70 to 130	0.232	20
AX01901	Boron, Total	mg/L	0.00597	0.044	1.00	2.32	2.37	0.945	0.85 to 1.15	94.2	70 to 130	2.11	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 23-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX01894

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01901	Chloride, Total	mg/L	0.000	0.25	10.00	23.2	14.2	10.6	9 to 11	90.0	80 to 120	0.00	20
AX01901	Solids, Dissolved	mg/L	2.00	25			388	42.0	40 to 60			1.04	5
AX01901	Sulfate, Total	mg/L	0.047	1.0	20.00	104	85.6	20.0	18 to 22	93.0	80 to 120	0.234	20

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Expiration: June 30, 2018

Comments:

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Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AX01895

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	0.000886	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		0.0286	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/14/2017	EPA 200.7		2	0.02	0.1	J	0.0333	mg/L
* Calcium, Total	HRG	2/14/2017	EPA 200.7		2	0.1	0.5		27.7	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	MCW	2/2/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/14/2017	EPA 200.7		2	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	2/2/2017	SM 2540C		1		25		107	mg/L
* Chloride, Total	SES	1/26/2017	EPA 300.0		1	0.04	0.25		1.38	mg/L
* Sulfate, Total	SES	1/26/2017	EPA 300.0		1	0.3	1		15.0	mg/L

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Laboratory certification ID: E571114
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Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
Version: 2.0

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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AX01895

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01900	Cadmium, Total	mg/L	0.00000541	0.00044	0.10	0.0926	0.0922	0.0983	0.085 to 0.115	92.6	70 to 130	0.346	20
AX01900	Cobalt, Total	mg/L	0.00000235	0.0044	0.10	0.114	0.114	0.0945	0.085 to 0.115	98.7	70 to 130	0.0591	20
AX01900	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.455	0.453	0.107	0.085 to 0.115	103	70 to 130	0.232	20
AX01901	Boron, Total	mg/L	0.00597	0.044	1.00	2.32	2.37	0.945	0.85 to 1.15	94.2	70 to 130	2.11	20
AX01900	Beryllium, Total	mg/L	0.0000467	0.00132	0.10	0.0969	0.0961	0.108	0.085 to 0.115	96.9	70 to 130	0.858	20
AX01900	Selenium, Total	mg/L	0.0000216	0.0044	0.10	0.0922	0.0926	0.105	0.085 to 0.115	92.2	70 to 130	0.364	20
AX01901	Lithium, Total	mg/L	0.000400	0.022	0.20	0.731	0.752	0.192	0.17 to 0.23	105	70 to 130	2.79	20
AX01901	Calcium, Total	mg/L	-0.00342	0.22	5.00	64.4	66.1	4.73	4.25 to 5.75	105	70 to 130	2.64	20
AX01901	Mercury, Total by CVAA	mg/L	0.000130	0.0005	0.004	0.00394	0.00391	0.00394	0.0034 to 0.0046	98.6	70 to 130	0.840	20
AX01900	Antimony, Total	mg/L	0.000180	0.00132	0.10	0.0896	0.0898	0.0951	0.085 to 0.115	88.7	70 to 130	0.162	20
AX01900	Barium, Total	mg/L	0.00000150	0.0044	0.10	0.206	0.205	0.0915	0.085 to 0.115	90.9	70 to 130	0.235	20
AX01900	Chromium, Total	mg/L	0.0000154	0.0044	0.10	0.0967	0.0967	0.0989	0.085 to 0.115	96.7	70 to 130	0.0977	20
AX01900	Lead, Total	mg/L	0.00000787	0.0022	0.10	0.100	0.0999	0.101	0.085 to 0.115	100	70 to 130	0.427	20
AX01900	Molybdenum, Total	mg/L	0.0000127	0.0044	0.10	0.200	0.201	0.0942	0.085 to 0.115	92.5	70 to 130	0.224	20
AX01900	Thallium, Total	mg/L	0.0000452	0.00044	0.10	0.102	0.102	0.0973	0.085 to 0.115	102	70 to 130	0.220	20

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Expiration: June 30, 2018

Comments:

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AX01895

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01901	Chloride, Total	mg/L	0.000	0.25	10.00	23.2	14.2	10.6	9 to 11	90.0	80 to 120	0.00	20
AX01901	Solids, Dissolved	mg/L	2.00	25			388	42.0	40 to 60			1.04	5
AX01901	Sulfate, Total	mg/L	0.047	1.0	20.00	104	85.6	20.0	18 to 22	93.0	80 to 120	0.234	20

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report
Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

CC:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AX01896

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	0.000960	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		0.264	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/14/2017	EPA 200.7		2	0.02	0.1	J	0.0331	mg/L
* Calcium, Total	HRG	2/14/2017	EPA 200.7		2	0.1	0.5		4.19	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	J	0.000716	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	J	0.00259	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	MCW	2/2/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/14/2017	EPA 200.7		2	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	2/2/2017	SM 2540C		1		25		45.3	mg/L
* Chloride, Total	SES	1/26/2017	EPA 300.0		1	0.04	0.25		1.71	mg/L
* Sulfate, Total	SES	1/26/2017	EPA 300.0		1	0.3	1		6.62	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
Version: 2.0

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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AX01896

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01900	Cadmium, Total	mg/L	0.00000541	0.00044	0.10	0.0926	0.0922	0.0983	0.085 to 0.115	92.6	70 to 130	0.346	20
AX01900	Cobalt, Total	mg/L	0.00000235	0.0044	0.10	0.114	0.114	0.0945	0.085 to 0.115	98.7	70 to 130	0.0591	20
AX01900	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.455	0.453	0.107	0.085 to 0.115	103	70 to 130	0.232	20
AX01901	Boron, Total	mg/L	0.00597	0.044	1.00	2.32	2.37	0.945	0.85 to 1.15	94.2	70 to 130	2.11	20
AX01900	Lead, Total	mg/L	0.00000787	0.0022	0.10	0.100	0.0999	0.101	0.085 to 0.115	100	70 to 130	0.427	20
AX01900	Molybdenum, Total	mg/L	0.0000127	0.0044	0.10	0.200	0.201	0.0942	0.085 to 0.115	92.5	70 to 130	0.224	20
AX01900	Thallium, Total	mg/L	0.0000452	0.00044	0.10	0.102	0.102	0.0973	0.085 to 0.115	102	70 to 130	0.220	20
AX01901	Calcium, Total	mg/L	-0.00342	0.22	5.00	64.4	66.1	4.73	4.25 to 5.75	105	70 to 130	2.64	20
AX01901	Mercury, Total by CVAA	mg/L	0.000130	0.0005	0.004	0.00394	0.00391	0.00394	0.0034 to 0.0046	98.6	70 to 130	0.840	20
AX01900	Beryllium, Total	mg/L	0.0000467	0.00132	0.10	0.0969	0.0961	0.108	0.085 to 0.115	96.9	70 to 130	0.858	20
AX01900	Selenium, Total	mg/L	0.0000216	0.0044	0.10	0.0922	0.0926	0.105	0.085 to 0.115	92.2	70 to 130	0.364	20
AX01901	Lithium, Total	mg/L	0.000400	0.022	0.20	0.731	0.752	0.192	0.17 to 0.23	105	70 to 130	2.79	20
AX01900	Antimony, Total	mg/L	0.000180	0.00132	0.10	0.0896	0.0898	0.0951	0.085 to 0.115	88.7	70 to 130	0.162	20
AX01900	Barium, Total	mg/L	0.00000150	0.0044	0.10	0.206	0.205	0.0915	0.085 to 0.115	90.9	70 to 130	0.235	20
AX01900	Chromium, Total	mg/L	0.0000154	0.0044	0.10	0.0967	0.0967	0.0989	0.085 to 0.115	96.7	70 to 130	0.0977	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

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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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AX01896

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01901	Chloride, Total	mg/L	0.000	0.25	10.00	23.2	14.2	10.6	9 to 11	90.0	80 to 120	0.00	20
AX01901	Solids, Dissolved	mg/L	2.00	25			388	42.0	40 to 60			1.04	5
AX01901	Sulfate, Total	mg/L	0.047	1.0	20.00	104	85.6	20.0	18 to 22	93.0	80 to 120	0.234	20

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Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AX01897

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	0.000928	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		0.0167	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/14/2017	EPA 200.7		2	0.02	0.1	J	0.0282	mg/L
* Calcium, Total	HRG	2/14/2017	EPA 200.7		2	0.1	0.5		19.5	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	J	0.00239	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	MCW	2/2/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/14/2017	EPA 200.7		2	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	2/2/2017	SM 2540C		1		25		83.3	mg/L
* Chloride, Total	SES	1/26/2017	EPA 300.0		1	0.04	0.25		5.41	mg/L
* Sulfate, Total	SES	1/26/2017	EPA 300.0		1	0.3	1		3.34	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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AX01897

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01900	Cobalt, Total	mg/L	0.00000235	0.0044	0.10	0.114	0.114	0.0945	0.085 to 0.115	98.7	70 to 130	0.0591	20
AX01900	Cadmium, Total	mg/L	0.00000541	0.00044	0.10	0.0926	0.0922	0.0983	0.085 to 0.115	92.6	70 to 130	0.346	20
AX01901	Calcium, Total	mg/L	-0.00342	0.22	5.00	64.4	66.1	4.73	4.25 to 5.75	105	70 to 130	2.64	20
AX01901	Mercury, Total by CVAA	mg/L	0.000130	0.0005	0.004	0.00394	0.00391	0.00394	0.0034 to 0.0046	98.6	70 to 130	0.840	20
AX01900	Lead, Total	mg/L	0.00000787	0.0022	0.10	0.100	0.0999	0.101	0.085 to 0.115	100	70 to 130	0.427	20
AX01900	Molybdenum, Total	mg/L	0.0000127	0.0044	0.10	0.200	0.201	0.0942	0.085 to 0.115	92.5	70 to 130	0.224	20
AX01900	Thallium, Total	mg/L	0.0000452	0.00044	0.10	0.102	0.102	0.0973	0.085 to 0.115	102	70 to 130	0.220	20
AX01900	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.455	0.453	0.107	0.085 to 0.115	103	70 to 130	0.232	20
AX01901	Boron, Total	mg/L	0.00597	0.044	1.00	2.32	2.37	0.945	0.85 to 1.15	94.2	70 to 130	2.11	20
AX01900	Beryllium, Total	mg/L	0.0000467	0.00132	0.10	0.0969	0.0961	0.108	0.085 to 0.115	96.9	70 to 130	0.858	20
AX01900	Selenium, Total	mg/L	0.0000216	0.0044	0.10	0.0922	0.0926	0.105	0.085 to 0.115	92.2	70 to 130	0.364	20
AX01901	Lithium, Total	mg/L	0.000400	0.022	0.20	0.731	0.752	0.192	0.17 to 0.23	105	70 to 130	2.79	20
AX01900	Antimony, Total	mg/L	0.000180	0.00132	0.10	0.0896	0.0898	0.0951	0.085 to 0.115	88.7	70 to 130	0.162	20
AX01900	Barium, Total	mg/L	0.00000150	0.0044	0.10	0.206	0.205	0.0915	0.085 to 0.115	90.9	70 to 130	0.235	20
AX01900	Chromium, Total	mg/L	0.0000154	0.0044	0.10	0.0967	0.0967	0.0989	0.085 to 0.115	96.7	70 to 130	0.0977	20

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Laboratory certification ID: E571114
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Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AX01897

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01901	Chloride, Total	mg/L	0.000	0.25	10.00	23.2	14.2	10.6	9 to 11	90.0	80 to 120	0.00	20
AX01901	Solids, Dissolved	mg/L	2.00	25			388	42.0	40 to 60			1.04	5
AX01901	Sulfate, Total	mg/L	0.047	1.0	20.00	104	85.6	20.0	18 to 22	93.0	80 to 120	0.234	20

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Calera, AL 35040
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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AX01898

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	0.000984	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005		0.0825	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.126	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/14/2017	EPA 200.7		2	0.02	0.1		1.49	mg/L
* Calcium, Total	HRG	2/14/2017	EPA 200.7		2	0.1	0.5		76.4	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		0.0150	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	MCW	2/2/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/14/2017	EPA 200.7		2	0.01	0.05		0.374	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	2/2/2017	SM 2540C		1		50		408	mg/L
* Chloride, Total	SES	1/26/2017	EPA 300.0		1	0.04	0.25		23.2	mg/L
* Sulfate, Total	SES	1/26/2017	EPA 300.0		1	0.3	1		12.3	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AX01898

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01900	Cobalt, Total	mg/L	0.00000235	0.0044	0.10	0.114	0.114	0.0945	0.085 to 0.115	98.7	70 to 130	0.0591	20
AX01900	Cadmium, Total	mg/L	0.00000541	0.00044	0.10	0.0926	0.0922	0.0983	0.085 to 0.115	92.6	70 to 130	0.346	20
AX01900	Beryllium, Total	mg/L	0.0000467	0.00132	0.10	0.0969	0.0961	0.108	0.085 to 0.115	96.9	70 to 130	0.858	20
AX01900	Selenium, Total	mg/L	0.0000216	0.0044	0.10	0.0922	0.0926	0.105	0.085 to 0.115	92.2	70 to 130	0.364	20
AX01901	Lithium, Total	mg/L	0.000400	0.022	0.20	0.731	0.752	0.192	0.17 to 0.23	105	70 to 130	2.79	20
AX01900	Lead, Total	mg/L	0.00000787	0.0022	0.10	0.100	0.0999	0.101	0.085 to 0.115	100	70 to 130	0.427	20
AX01900	Molybdenum, Total	mg/L	0.0000127	0.0044	0.10	0.200	0.201	0.0942	0.085 to 0.115	92.5	70 to 130	0.224	20
AX01900	Thallium, Total	mg/L	0.0000452	0.00044	0.10	0.102	0.102	0.0973	0.085 to 0.115	102	70 to 130	0.220	20
AX01901	Calcium, Total	mg/L	-0.00342	0.22	5.00	64.4	66.1	4.73	4.25 to 5.75	105	70 to 130	2.64	20
AX01901	Mercury, Total by CVAA	mg/L	0.000130	0.0005	0.004	0.00394	0.00391	0.00394	0.0034 to 0.0046	98.6	70 to 130	0.840	20
AX01900	Antimony, Total	mg/L	0.000180	0.00132	0.10	0.0896	0.0898	0.0951	0.085 to 0.115	88.7	70 to 130	0.162	20
AX01900	Barium, Total	mg/L	0.00000150	0.0044	0.10	0.206	0.205	0.0915	0.085 to 0.115	90.9	70 to 130	0.235	20
AX01900	Chromium, Total	mg/L	0.0000154	0.0044	0.10	0.0967	0.0967	0.0989	0.085 to 0.115	96.7	70 to 130	0.0977	20
AX01900	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.455	0.453	0.107	0.085 to 0.115	103	70 to 130	0.232	20
AX01901	Boron, Total	mg/L	0.00597	0.044	1.00	2.32	2.37	0.945	0.85 to 1.15	94.2	70 to 130	2.11	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:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AX01898

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01901	Chloride, Total	mg/L	0.000	0.25	10.00	23.2	14.2	10.6	9 to 11	90.0	80 to 120	0.00	20
AX01901	Solids, Dissolved	mg/L	2.00	25			388	42.0	40 to 60			1.04	5
AX01901	Sulfate, Total	mg/L	0.047	1.0	20.00	104	85.6	20.0	18 to 22	93.0	80 to 120	0.234	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:

CC:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AX01899

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	0.000997	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005		0.363	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.117	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/14/2017	EPA 200.7		2	0.02	0.1		1.94	mg/L
* Calcium, Total	HRG	2/14/2017	EPA 200.7		2	0.1	0.5		69.4	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		0.0157	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	MCW	2/2/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/14/2017	EPA 200.7		2	0.01	0.05		0.752	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.111	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	2/2/2017	SM 2540C		1		50		464	mg/L
* Chloride, Total	SES	1/26/2017	EPA 300.0		1	0.04	0.25		19.0	mg/L
* Sulfate, Total	SES	1/26/2017	EPA 300.0		1	0.3	1		63.4	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AX01899

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01900	Cobalt, Total	mg/L	0.00000235	0.0044	0.10	0.114	0.114	0.0945	0.085 to 0.115	98.7	70 to 130	0.0591	20
AX01900	Cadmium, Total	mg/L	0.00000541	0.00044	0.10	0.0926	0.0922	0.0983	0.085 to 0.115	92.6	70 to 130	0.346	20
AX01900	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.455	0.453	0.107	0.085 to 0.115	103	70 to 130	0.232	20
AX01901	Boron, Total	mg/L	0.00597	0.044	1.00	2.32	2.37	0.945	0.85 to 1.15	94.2	70 to 130	2.11	20
AX01900	Antimony, Total	mg/L	0.000180	0.00132	0.10	0.0896	0.0898	0.0951	0.085 to 0.115	88.7	70 to 130	0.162	20
AX01900	Barium, Total	mg/L	0.00000150	0.0044	0.10	0.206	0.205	0.0915	0.085 to 0.115	90.9	70 to 130	0.235	20
AX01900	Chromium, Total	mg/L	0.0000154	0.0044	0.10	0.0967	0.0967	0.0989	0.085 to 0.115	96.7	70 to 130	0.0977	20
AX01901	Calcium, Total	mg/L	-0.00342	0.22	5.00	64.4	66.1	4.73	4.25 to 5.75	105	70 to 130	2.64	20
AX01901	Mercury, Total by CVAA	mg/L	0.000130	0.0005	0.004	0.00394	0.00391	0.00394	0.0034 to 0.0046	98.6	70 to 130	0.840	20
AX01900	Beryllium, Total	mg/L	0.0000467	0.00132	0.10	0.0969	0.0961	0.108	0.085 to 0.115	96.9	70 to 130	0.858	20
AX01900	Selenium, Total	mg/L	0.0000216	0.0044	0.10	0.0922	0.0926	0.105	0.085 to 0.115	92.2	70 to 130	0.364	20
AX01901	Lithium, Total	mg/L	0.000400	0.022	0.20	0.731	0.752	0.192	0.17 to 0.23	105	70 to 130	2.79	20
AX01900	Lead, Total	mg/L	0.00000787	0.0022	0.10	0.100	0.0999	0.101	0.085 to 0.115	100	70 to 130	0.427	20
AX01900	Molybdenum, Total	mg/L	0.0000127	0.0044	0.10	0.200	0.201	0.0942	0.085 to 0.115	92.5	70 to 130	0.224	20
AX01900	Thallium, Total	mg/L	0.0000452	0.00044	0.10	0.102	0.102	0.0973	0.085 to 0.115	102	70 to 130	0.220	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AX01899

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01901	Chloride, Total	mg/L	0.000	0.25	10.00	23.2	14.2	10.6	9 to 11	90.0	80 to 120	0.00	20
AX01901	Solids, Dissolved	mg/L	2.00	25			388	42.0	40 to 60			1.04	5
AX01901	Sulfate, Total	mg/L	0.047	1.0	20.00	104	85.6	20.0	18 to 22	93.0	80 to 120	0.234	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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Reported: 7/24/2017
Version: 2.0

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-17 Dup

Laboratory ID Number: AX01900

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	0.000913	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005		0.352	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.115	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/14/2017	EPA 200.7		2	0.02	0.1		1.92	mg/L
* Calcium, Total	HRG	2/14/2017	EPA 200.7		2	0.1	0.5		69.3	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		0.0154	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	MCW	2/2/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/14/2017	EPA 200.7		2	0.01	0.05		0.746	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.108	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	2/2/2017	SM 2540C		1		50		498	mg/L
* Chloride, Total	SES	1/26/2017	EPA 300.0		1	0.04	0.25		19.0	mg/L
* Sulfate, Total	SES	1/26/2017	EPA 300.0		1	0.3	1		64.3	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:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-17 Dup

Laboratory ID Number: AX01900

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01900	Cobalt, Total	mg/L	0.00000235	0.0044	0.10	0.114	0.114	0.0945	0.085 to 0.115	98.7	70 to 130	0.0591	20
AX01900	Cadmium, Total	mg/L	0.00000541	0.00044	0.10	0.0926	0.0922	0.0983	0.085 to 0.115	92.6	70 to 130	0.346	20
AX01901	Calcium, Total	mg/L	-0.00342	0.22	5.00	64.4	66.1	4.73	4.25 to 5.75	105	70 to 130	2.64	20
AX01901	Mercury, Total by CVAA	mg/L	0.000130	0.0005	0.004	0.00394	0.00391	0.00394	0.0034 to 0.0046	98.6	70 to 130	0.840	20
AX01900	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.455	0.453	0.107	0.085 to 0.115	103	70 to 130	0.232	20
AX01901	Boron, Total	mg/L	0.00597	0.044	1.00	2.32	2.37	0.945	0.85 to 1.15	94.2	70 to 130	2.11	20
AX01900	Antimony, Total	mg/L	0.000180	0.00132	0.10	0.0896	0.0898	0.0951	0.085 to 0.115	88.7	70 to 130	0.162	20
AX01900	Barium, Total	mg/L	0.00000150	0.0044	0.10	0.206	0.205	0.0915	0.085 to 0.115	90.9	70 to 130	0.235	20
AX01900	Chromium, Total	mg/L	0.0000154	0.0044	0.10	0.0967	0.0967	0.0989	0.085 to 0.115	96.7	70 to 130	0.0977	20
AX01900	Lead, Total	mg/L	0.00000787	0.0022	0.10	0.100	0.0999	0.101	0.085 to 0.115	100	70 to 130	0.427	20
AX01900	Molybdenum, Total	mg/L	0.0000127	0.0044	0.10	0.200	0.201	0.0942	0.085 to 0.115	92.5	70 to 130	0.224	20
AX01900	Thallium, Total	mg/L	0.0000452	0.00044	0.10	0.102	0.102	0.0973	0.085 to 0.115	102	70 to 130	0.220	20
AX01900	Beryllium, Total	mg/L	0.0000467	0.00132	0.10	0.0969	0.0961	0.108	0.085 to 0.115	96.9	70 to 130	0.858	20
AX01900	Selenium, Total	mg/L	0.0000216	0.0044	0.10	0.0922	0.0926	0.105	0.085 to 0.115	92.2	70 to 130	0.364	20
AX01901	Lithium, Total	mg/L	0.000400	0.022	0.20	0.731	0.752	0.192	0.17 to 0.23	105	70 to 130	2.79	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-17 Dup

Laboratory ID Number: AX01900

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01901	Chloride, Total	mg/L	0.000	0.25	10.00	23.2	14.2	10.6	9 to 11	90.0	80 to 120	0.00	20
AX01901	Solids, Dissolved	mg/L	2.00	25			388	42.0	40 to 60			1.04	5
AX01901	Sulfate, Total	mg/L	0.047	1.0	20.00	104	85.6	20.0	18 to 22	93.0	80 to 120	0.234	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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Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AX01901

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	0.000935	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005		0.0472	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.0418	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/14/2017	EPA 200.7		2	0.02	0.1		1.38	mg/L
* Calcium, Total	HRG	2/14/2017	EPA 200.7		2	0.1	0.5		59.1	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		0.0122	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	MCW	2/2/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/14/2017	EPA 200.7		2	0.01	0.05		0.522	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	J	0.000265	mg/L
General Characteristics										
* Solids, Dissolved	KRC	2/2/2017	SM 2540C		1		50		380	mg/L
* Chloride, Total	SES	1/26/2017	EPA 300.0		1	0.04	0.25		14.2	mg/L
* Sulfate, Total	SES	1/26/2017	EPA 300.0		1	0.3	1		85.4	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: Recovery for Calcium was out of spec.
The spike amount was less than 30% of the sample amount. SGC

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AX01901

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01900	Cadmium, Total	mg/L	0.00000541	0.00044	0.10	0.0926	0.0922	0.0983	0.085 to 0.115	92.6	70 to 130	0.346	20
AX01900	Cobalt, Total	mg/L	0.00000235	0.0044	0.10	0.114	0.114	0.0945	0.085 to 0.115	98.7	70 to 130	0.0591	20
AX01900	Arsenic, Total	mg/L	0.0000167	0.0022	0.10	0.455	0.453	0.107	0.085 to 0.115	103	70 to 130	0.232	20
AX01901	Boron, Total	mg/L	0.00597	0.044	1.00	2.32	2.37	0.945	0.85 to 1.15	94.2	70 to 130	2.11	20
AX01901	Calcium, Total	mg/L	-0.00342	0.22	5.00	64.4	66.1	4.73	4.25 to 5.75	105	70 to 130	2.64	20
AX01901	Mercury, Total by CVAA	mg/L	0.000130	0.0005	0.004	0.00394	0.00391	0.00394	0.0034 to 0.0046	98.6	70 to 130	0.840	20
AX01900	Beryllium, Total	mg/L	0.0000467	0.00132	0.10	0.0969	0.0961	0.108	0.085 to 0.115	96.9	70 to 130	0.858	20
AX01900	Selenium, Total	mg/L	0.0000216	0.0044	0.10	0.0922	0.0926	0.105	0.085 to 0.115	92.2	70 to 130	0.364	20
AX01901	Lithium, Total	mg/L	0.000400	0.022	0.20	0.731	0.752	0.192	0.17 to 0.23	105	70 to 130	2.79	20
AX01900	Antimony, Total	mg/L	0.000180	0.00132	0.10	0.0896	0.0898	0.0951	0.085 to 0.115	88.7	70 to 130	0.162	20
AX01900	Barium, Total	mg/L	0.00000150	0.0044	0.10	0.206	0.205	0.0915	0.085 to 0.115	90.9	70 to 130	0.235	20
AX01900	Chromium, Total	mg/L	0.0000154	0.0044	0.10	0.0967	0.0967	0.0989	0.085 to 0.115	96.7	70 to 130	0.0977	20
AX01900	Lead, Total	mg/L	0.00000787	0.0022	0.10	0.100	0.0999	0.101	0.085 to 0.115	100	70 to 130	0.427	20
AX01900	Molybdenum, Total	mg/L	0.0000127	0.0044	0.10	0.200	0.201	0.0942	0.085 to 0.115	92.5	70 to 130	0.224	20
AX01900	Thallium, Total	mg/L	0.0000452	0.00044	0.10	0.102	0.102	0.0973	0.085 to 0.115	102	70 to 130	0.220	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 was out of spec.
The spike amount was less than 30% of the sample amount. SGC

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AX01901

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01901	Chloride, Total	mg/L	0.000	0.25	10.00	23.2	14.2	10.6	9 to 11	90.0	80 to 120	0.00	20
AX01901	Solids, Dissolved	mg/L	2.00	25			388	42.0	40 to 60			1.04	5
AX01901	Sulfate, Total	mg/L	0.047	1.0	20.00	104	85.6	20.0	18 to 22	93.0	80 to 120	0.234	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 was out of spec.
The spike amount was less than 30% of the sample amount. SGC

CC:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 23-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AX01902

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	0.000701	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		0.0290	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/28/2017	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	2/28/2017	EPA 200.7		1	0.1	0.5		1.83	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	MCW	2/2/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	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	2/2/2017	SM 2540C		1		25		33.3	mg/L
* Chloride, Total	SES	1/26/2017	EPA 300.0		1	0.04	0.25		2.37	mg/L
* Sulfate, Total	SES	1/26/2017	EPA 300.0		1	0.3	1	J	0.493	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 23-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AX01902

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02033	Lead, Total	mg/L	0.00000787	0.0022	0.100	0.0986	0.103	0.101	0.085 to 0.115	98.6	70 to 130	4.37	20
AX02033	Cobalt, Total	mg/L	0.00000235	0.0044	0.100	0.136	0.143	0.0945	0.085 to 0.115	94.3	70 to 130	5.02	20
AX02033	Arsenic, Total	mg/L	0.0000167	0.0022	0.100	0.101	0.106	0.107	0.085 to 0.115	93.8	70 to 130	4.83	20
AX02033	Antimony, Total	mg/L	0.000180	0.00132	0.100	0.0882	0.0930	0.0951	0.085 to 0.115	87.3	70 to 130	5.30	20
AX02033	Lithium, Total	mg/L	0.0000409	0.022	0.20	0.269	0.271	0.185	0.17 to 0.23	100	70 to 130	0.756	20
AX02033	Barium, Total	mg/L	0.00000150	0.0044	0.100	0.189	0.199	0.0915	0.085 to 0.115	86.0	70 to 130	5.15	20
AX02033	Beryllium, Total	mg/L	0.0000467	0.00132	0.100	0.0958	0.100	0.108	0.085 to 0.115	95.8	70 to 130	4.29	20
AX02033	Chromium, Total	mg/L	0.0000154	0.0044	0.100	0.0952	0.0995	0.0989	0.085 to 0.115	95.2	70 to 130	4.42	20
AX02033	Mercury, Total by CVAA	mg/L	0.000127	0.0005	0.004	0.00389	0.00393	0.00395	0.0034 to 0.0046	97.2	70 to 130	0.975	20
AX02033	Molybdenum, Total	mg/L	0.0000127	0.0044	0.100	0.0936	0.0996	0.0942	0.085 to 0.115	88.0	70 to 130	6.21	20
AX02033	Boron, Total	mg/L	0.000631	0.044	1.00	1.56	1.56	0.970	0.85 to 1.15	99.5	70 to 130	0.192	20
AX02033	Cadmium, Total	mg/L	0.00000541	0.00044	0.100	0.0916	0.0969	0.0983	0.085 to 0.115	91.6	70 to 130	5.62	20
AX02033	Calcium, Total	mg/L	-0.00161	0.22	5.00	21.4	21.4	4.94	4.25 to 5.75	94.8	70 to 130	0.167	20
AX02033	Selenium, Total	mg/L	0.0000216	0.0044	0.100	0.0903	0.0967	0.105	0.085 to 0.115	90.3	70 to 130	6.84	20
AX02033	Thallium, Total	mg/L	0.0000452	0.00044	0.100	0.0985	0.104	0.0973	0.085 to 0.115	98.5	70 to 130	5.43	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 23-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AX01902

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01908	Chloride, Total	mg/L	0.000	0.25	10.00	10.2	0.000	10.6	9 to 11	102	80 to 120	0.00	20
AX01908	Solids, Dissolved	mg/L	2.00	25			2.0	42.0	40 to 60			0.00	5
AX01908	Sulfate, Total	mg/L	0.050	1.0	20.00	20.3	0.094	21.3	18 to 22	102	80 to 120	0.00	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

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Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AX01904

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		0.0173	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.0428	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/28/2017	EPA 200.7		1	0.02	0.1		0.218	mg/L
* Calcium, Total	HRG	3/1/2017	EPA 200.7		10	1.0	5.0		193	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		0.0539	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	MCW	2/2/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	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	2/2/2017	SM 2540C		1		100		1350	mg/L
* Chloride, Total	SES	1/26/2017	EPA 300.0		1	0.04	0.25		18.4	mg/L
* Sulfate, Total	SES	1/27/2017	EPA 300.0		10	3.0	10		906	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AX01904

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02033	Lead, Total	mg/L	0.00000787	0.0022	0.100	0.0986	0.103	0.101	0.085 to 0.115	98.6	70 to 130	4.37	20
AX02033	Cobalt, Total	mg/L	0.00000235	0.0044	0.100	0.136	0.143	0.0945	0.085 to 0.115	94.3	70 to 130	5.02	20
AX02033	Arsenic, Total	mg/L	0.0000167	0.0022	0.100	0.101	0.106	0.107	0.085 to 0.115	93.8	70 to 130	4.83	20
AX02033	Barium, Total	mg/L	0.00000150	0.0044	0.100	0.189	0.199	0.0915	0.085 to 0.115	86.0	70 to 130	5.15	20
AX02033	Beryllium, Total	mg/L	0.0000467	0.00132	0.100	0.0958	0.100	0.108	0.085 to 0.115	95.8	70 to 130	4.29	20
AX02033	Selenium, Total	mg/L	0.0000216	0.0044	0.100	0.0903	0.0967	0.105	0.085 to 0.115	90.3	70 to 130	6.84	20
AX02033	Thallium, Total	mg/L	0.0000452	0.00044	0.100	0.0985	0.104	0.0973	0.085 to 0.115	98.5	70 to 130	5.43	20
AX02033	Chromium, Total	mg/L	0.0000154	0.0044	0.100	0.0952	0.0995	0.0989	0.085 to 0.115	95.2	70 to 130	4.42	20
AX02033	Mercury, Total by CVAA	mg/L	0.000127	0.0005	0.004	0.00389	0.00393	0.00395	0.0034 to 0.0046	97.2	70 to 130	0.975	20
AX02033	Molybdenum, Total	mg/L	0.0000127	0.0044	0.100	0.0936	0.0996	0.0942	0.085 to 0.115	88.0	70 to 130	6.21	20
AX02033	Antimony, Total	mg/L	0.000180	0.00132	0.100	0.0882	0.0930	0.0951	0.085 to 0.115	87.3	70 to 130	5.30	20
AX02033	Lithium, Total	mg/L	0.0000409	0.022	0.20	0.269	0.271	0.185	0.17 to 0.23	100	70 to 130	0.756	20
AX02033	Boron, Total	mg/L	0.000631	0.044	1.00	1.56	1.56	0.970	0.85 to 1.15	99.5	70 to 130	0.192	20
AX02033	Cadmium, Total	mg/L	0.00000541	0.00044	0.100	0.0916	0.0969	0.0983	0.085 to 0.115	91.6	70 to 130	5.62	20
AX02033	Calcium, Total	mg/L	-0.00161	0.22	5.00	21.4	21.4	4.94	4.25 to 5.75	94.8	70 to 130	0.167	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AX01904

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01908	Chloride, Total	mg/L	0.000	0.25	10.00	10.2	0.000	10.6	9 to 11	102	80 to 120	0.00	20
AX01908	Solids, Dissolved	mg/L	2.00	25			2.0	42.0	40 to 60			0.00	5
AX01908	Sulfate, Total	mg/L	0.050	1.0	20.00	20.3	0.094	21.3	18 to 22	102	80 to 120	0.00	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

CC:

Reported: 7/24/2017
Version: 2.0

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AX01905

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	0.000840	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005		0.0115	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.0276	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/28/2017	EPA 200.7		1	0.02	0.1		0.124	mg/L
* Calcium, Total	HRG	3/1/2017	EPA 200.7		10	1.0	5.0		72.2	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	J	0.00863	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	MCW	2/2/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	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	2/2/2017	SM 2540C		1		50		510	mg/L
* Chloride, Total	SES	1/26/2017	EPA 300.0		1	0.04	0.25		15.0	mg/L
* Sulfate, Total	SES	1/27/2017	EPA 300.0		10	3.0	10		302	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AX01905

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02033	Lead, Total	mg/L	0.00000787	0.0022	0.100	0.0986	0.103	0.101	0.085 to 0.115	98.6	70 to 130	4.37	20
AX02033	Arsenic, Total	mg/L	0.0000167	0.0022	0.100	0.101	0.106	0.107	0.085 to 0.115	93.8	70 to 130	4.83	20
AX02033	Barium, Total	mg/L	0.00000150	0.0044	0.100	0.189	0.199	0.0915	0.085 to 0.115	86.0	70 to 130	5.15	20
AX02033	Beryllium, Total	mg/L	0.0000467	0.00132	0.100	0.0958	0.100	0.108	0.085 to 0.115	95.8	70 to 130	4.29	20
AX02033	Cobalt, Total	mg/L	0.00000235	0.0044	0.100	0.136	0.143	0.0945	0.085 to 0.115	94.3	70 to 130	5.02	20
AX02033	Antimony, Total	mg/L	0.000180	0.00132	0.100	0.0882	0.0930	0.0951	0.085 to 0.115	87.3	70 to 130	5.30	20
AX02033	Lithium, Total	mg/L	0.0000409	0.022	0.20	0.269	0.271	0.185	0.17 to 0.23	100	70 to 130	0.756	20
AX02033	Selenium, Total	mg/L	0.0000216	0.0044	0.100	0.0903	0.0967	0.105	0.085 to 0.115	90.3	70 to 130	6.84	20
AX02033	Thallium, Total	mg/L	0.0000452	0.00044	0.100	0.0985	0.104	0.0973	0.085 to 0.115	98.5	70 to 130	5.43	20
AX02033	Chromium, Total	mg/L	0.0000154	0.0044	0.100	0.0952	0.0995	0.0989	0.085 to 0.115	95.2	70 to 130	4.42	20
AX02033	Mercury, Total by CVAA	mg/L	0.000127	0.0005	0.004	0.00389	0.00393	0.00395	0.0034 to 0.0046	97.2	70 to 130	0.975	20
AX02033	Molybdenum, Total	mg/L	0.0000127	0.0044	0.100	0.0936	0.0996	0.0942	0.085 to 0.115	88.0	70 to 130	6.21	20
AX02033	Boron, Total	mg/L	0.000631	0.044	1.00	1.56	1.56	0.970	0.85 to 1.15	99.5	70 to 130	0.192	20
AX02033	Cadmium, Total	mg/L	0.00000541	0.00044	0.100	0.0916	0.0969	0.0983	0.085 to 0.115	91.6	70 to 130	5.62	20
AX02033	Calcium, Total	mg/L	-0.00161	0.22	5.00	21.4	21.4	4.94	4.25 to 5.75	94.8	70 to 130	0.167	20

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Comments:

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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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AX01905

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01908	Chloride, Total	mg/L	0.000	0.25	10.00	10.2	0.000	10.6	9 to 11	102	80 to 120	0.00	20
AX01908	Solids, Dissolved	mg/L	2.00	25			2.0	42.0	40 to 60			0.00	5
AX01908	Sulfate, Total	mg/L	0.050	1.0	20.00	20.3	0.094	21.3	18 to 22	102	80 to 120	0.00	20

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Expiration: June 30, 2018

Comments:

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Reported: 7/24/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AX01906

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	0.000906	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005		0.00722	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.0942	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/28/2017	EPA 200.7		1	0.02	0.1	J	0.0262	mg/L
* Calcium, Total	HRG	3/1/2017	EPA 200.7		10	1.0	5.0		94.2	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	J	0.00383	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	MCW	2/2/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	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	2/2/2017	SM 2540C		1		50		354	mg/L
* Chloride, Total	SES	1/26/2017	EPA 300.0		1	0.04	0.25		24.6	mg/L
* Sulfate, Total	SES	1/26/2017	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

Comments:

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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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AX01906

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02033	Lead, Total	mg/L	0.00000787	0.0022	0.100	0.0986	0.103	0.101	0.085 to 0.115	98.6	70 to 130	4.37	20
AX02033	Cobalt, Total	mg/L	0.00000235	0.0044	0.100	0.136	0.143	0.0945	0.085 to 0.115	94.3	70 to 130	5.02	20
AX02033	Arsenic, Total	mg/L	0.0000167	0.0022	0.100	0.101	0.106	0.107	0.085 to 0.115	93.8	70 to 130	4.83	20
AX02033	Barium, Total	mg/L	0.00000150	0.0044	0.100	0.189	0.199	0.0915	0.085 to 0.115	86.0	70 to 130	5.15	20
AX02033	Beryllium, Total	mg/L	0.0000467	0.00132	0.100	0.0958	0.100	0.108	0.085 to 0.115	95.8	70 to 130	4.29	20
AX02033	Selenium, Total	mg/L	0.0000216	0.0044	0.100	0.0903	0.0967	0.105	0.085 to 0.115	90.3	70 to 130	6.84	20
AX02033	Thallium, Total	mg/L	0.0000452	0.00044	0.100	0.0985	0.104	0.0973	0.085 to 0.115	98.5	70 to 130	5.43	20
AX02033	Boron, Total	mg/L	0.000631	0.044	1.00	1.56	1.56	0.970	0.85 to 1.15	99.5	70 to 130	0.192	20
AX02033	Cadmium, Total	mg/L	0.00000541	0.00044	0.100	0.0916	0.0969	0.0983	0.085 to 0.115	91.6	70 to 130	5.62	20
AX02033	Calcium, Total	mg/L	-0.00161	0.22	5.00	21.4	21.4	4.94	4.25 to 5.75	94.8	70 to 130	0.167	20
AX02033	Antimony, Total	mg/L	0.000180	0.00132	0.100	0.0882	0.0930	0.0951	0.085 to 0.115	87.3	70 to 130	5.30	20
AX02033	Lithium, Total	mg/L	0.0000409	0.022	0.20	0.269	0.271	0.185	0.17 to 0.23	100	70 to 130	0.756	20
AX02033	Chromium, Total	mg/L	0.0000154	0.0044	0.100	0.0952	0.0995	0.0989	0.085 to 0.115	95.2	70 to 130	4.42	20
AX02033	Mercury, Total by CVAA	mg/L	0.000127	0.0005	0.004	0.00389	0.00393	0.00395	0.0034 to 0.0046	97.2	70 to 130	0.975	20
AX02033	Molybdenum, Total	mg/L	0.0000127	0.0044	0.100	0.0936	0.0996	0.0942	0.085 to 0.115	88.0	70 to 130	6.21	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AX01906

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01908	Chloride, Total	mg/L	0.000	0.25	10.00	10.2	0.000	10.6	9 to 11	102	80 to 120	0.00	20
AX01908	Solids, Dissolved	mg/L	2.00	25			2.0	42.0	40 to 60			0.00	5
AX01908	Sulfate, Total	mg/L	0.050	1.0	20.00	20.3	0.094	21.3	18 to 22	102	80 to 120	0.00	20

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Expiration: June 30, 2018

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Reported: 7/24/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-3 Dup

Laboratory ID Number: AX01907

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	0.000935	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005		0.00694	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.0891	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/28/2017	EPA 200.7		1	0.02	0.1	J	0.0265	mg/L
* Calcium, Total	HRG	3/1/2017	EPA 200.7		10	1.0	5.0		95.9	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	0.00352	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	MCW	2/2/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	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	2/2/2017	SM 2540C		1		50		380	mg/L
* Chloride, Total	SES	1/26/2017	EPA 300.0		1	0.04	0.25		24.7	mg/L
* Sulfate, Total	SES	1/26/2017	EPA 300.0		1	0.3	1	U	Not Detected	mg/L

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Expiration: June 30, 2018

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Calera, AL 35040
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-3 Dup

Laboratory ID Number: AX01907

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02033	Lead, Total	mg/L	0.00000787	0.0022	0.100	0.0986	0.103	0.101	0.085 to 0.115	98.6	70 to 130	4.37	20
AX02033	Cobalt, Total	mg/L	0.00000235	0.0044	0.100	0.136	0.143	0.0945	0.085 to 0.115	94.3	70 to 130	5.02	20
AX02033	Arsenic, Total	mg/L	0.0000167	0.0022	0.100	0.101	0.106	0.107	0.085 to 0.115	93.8	70 to 130	4.83	20
AX02033	Antimony, Total	mg/L	0.000180	0.00132	0.100	0.0882	0.0930	0.0951	0.085 to 0.115	87.3	70 to 130	5.30	20
AX02033	Lithium, Total	mg/L	0.0000409	0.022	0.20	0.269	0.271	0.185	0.17 to 0.23	100	70 to 130	0.756	20
AX02033	Barium, Total	mg/L	0.00000150	0.0044	0.100	0.189	0.199	0.0915	0.085 to 0.115	86.0	70 to 130	5.15	20
AX02033	Beryllium, Total	mg/L	0.0000467	0.00132	0.100	0.0958	0.100	0.108	0.085 to 0.115	95.8	70 to 130	4.29	20
AX02033	Chromium, Total	mg/L	0.0000154	0.0044	0.100	0.0952	0.0995	0.0989	0.085 to 0.115	95.2	70 to 130	4.42	20
AX02033	Mercury, Total by CVAA	mg/L	0.000127	0.0005	0.004	0.00389	0.00393	0.00395	0.0034 to 0.0046	97.2	70 to 130	0.975	20
AX02033	Molybdenum, Total	mg/L	0.0000127	0.0044	0.100	0.0936	0.0996	0.0942	0.085 to 0.115	88.0	70 to 130	6.21	20
AX02033	Boron, Total	mg/L	0.000631	0.044	1.00	1.56	1.56	0.970	0.85 to 1.15	99.5	70 to 130	0.192	20
AX02033	Cadmium, Total	mg/L	0.00000541	0.00044	0.100	0.0916	0.0969	0.0983	0.085 to 0.115	91.6	70 to 130	5.62	20
AX02033	Calcium, Total	mg/L	-0.00161	0.22	5.00	21.4	21.4	4.94	4.25 to 5.75	94.8	70 to 130	0.167	20
AX02033	Selenium, Total	mg/L	0.0000216	0.0044	0.100	0.0903	0.0967	0.105	0.085 to 0.115	90.3	70 to 130	6.84	20
AX02033	Thallium, Total	mg/L	0.0000452	0.00044	0.100	0.0985	0.104	0.0973	0.085 to 0.115	98.5	70 to 130	5.43	20

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond - MW-3 Dup

Laboratory ID Number: AX01907

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01908	Chloride, Total	mg/L	0.000	0.25	10.00	10.2	0.000	10.6	9 to 11	102	80 to 120	0.00	20
AX01908	Solids, Dissolved	mg/L	2.00	25			2.0	42.0	40 to 60			0.00	5
AX01908	Sulfate, Total	mg/L	0.050	1.0	20.00	20.3	0.094	21.3	18 to 22	102	80 to 120	0.00	20

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Comments:

CC:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX01908

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	0.000925	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	2/28/2017	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	2/28/2017	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	MCW	2/2/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	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	2/2/2017	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	1/26/2017	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Sulfate, Total	SES	1/26/2017	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:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX01908

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02033	Lead, Total	mg/L	0.00000787	0.0022	0.100	0.0986	0.103	0.101	0.085 to 0.115	98.6	70 to 130	4.37	20
AX02033	Cobalt, Total	mg/L	0.00000235	0.0044	0.100	0.136	0.143	0.0945	0.085 to 0.115	94.3	70 to 130	5.02	20
AX02033	Arsenic, Total	mg/L	0.0000167	0.0022	0.100	0.101	0.106	0.107	0.085 to 0.115	93.8	70 to 130	4.83	20
AX02033	Barium, Total	mg/L	0.00000150	0.0044	0.100	0.189	0.199	0.0915	0.085 to 0.115	86.0	70 to 130	5.15	20
AX02033	Beryllium, Total	mg/L	0.0000467	0.00132	0.100	0.0958	0.100	0.108	0.085 to 0.115	95.8	70 to 130	4.29	20
AX02033	Chromium, Total	mg/L	0.0000154	0.0044	0.100	0.0952	0.0995	0.0989	0.085 to 0.115	95.2	70 to 130	4.42	20
AX02033	Mercury, Total by CVAA	mg/L	0.000127	0.0005	0.004	0.00389	0.00393	0.00395	0.0034 to 0.0046	97.2	70 to 130	0.975	20
AX02033	Molybdenum, Total	mg/L	0.0000127	0.0044	0.100	0.0936	0.0996	0.0942	0.085 to 0.115	88.0	70 to 130	6.21	20
AX02033	Antimony, Total	mg/L	0.000180	0.00132	0.100	0.0882	0.0930	0.0951	0.085 to 0.115	87.3	70 to 130	5.30	20
AX02033	Lithium, Total	mg/L	0.0000409	0.022	0.20	0.269	0.271	0.185	0.17 to 0.23	100	70 to 130	0.756	20
AX02033	Selenium, Total	mg/L	0.0000216	0.0044	0.100	0.0903	0.0967	0.105	0.085 to 0.115	90.3	70 to 130	6.84	20
AX02033	Thallium, Total	mg/L	0.0000452	0.00044	0.100	0.0985	0.104	0.0973	0.085 to 0.115	98.5	70 to 130	5.43	20
AX02033	Boron, Total	mg/L	0.000631	0.044	1.00	1.56	1.56	0.970	0.85 to 1.15	99.5	70 to 130	0.192	20
AX02033	Cadmium, Total	mg/L	0.00000541	0.00044	0.100	0.0916	0.0969	0.0983	0.085 to 0.115	91.6	70 to 130	5.62	20
AX02033	Calcium, Total	mg/L	-0.00161	0.22	5.00	21.4	21.4	4.94	4.25 to 5.75	94.8	70 to 130	0.167	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 25-Jan-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX01908

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01908	Chloride, Total	mg/L	0.000	0.25	10.00	10.2	0.000	10.6	9 to 11	102	80 to 120	0.00	20
AX01908	Solids, Dissolved	mg/L	2.00	25			2.0	42.0	40 to 60			0.00	5
AX01908	Sulfate, Total	mg/L	0.050	1.0	20.00	20.3	0.094	21.3	18 to 22	102	80 to 120	0.00	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

CC:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AX02030

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	0.000910	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		0.0118	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/28/2017	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	2/28/2017	EPA 200.7		1	0.1	0.5		9.67	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	MCW	2/2/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	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	1/30/2017	SM 2540C		1		25		48.7	mg/L
* Chloride, Total	SES	1/27/2017	EPA 300.0		1	0.04	0.25		4.40	mg/L
* Sulfate, Total	SES	1/27/2017	EPA 300.0		1	0.3	1		2.06	mg/L

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Laboratory certification ID: E571114
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Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AX02030

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02033	Lead, Total	mg/L	0.00000787	0.0022	0.100	0.0986	0.103	0.101	0.085 to 0.115	98.6	70 to 130	4.37	20
AX02033	Arsenic, Total	mg/L	0.0000167	0.0022	0.100	0.101	0.106	0.107	0.085 to 0.115	93.8	70 to 130	4.83	20
AX02033	Cobalt, Total	mg/L	0.00000235	0.0044	0.100	0.136	0.143	0.0945	0.085 to 0.115	94.3	70 to 130	5.02	20
AX02033	Antimony, Total	mg/L	0.000180	0.00132	0.100	0.0882	0.0930	0.0951	0.085 to 0.115	87.3	70 to 130	5.30	20
AX02033	Lithium, Total	mg/L	0.0000409	0.022	0.20	0.269	0.271	0.185	0.17 to 0.23	100	70 to 130	0.756	20
AX02033	Chromium, Total	mg/L	0.0000154	0.0044	0.100	0.0952	0.0995	0.0989	0.085 to 0.115	95.2	70 to 130	4.42	20
AX02033	Mercury, Total by CVAA	mg/L	0.000127	0.0005	0.004	0.00389	0.00393	0.00395	0.0034 to 0.0046	97.2	70 to 130	0.975	20
AX02033	Molybdenum, Total	mg/L	0.0000127	0.0044	0.100	0.0936	0.0996	0.0942	0.085 to 0.115	88.0	70 to 130	6.21	20
AX02033	Boron, Total	mg/L	0.000631	0.044	1.00	1.56	1.56	0.970	0.85 to 1.15	99.5	70 to 130	0.192	20
AX02033	Cadmium, Total	mg/L	0.00000541	0.00044	0.100	0.0916	0.0969	0.0983	0.085 to 0.115	91.6	70 to 130	5.62	20
AX02033	Calcium, Total	mg/L	-0.00161	0.22	5.00	21.4	21.4	4.94	4.25 to 5.75	94.8	70 to 130	0.167	20
AX02033	Selenium, Total	mg/L	0.0000216	0.0044	0.100	0.0903	0.0967	0.105	0.085 to 0.115	90.3	70 to 130	6.84	20
AX02033	Thallium, Total	mg/L	0.0000452	0.00044	0.100	0.0985	0.104	0.0973	0.085 to 0.115	98.5	70 to 130	5.43	20
AX02033	Barium, Total	mg/L	0.00000150	0.0044	0.100	0.189	0.199	0.0915	0.085 to 0.115	86.0	70 to 130	5.15	20
AX02033	Beryllium, Total	mg/L	0.0000467	0.00132	0.100	0.0958	0.100	0.108	0.085 to 0.115	95.8	70 to 130	4.29	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AX02030

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01908	Chloride, Total	mg/L	0.000	0.25	10.00	10.2	0.000	10.6	9 to 11	102	80 to 120	0.00	20
AX01908	Sulfate, Total	mg/L	0.050	1.0	20.00	20.3	0.094	21.3	18 to 22	102	80 to 120	0.00	20
AX02045	Solids, Dissolved	mg/L	7.00	25			720	53.0	40 to 60			1.69	5

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

CC:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AX02031

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	0.000858	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		0.0446	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/28/2017	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	2/28/2017	EPA 200.7		1	0.1	0.5		12.8	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	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/2/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	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	1/30/2017	SM 2540C		1		25		78.7	mg/L
* Chloride, Total	SES	1/27/2017	EPA 300.0		1	0.04	0.25		4.61	mg/L
* Sulfate, Total	SES	1/27/2017	EPA 300.0		1	0.3	1		30.7	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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Alabama Power General Test Laboratory
744 County Road 87, GSC#8
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AX02031

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02033	Lead, Total	mg/L	0.00000787	0.0022	0.100	0.0986	0.103	0.101	0.085 to 0.115	98.6	70 to 130	4.37	20
AX02033	Cobalt, Total	mg/L	0.00000235	0.0044	0.100	0.136	0.143	0.0945	0.085 to 0.115	94.3	70 to 130	5.02	20
AX02033	Arsenic, Total	mg/L	0.0000167	0.0022	0.100	0.101	0.106	0.107	0.085 to 0.115	93.8	70 to 130	4.83	20
AX02033	Barium, Total	mg/L	0.00000150	0.0044	0.100	0.189	0.199	0.0915	0.085 to 0.115	86.0	70 to 130	5.15	20
AX02033	Beryllium, Total	mg/L	0.0000467	0.00132	0.100	0.0958	0.100	0.108	0.085 to 0.115	95.8	70 to 130	4.29	20
AX02033	Boron, Total	mg/L	0.000631	0.044	1.00	1.56	1.56	0.970	0.85 to 1.15	99.5	70 to 130	0.192	20
AX02033	Cadmium, Total	mg/L	0.00000541	0.00044	0.100	0.0916	0.0969	0.0983	0.085 to 0.115	91.6	70 to 130	5.62	20
AX02033	Calcium, Total	mg/L	-0.00161	0.22	5.00	21.4	21.4	4.94	4.25 to 5.75	94.8	70 to 130	0.167	20
AX02033	Selenium, Total	mg/L	0.0000216	0.0044	0.100	0.0903	0.0967	0.105	0.085 to 0.115	90.3	70 to 130	6.84	20
AX02033	Thallium, Total	mg/L	0.0000452	0.00044	0.100	0.0985	0.104	0.0973	0.085 to 0.115	98.5	70 to 130	5.43	20
AX02033	Antimony, Total	mg/L	0.000180	0.00132	0.100	0.0882	0.0930	0.0951	0.085 to 0.115	87.3	70 to 130	5.30	20
AX02033	Lithium, Total	mg/L	0.0000409	0.022	0.20	0.269	0.271	0.185	0.17 to 0.23	100	70 to 130	0.756	20
AX02033	Chromium, Total	mg/L	0.0000154	0.0044	0.100	0.0952	0.0995	0.0989	0.085 to 0.115	95.2	70 to 130	4.42	20
AX02033	Mercury, Total by CVAA	mg/L	0.000127	0.0005	0.004	0.00389	0.00393	0.00395	0.0034 to 0.0046	97.2	70 to 130	0.975	20
AX02033	Molybdenum, Total	mg/L	0.0000127	0.0044	0.100	0.0936	0.0996	0.0942	0.085 to 0.115	88.0	70 to 130	6.21	20

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AX02031

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01908	Chloride, Total	mg/L	0.000	0.25	10.00	10.2	0.000	10.6	9 to 11	102	80 to 120	0.00	20
AX01908	Sulfate, Total	mg/L	0.050	1.0	20.00	20.3	0.094	21.3	18 to 22	102	80 to 120	0.00	20
AX02045	Solids, Dissolved	mg/L	7.00	25			720	53.0	40 to 60			1.69	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:

CC:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-24 Dup

Laboratory ID Number: AX02032

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	0.000932	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		0.0478	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/28/2017	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	2/28/2017	EPA 200.7		1	0.1	0.5		12.7	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	MCW	2/2/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	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	1/30/2017	SM 2540C		1		25		84.0	mg/L
* Chloride, Total	SES	1/27/2017	EPA 300.0		1	0.04	0.25		4.66	mg/L
* Sulfate, Total	SES	1/27/2017	EPA 300.0		1	0.3	1		31.0	mg/L

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Comments:

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-24 Dup

Laboratory ID Number: AX02032

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02033	Lead, Total	mg/L	0.00000787	0.0022	0.100	0.0986	0.103	0.101	0.085 to 0.115	98.6	70 to 130	4.37	20
AX02033	Cobalt, Total	mg/L	0.00000235	0.0044	0.100	0.136	0.143	0.0945	0.085 to 0.115	94.3	70 to 130	5.02	20
AX02033	Arsenic, Total	mg/L	0.0000167	0.0022	0.100	0.101	0.106	0.107	0.085 to 0.115	93.8	70 to 130	4.83	20
AX02033	Antimony, Total	mg/L	0.000180	0.00132	0.100	0.0882	0.0930	0.0951	0.085 to 0.115	87.3	70 to 130	5.30	20
AX02033	Lithium, Total	mg/L	0.0000409	0.022	0.20	0.269	0.271	0.185	0.17 to 0.23	100	70 to 130	0.756	20
AX02033	Chromium, Total	mg/L	0.0000154	0.0044	0.100	0.0952	0.0995	0.0989	0.085 to 0.115	95.2	70 to 130	4.42	20
AX02033	Mercury, Total by CVAA	mg/L	0.000127	0.0005	0.004	0.00389	0.00393	0.00395	0.0034 to 0.0046	97.2	70 to 130	0.975	20
AX02033	Molybdenum, Total	mg/L	0.0000127	0.0044	0.100	0.0936	0.0996	0.0942	0.085 to 0.115	88.0	70 to 130	6.21	20
AX02033	Barium, Total	mg/L	0.00000150	0.0044	0.100	0.189	0.199	0.0915	0.085 to 0.115	86.0	70 to 130	5.15	20
AX02033	Beryllium, Total	mg/L	0.0000467	0.00132	0.100	0.0958	0.100	0.108	0.085 to 0.115	95.8	70 to 130	4.29	20
AX02033	Boron, Total	mg/L	0.000631	0.044	1.00	1.56	1.56	0.970	0.85 to 1.15	99.5	70 to 130	0.192	20
AX02033	Cadmium, Total	mg/L	0.00000541	0.00044	0.100	0.0916	0.0969	0.0983	0.085 to 0.115	91.6	70 to 130	5.62	20
AX02033	Calcium, Total	mg/L	-0.00161	0.22	5.00	21.4	21.4	4.94	4.25 to 5.75	94.8	70 to 130	0.167	20
AX02033	Selenium, Total	mg/L	0.0000216	0.0044	0.100	0.0903	0.0967	0.105	0.085 to 0.115	90.3	70 to 130	6.84	20
AX02033	Thallium, Total	mg/L	0.0000452	0.00044	0.100	0.0985	0.104	0.0973	0.085 to 0.115	98.5	70 to 130	5.43	20

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Batch QC Summary

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Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-24 Dup

Laboratory ID Number: AX02032

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01908	Chloride, Total	mg/L	0.000	0.25	10.00	10.2	0.000	10.6	9 to 11	102	80 to 120	0.00	20
AX01908	Sulfate, Total	mg/L	0.050	1.0	20.00	20.3	0.094	21.3	18 to 22	102	80 to 120	0.00	20
AX02045	Solids, Dissolved	mg/L	7.00	25			720	53.0	40 to 60			1.69	5

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AX02033

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	0.000896	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005		0.00718	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.103	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/28/2017	EPA 200.7		1	0.02	0.1		0.562	mg/L
* Calcium, Total	HRG	2/28/2017	EPA 200.7		1	0.1	0.5		16.6	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		0.0417	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	MCW	2/2/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	EPA 200.7		1	0.01	0.05		0.0683	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	J	0.00556	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	DLJ	2/6/2017	SM 2540C		1		25		161	mg/L
* Chloride, Total	SES	1/27/2017	EPA 300.0		1	0.04	0.25		18.0	mg/L
* Sulfate, Total	SES	1/27/2017	EPA 300.0		1	0.3	1		32.0	mg/L

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Batch QC Summary

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John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AX02033

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02033	Lead, Total	mg/L	0.00000787	0.0022	0.100	0.0986	0.103	0.101	0.085 to 0.115	98.6	70 to 130	4.37	20
AX02033	Cobalt, Total	mg/L	0.00000235	0.0044	0.100	0.136	0.143	0.0945	0.085 to 0.115	94.3	70 to 130	5.02	20
AX02033	Arsenic, Total	mg/L	0.0000167	0.0022	0.100	0.101	0.106	0.107	0.085 to 0.115	93.8	70 to 130	4.83	20
AX02033	Barium, Total	mg/L	0.00000150	0.0044	0.100	0.189	0.199	0.0915	0.085 to 0.115	86.0	70 to 130	5.15	20
AX02033	Beryllium, Total	mg/L	0.0000467	0.00132	0.100	0.0958	0.100	0.108	0.085 to 0.115	95.8	70 to 130	4.29	20
AX02033	Antimony, Total	mg/L	0.000180	0.00132	0.100	0.0882	0.0930	0.0951	0.085 to 0.115	87.3	70 to 130	5.30	20
AX02033	Lithium, Total	mg/L	0.0000409	0.022	0.20	0.269	0.271	0.185	0.17 to 0.23	100	70 to 130	0.756	20
AX02033	Chromium, Total	mg/L	0.0000154	0.0044	0.100	0.0952	0.0995	0.0989	0.085 to 0.115	95.2	70 to 130	4.42	20
AX02033	Mercury, Total by CVAA	mg/L	0.000127	0.0005	0.004	0.00389	0.00393	0.00395	0.0034 to 0.0046	97.2	70 to 130	0.975	20
AX02033	Molybdenum, Total	mg/L	0.0000127	0.0044	0.100	0.0936	0.0996	0.0942	0.085 to 0.115	88.0	70 to 130	6.21	20
AX02033	Selenium, Total	mg/L	0.0000216	0.0044	0.100	0.0903	0.0967	0.105	0.085 to 0.115	90.3	70 to 130	6.84	20
AX02033	Thallium, Total	mg/L	0.0000452	0.00044	0.100	0.0985	0.104	0.0973	0.085 to 0.115	98.5	70 to 130	5.43	20
AX02033	Boron, Total	mg/L	0.000631	0.044	1.00	1.56	1.56	0.970	0.85 to 1.15	99.5	70 to 130	0.192	20
AX02033	Cadmium, Total	mg/L	0.00000541	0.00044	0.100	0.0916	0.0969	0.0983	0.085 to 0.115	91.6	70 to 130	5.62	20
AX02033	Calcium, Total	mg/L	-0.00161	0.22	5.00	21.4	21.4	4.94	4.25 to 5.75	94.8	70 to 130	0.167	20

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Batch QC Summary

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John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AX02033

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX01908	Chloride, Total	mg/L	0.000	0.25	10.00	10.2	0.000	10.6	9 to 11	102	80 to 120	0.00	20
AX01908	Sulfate, Total	mg/L	0.050	1.0	20.00	20.3	0.094	21.3	18 to 22	102	80 to 120	0.00	20
AX02046	Solids, Dissolved	mg/L	0.00	25			984	56.0	40 to 60			0.613	5

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Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AX02034

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	0.00128	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005		0.0122	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.156	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/28/2017	EPA 200.7		1	0.02	0.1		1.38	mg/L
* Calcium, Total	HRG	3/1/2017	EPA 200.7		10	1.0	5.0		64.2	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		0.0139	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	MCW	2/3/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	EPA 200.7		1	0.01	0.05		0.109	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.0101	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	DLJ	2/6/2017	SM 2540C		1		50		286	mg/L
* Chloride, Total	SES	1/27/2017	EPA 300.0		1	0.04	0.25		18.6	mg/L
* Sulfate, Total	SES	1/27/2017	EPA 300.0		1	0.3	1		9.71	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AX02034

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02043	Molybdenum, Total	mg/L	0.0000159	0.0044	0.100	0.0826	0.0925	0.0906	0.085 to 0.115	82.6	70 to 130	11.3	20
AX02043	Lithium, Total	mg/L	0.000120	0.022	0.20	0.179	0.180	0.182	0.17 to 0.23	89.7	70 to 130	0.441	20
AX02043	Barium, Total	mg/L	0.00000136	0.0044	0.100	0.0829	0.0925	0.0934	0.085 to 0.115	82.9	70 to 130	10.9	20
AX02043	Antimony, Total	mg/L	0.000151	0.00132	0.100	0.0820	0.0919	0.0916	0.085 to 0.115	81.0	70 to 130	11.4	20
AX02043	Boron, Total	mg/L	0.000452	0.044	1.00	0.960	0.963	0.954	0.85 to 1.15	96.0	70 to 130	0.357	20
AX02043	Selenium, Total	mg/L	0.0000484	0.0044	0.100	0.0850	0.0957	0.0986	0.085 to 0.115	85.0	70 to 130	11.8	20
AX02043	Thallium, Total	mg/L	0.0000317	0.00044	0.100	0.0953	0.105	0.101	0.085 to 0.115	95.3	70 to 130	9.69	20
AX02043	Calcium, Total	mg/L	-0.00145	0.22	5.00	4.96	4.96	4.91	4.25 to 5.75	99.3	70 to 130	0.0292	20
AX02043	Cobalt, Total	mg/L	0.0000139	0.0044	0.100	0.0911	0.102	0.0979	0.085 to 0.115	91.1	70 to 130	11.3	20
AX02043	Arsenic, Total	mg/L	0.0000239	0.0022	0.100	0.0879	0.0979	0.0993	0.085 to 0.115	87.9	70 to 130	10.8	20
AX02043	Beryllium, Total	mg/L	0.0000323	0.00132	0.100	0.0941	0.104	0.108	0.085 to 0.115	94.1	70 to 130	9.99	20
AX02043	Cadmium, Total	mg/L	0.0000176	0.00044	0.100	0.0858	0.0968	0.0982	0.085 to 0.115	85.8	70 to 130	12.0	20
AX02043	Chromium, Total	mg/L	0.000113	0.0044	0.100	0.0908	0.101	0.0982	0.085 to 0.115	90.8	70 to 130	10.6	20
AX02043	Lead, Total	mg/L	0.0000163	0.0022	0.100	0.0932	0.104	0.104	0.085 to 0.115	93.2	70 to 130	11.0	20
AX02043	Mercury, Total by CVAA	mg/L	0.000101	0.0005	0.004	0.00395	0.00396	0.00392	0.0034 to 0.0046	98.6	70 to 130	0.475	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AX02034

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02039	Chloride, Total	mg/L	0.000	0.25	10.00	30.2	22.0	10.6	9 to 11	82.0	80 to 120	0.00	20
AX02039	Sulfate, Total	mg/L	0.033	1.0	200	297	112	18.8	18 to 22	92.0	80 to 120	0.889	20
AX02046	Solids, Dissolved	mg/L	0.00	25			984	56.0	40 to 60			0.613	5

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Expiration: June 30, 2018

Comments:

CC:

Reported: 7/24/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AX02035

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	0.00112	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		0.0455	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/28/2017	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	2/28/2017	EPA 200.7		1	0.1	0.5		2.91	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	0.00770	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	MCW	2/3/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	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	DLJ	2/6/2017	SM 2540C		1		25		54.7	mg/L
* Chloride, Total	SES	1/27/2017	EPA 300.0		1	0.04	0.25		5.66	mg/L
* Sulfate, Total	SES	1/27/2017	EPA 300.0		1	0.3	1		15.2	mg/L

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AX02035

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02043	Barium, Total	mg/L	0.00000136	0.0044	0.100	0.0829	0.0925	0.0934	0.085 to 0.115	82.9	70 to 130	10.9	20
AX02043	Lithium, Total	mg/L	0.000120	0.022	0.20	0.179	0.180	0.182	0.17 to 0.23	89.7	70 to 130	0.441	20
AX02043	Molybdenum, Total	mg/L	0.0000159	0.0044	0.100	0.0826	0.0925	0.0906	0.085 to 0.115	82.6	70 to 130	11.3	20
AX02043	Antimony, Total	mg/L	0.000151	0.00132	0.100	0.0820	0.0919	0.0916	0.085 to 0.115	81.0	70 to 130	11.4	20
AX02043	Boron, Total	mg/L	0.000452	0.044	1.00	0.960	0.963	0.954	0.85 to 1.15	96.0	70 to 130	0.357	20
AX02043	Selenium, Total	mg/L	0.0000484	0.0044	0.100	0.0850	0.0957	0.0986	0.085 to 0.115	85.0	70 to 130	11.8	20
AX02043	Thallium, Total	mg/L	0.0000317	0.00044	0.100	0.0953	0.105	0.101	0.085 to 0.115	95.3	70 to 130	9.69	20
AX02043	Calcium, Total	mg/L	-0.00145	0.22	5.00	4.96	4.96	4.91	4.25 to 5.75	99.3	70 to 130	0.0292	20
AX02043	Cobalt, Total	mg/L	0.0000139	0.0044	0.100	0.0911	0.102	0.0979	0.085 to 0.115	91.1	70 to 130	11.3	20
AX02043	Arsenic, Total	mg/L	0.0000239	0.0022	0.100	0.0879	0.0979	0.0993	0.085 to 0.115	87.9	70 to 130	10.8	20
AX02043	Beryllium, Total	mg/L	0.0000323	0.00132	0.100	0.0941	0.104	0.108	0.085 to 0.115	94.1	70 to 130	9.99	20
AX02043	Cadmium, Total	mg/L	0.0000176	0.00044	0.100	0.0858	0.0968	0.0982	0.085 to 0.115	85.8	70 to 130	12.0	20
AX02043	Chromium, Total	mg/L	0.000113	0.0044	0.100	0.0908	0.101	0.0982	0.085 to 0.115	90.8	70 to 130	10.6	20
AX02043	Lead, Total	mg/L	0.0000163	0.0022	0.100	0.0932	0.104	0.104	0.085 to 0.115	93.2	70 to 130	11.0	20
AX02043	Mercury, Total by CVAA	mg/L	0.000101	0.0005	0.004	0.00395	0.00396	0.00392	0.0034 to 0.0046	98.6	70 to 130	0.475	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AX02035

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02039	Chloride, Total	mg/L	0.000	0.25	10.00	30.2	22.0	10.6	9 to 11	82.0	80 to 120	0.00	20
AX02039	Sulfate, Total	mg/L	0.033	1.0	200	297	112	18.8	18 to 22	92.0	80 to 120	0.889	20
AX02046	Solids, Dissolved	mg/L	0.00	25			984	56.0	40 to 60			0.613	5

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Version: 2.0

Alabama Power General Test Laboratory
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Calera, AL 35040
(205) 664-6032 or 6171
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AX02036

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	0.00111	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		0.0856	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/28/2017	EPA 200.7		1	0.02	0.1	J	0.0877	mg/L
* Calcium, Total	HRG	2/28/2017	EPA 200.7		1	0.1	0.5		8.72	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	0.00522	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	MCW	2/3/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	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	1/30/2017	SM 2540C		1		50		124	mg/L
* Chloride, Total	SES	1/27/2017	EPA 300.0		1	0.04	0.25		21.8	mg/L
* Sulfate, Total	SES	1/27/2017	EPA 300.0		1	0.3	1		33.5	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AX02036

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02043	Molybdenum, Total	mg/L	0.0000159	0.0044	0.100	0.0826	0.0925	0.0906	0.085 to 0.115	82.6	70 to 130	11.3	20
AX02043	Lithium, Total	mg/L	0.000120	0.022	0.20	0.179	0.180	0.182	0.17 to 0.23	89.7	70 to 130	0.441	20
AX02043	Barium, Total	mg/L	0.00000136	0.0044	0.100	0.0829	0.0925	0.0934	0.085 to 0.115	82.9	70 to 130	10.9	20
AX02043	Antimony, Total	mg/L	0.000151	0.00132	0.100	0.0820	0.0919	0.0916	0.085 to 0.115	81.0	70 to 130	11.4	20
AX02043	Boron, Total	mg/L	0.000452	0.044	1.00	0.960	0.963	0.954	0.85 to 1.15	96.0	70 to 130	0.357	20
AX02043	Selenium, Total	mg/L	0.0000484	0.0044	0.100	0.0850	0.0957	0.0986	0.085 to 0.115	85.0	70 to 130	11.8	20
AX02043	Thallium, Total	mg/L	0.0000317	0.00044	0.100	0.0953	0.105	0.101	0.085 to 0.115	95.3	70 to 130	9.69	20
AX02043	Arsenic, Total	mg/L	0.0000239	0.0022	0.100	0.0879	0.0979	0.0993	0.085 to 0.115	87.9	70 to 130	10.8	20
AX02043	Beryllium, Total	mg/L	0.0000323	0.00132	0.100	0.0941	0.104	0.108	0.085 to 0.115	94.1	70 to 130	9.99	20
AX02043	Cadmium, Total	mg/L	0.0000176	0.00044	0.100	0.0858	0.0968	0.0982	0.085 to 0.115	85.8	70 to 130	12.0	20
AX02043	Chromium, Total	mg/L	0.000113	0.0044	0.100	0.0908	0.101	0.0982	0.085 to 0.115	90.8	70 to 130	10.6	20
AX02043	Lead, Total	mg/L	0.0000163	0.0022	0.100	0.0932	0.104	0.104	0.085 to 0.115	93.2	70 to 130	11.0	20
AX02043	Mercury, Total by CVAA	mg/L	0.000101	0.0005	0.004	0.00395	0.00396	0.00392	0.0034 to 0.0046	98.6	70 to 130	0.475	20
AX02043	Calcium, Total	mg/L	-0.00145	0.22	5.00	4.96	4.96	4.91	4.25 to 5.75	99.3	70 to 130	0.0292	20
AX02043	Cobalt, Total	mg/L	0.0000139	0.0044	0.100	0.0911	0.102	0.0979	0.085 to 0.115	91.1	70 to 130	11.3	20

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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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AX02036

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02039	Chloride, Total	mg/L	0.000	0.25	10.00	30.2	22.0	10.6	9 to 11	82.0	80 to 120	0.00	20
AX02039	Sulfate, Total	mg/L	0.033	1.0	200	297	112	18.8	18 to 22	92.0	80 to 120	0.889	20
AX02045	Solids, Dissolved	mg/L	7.00	25			720	53.0	40 to 60			1.69	5

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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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AX02037

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	0.00111	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		0.0223	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/28/2017	EPA 200.7		1	0.02	0.1		0.458	mg/L
* Calcium, Total	HRG	3/1/2017	EPA 200.7		10	1.0	5.0		49.4	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		0.0132	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	MCW	2/3/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	EPA 200.7		1	0.01	0.05		0.689	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	1/30/2017	SM 2540C		1		50		354	mg/L
* Chloride, Total	SES	1/27/2017	EPA 300.0		1	0.04	0.25		11.2	mg/L
* Sulfate, Total	SES	1/27/2017	EPA 300.0		10	3.0	10		183	mg/L

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Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AX02037

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02043	Molybdenum, Total	mg/L	0.0000159	0.0044	0.100	0.0826	0.0925	0.0906	0.085 to 0.115	82.6	70 to 130	11.3	20
AX02043	Lithium, Total	mg/L	0.000120	0.022	0.20	0.179	0.180	0.182	0.17 to 0.23	89.7	70 to 130	0.441	20
AX02043	Barium, Total	mg/L	0.00000136	0.0044	0.100	0.0829	0.0925	0.0934	0.085 to 0.115	82.9	70 to 130	10.9	20
AX02043	Antimony, Total	mg/L	0.000151	0.00132	0.100	0.0820	0.0919	0.0916	0.085 to 0.115	81.0	70 to 130	11.4	20
AX02043	Boron, Total	mg/L	0.000452	0.044	1.00	0.960	0.963	0.954	0.85 to 1.15	96.0	70 to 130	0.357	20
AX02043	Selenium, Total	mg/L	0.0000484	0.0044	0.100	0.0850	0.0957	0.0986	0.085 to 0.115	85.0	70 to 130	11.8	20
AX02043	Thallium, Total	mg/L	0.0000317	0.00044	0.100	0.0953	0.105	0.101	0.085 to 0.115	95.3	70 to 130	9.69	20
AX02043	Calcium, Total	mg/L	-0.00145	0.22	5.00	4.96	4.96	4.91	4.25 to 5.75	99.3	70 to 130	0.0292	20
AX02043	Cobalt, Total	mg/L	0.0000139	0.0044	0.100	0.0911	0.102	0.0979	0.085 to 0.115	91.1	70 to 130	11.3	20
AX02043	Arsenic, Total	mg/L	0.0000239	0.0022	0.100	0.0879	0.0979	0.0993	0.085 to 0.115	87.9	70 to 130	10.8	20
AX02043	Beryllium, Total	mg/L	0.0000323	0.00132	0.100	0.0941	0.104	0.108	0.085 to 0.115	94.1	70 to 130	9.99	20
AX02043	Cadmium, Total	mg/L	0.0000176	0.00044	0.100	0.0858	0.0968	0.0982	0.085 to 0.115	85.8	70 to 130	12.0	20
AX02043	Chromium, Total	mg/L	0.000113	0.0044	0.100	0.0908	0.101	0.0982	0.085 to 0.115	90.8	70 to 130	10.6	20
AX02043	Lead, Total	mg/L	0.0000163	0.0022	0.100	0.0932	0.104	0.104	0.085 to 0.115	93.2	70 to 130	11.0	20
AX02043	Mercury, Total by CVAA	mg/L	0.000101	0.0005	0.004	0.00395	0.00396	0.00392	0.0034 to 0.0046	98.6	70 to 130	0.475	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AX02037

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02039	Chloride, Total	mg/L	0.000	0.25	10.00	30.2	22.0	10.6	9 to 11	82.0	80 to 120	0.00	20
AX02039	Sulfate, Total	mg/L	0.033	1.0	200	297	112	18.8	18 to 22	92.0	80 to 120	0.889	20
AX02045	Solids, Dissolved	mg/L	7.00	25			720	53.0	40 to 60			1.69	5

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

CC:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AX02038

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	0.00106	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005		0.0194	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.0567	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/28/2017	EPA 200.7		1	0.02	0.1		0.671	mg/L
* Calcium, Total	HRG	3/1/2017	EPA 200.7		10	1.0	5.0		42.7	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	J	0.00454	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	MCW	2/3/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	EPA 200.7		1	0.01	0.05		0.516	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	J	0.00501	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	DLJ	2/6/2017	SM 2540C		1		25		259	mg/L
* Chloride, Total	SES	1/27/2017	EPA 300.0		1	0.04	0.25		16.4	mg/L
* Sulfate, Total	SES	1/27/2017	EPA 300.0		1	0.3	1		75.4	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AX02038

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02043	Molybdenum, Total	mg/L	0.0000159	0.0044	0.100	0.0826	0.0925	0.0906	0.085 to 0.115	82.6	70 to 130	11.3	20
AX02043	Barium, Total	mg/L	0.00000136	0.0044	0.100	0.0829	0.0925	0.0934	0.085 to 0.115	82.9	70 to 130	10.9	20
AX02043	Lithium, Total	mg/L	0.000120	0.022	0.20	0.179	0.180	0.182	0.17 to 0.23	89.7	70 to 130	0.441	20
AX02043	Selenium, Total	mg/L	0.0000484	0.0044	0.100	0.0850	0.0957	0.0986	0.085 to 0.115	85.0	70 to 130	11.8	20
AX02043	Thallium, Total	mg/L	0.0000317	0.00044	0.100	0.0953	0.105	0.101	0.085 to 0.115	95.3	70 to 130	9.69	20
AX02043	Calcium, Total	mg/L	-0.00145	0.22	5.00	4.96	4.96	4.91	4.25 to 5.75	99.3	70 to 130	0.0292	20
AX02043	Cobalt, Total	mg/L	0.0000139	0.0044	0.100	0.0911	0.102	0.0979	0.085 to 0.115	91.1	70 to 130	11.3	20
AX02043	Antimony, Total	mg/L	0.000151	0.00132	0.100	0.0820	0.0919	0.0916	0.085 to 0.115	81.0	70 to 130	11.4	20
AX02043	Boron, Total	mg/L	0.000452	0.044	1.00	0.960	0.963	0.954	0.85 to 1.15	96.0	70 to 130	0.357	20
AX02043	Arsenic, Total	mg/L	0.0000239	0.0022	0.100	0.0879	0.0979	0.0993	0.085 to 0.115	87.9	70 to 130	10.8	20
AX02043	Beryllium, Total	mg/L	0.0000323	0.00132	0.100	0.0941	0.104	0.108	0.085 to 0.115	94.1	70 to 130	9.99	20
AX02043	Cadmium, Total	mg/L	0.0000176	0.00044	0.100	0.0858	0.0968	0.0982	0.085 to 0.115	85.8	70 to 130	12.0	20
AX02043	Chromium, Total	mg/L	0.000113	0.0044	0.100	0.0908	0.101	0.0982	0.085 to 0.115	90.8	70 to 130	10.6	20
AX02043	Lead, Total	mg/L	0.0000163	0.0022	0.100	0.0932	0.104	0.104	0.085 to 0.115	93.2	70 to 130	11.0	20
AX02043	Mercury, Total by CVAA	mg/L	0.000101	0.0005	0.004	0.00395	0.00396	0.00392	0.0034 to 0.0046	98.6	70 to 130	0.475	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AX02038

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02039	Chloride, Total	mg/L	0.000	0.25	10.00	30.2	22.0	10.6	9 to 11	82.0	80 to 120	0.00	20
AX02039	Sulfate, Total	mg/L	0.033	1.0	200	297	112	18.8	18 to 22	92.0	80 to 120	0.889	20
AX02046	Solids, Dissolved	mg/L	0.00	25			984	56.0	40 to 60			0.613	5

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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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AX02039

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		0.00384	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	J	0.00316	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.114	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/28/2017	EPA 200.7		1	0.02	0.1		0.188	mg/L
* Calcium, Total	HRG	2/28/2017	EPA 200.7		1	0.1	0.5		33.6	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	MCW	2/3/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	EPA 200.7		1	0.01	0.05		0.0904	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.0780	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	J	0.00779	mg/L
* Thallium, Total	JHK	2/15/2017	EPA 200.8		5	0.00020	0.0010	J	0.000309	mg/L
General Characteristics										
* Solids, Dissolved	DLJ	2/6/2017	SM 2540C		1		25		274	mg/L
* Chloride, Total	SES	1/27/2017	EPA 300.0		1	0.04	0.25		22.0	mg/L
* Sulfate, Total	SES	1/27/2017	EPA 300.0		10	3.0	10		113	mg/L

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AX02039

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02043	Barium, Total	mg/L	0.00000136	0.0044	0.100	0.0829	0.0925	0.0934	0.085 to 0.115	82.9	70 to 130	10.9	20
AX02043	Lithium, Total	mg/L	0.000120	0.022	0.20	0.179	0.180	0.182	0.17 to 0.23	89.7	70 to 130	0.441	20
AX02043	Molybdenum, Total	mg/L	0.0000159	0.0044	0.100	0.0826	0.0925	0.0906	0.085 to 0.115	82.6	70 to 130	11.3	20
AX02043	Antimony, Total	mg/L	0.000151	0.00132	0.100	0.0820	0.0919	0.0916	0.085 to 0.115	81.0	70 to 130	11.4	20
AX02043	Boron, Total	mg/L	0.000452	0.044	1.00	0.960	0.963	0.954	0.85 to 1.15	96.0	70 to 130	0.357	20
AX02043	Selenium, Total	mg/L	0.0000484	0.0044	0.100	0.0850	0.0957	0.0986	0.085 to 0.115	85.0	70 to 130	11.8	20
AX02043	Thallium, Total	mg/L	0.0000317	0.00044	0.100	0.0953	0.105	0.101	0.085 to 0.115	95.3	70 to 130	9.69	20
AX02043	Calcium, Total	mg/L	-0.00145	0.22	5.00	4.96	4.96	4.91	4.25 to 5.75	99.3	70 to 130	0.0292	20
AX02043	Cobalt, Total	mg/L	0.0000139	0.0044	0.100	0.0911	0.102	0.0979	0.085 to 0.115	91.1	70 to 130	11.3	20
AX02043	Arsenic, Total	mg/L	0.0000239	0.0022	0.100	0.0879	0.0979	0.0993	0.085 to 0.115	87.9	70 to 130	10.8	20
AX02043	Beryllium, Total	mg/L	0.0000323	0.00132	0.100	0.0941	0.104	0.108	0.085 to 0.115	94.1	70 to 130	9.99	20
AX02043	Cadmium, Total	mg/L	0.0000176	0.00044	0.100	0.0858	0.0968	0.0982	0.085 to 0.115	85.8	70 to 130	12.0	20
AX02043	Chromium, Total	mg/L	0.000113	0.0044	0.100	0.0908	0.101	0.0982	0.085 to 0.115	90.8	70 to 130	10.6	20
AX02043	Lead, Total	mg/L	0.0000163	0.0022	0.100	0.0932	0.104	0.104	0.085 to 0.115	93.2	70 to 130	11.0	20
AX02043	Mercury, Total by CVAA	mg/L	0.000101	0.0005	0.004	0.00395	0.00396	0.00392	0.0034 to 0.0046	98.6	70 to 130	0.475	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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AX02039

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02039	Chloride, Total	mg/L	0.000	0.25	10.00	30.2	22.0	10.6	9 to 11	82.0	80 to 120	0.00	20
AX02039	Sulfate, Total	mg/L	0.033	1.0	200	297	112	18.8	18 to 22	92.0	80 to 120	0.889	20
AX02046	Solids, Dissolved	mg/L	0.00	25			984	56.0	40 to 60			0.613	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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Reported: 7/24/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX02040

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	0.00101	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	2/28/2017	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	2/28/2017	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	MCW	2/3/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	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	DLJ	2/6/2017	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	1/27/2017	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Sulfate, Total	SES	1/27/2017	EPA 300.0		1	0.3	1	U	Not Detected	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:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX02040

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02043	Molybdenum, Total	mg/L	0.0000159	0.0044	0.100	0.0826	0.0925	0.0906	0.085 to 0.115	82.6	70 to 130	11.3	20
AX02043	Lithium, Total	mg/L	0.000120	0.022	0.20	0.179	0.180	0.182	0.17 to 0.23	89.7	70 to 130	0.441	20
AX02043	Barium, Total	mg/L	0.00000136	0.0044	0.100	0.0829	0.0925	0.0934	0.085 to 0.115	82.9	70 to 130	10.9	20
AX02043	Antimony, Total	mg/L	0.000151	0.00132	0.100	0.0820	0.0919	0.0916	0.085 to 0.115	81.0	70 to 130	11.4	20
AX02043	Boron, Total	mg/L	0.000452	0.044	1.00	0.960	0.963	0.954	0.85 to 1.15	96.0	70 to 130	0.357	20
AX02043	Arsenic, Total	mg/L	0.0000239	0.0022	0.100	0.0879	0.0979	0.0993	0.085 to 0.115	87.9	70 to 130	10.8	20
AX02043	Beryllium, Total	mg/L	0.0000323	0.00132	0.100	0.0941	0.104	0.108	0.085 to 0.115	94.1	70 to 130	9.99	20
AX02043	Cadmium, Total	mg/L	0.0000176	0.00044	0.100	0.0858	0.0968	0.0982	0.085 to 0.115	85.8	70 to 130	12.0	20
AX02043	Chromium, Total	mg/L	0.000113	0.0044	0.100	0.0908	0.101	0.0982	0.085 to 0.115	90.8	70 to 130	10.6	20
AX02043	Lead, Total	mg/L	0.0000163	0.0022	0.100	0.0932	0.104	0.104	0.085 to 0.115	93.2	70 to 130	11.0	20
AX02043	Mercury, Total by CVAA	mg/L	0.000101	0.0005	0.004	0.00395	0.00396	0.00392	0.0034 to 0.0046	98.6	70 to 130	0.475	20
AX02043	Calcium, Total	mg/L	-0.00145	0.22	5.00	4.96	4.96	4.91	4.25 to 5.75	99.3	70 to 130	0.0292	20
AX02043	Cobalt, Total	mg/L	0.0000139	0.0044	0.100	0.0911	0.102	0.0979	0.085 to 0.115	91.1	70 to 130	11.3	20
AX02043	Selenium, Total	mg/L	0.0000484	0.0044	0.100	0.0850	0.0957	0.0986	0.085 to 0.115	85.0	70 to 130	11.8	20
AX02043	Thallium, Total	mg/L	0.0000317	0.00044	0.100	0.0953	0.105	0.101	0.085 to 0.115	95.3	70 to 130	9.69	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPFB
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX02040

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02039	Chloride, Total	mg/L	0.000	0.25	10.00	30.2	22.0	10.6	9 to 11	82.0	80 to 120	0.00	20
AX02039	Sulfate, Total	mg/L	0.033	1.0	200	297	112	18.8	18 to 22	92.0	80 to 120	0.889	20
AX02046	Solids, Dissolved	mg/L	0.00	25			984	56.0	40 to 60			0.613	5

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

CC:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AX02041

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	0.00136	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		0.0187	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/28/2017	EPA 200.7		1	0.02	0.1		0.167	mg/L
* Calcium, Total	HRG	2/28/2017	EPA 200.7		1	0.1	0.5		33.7	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	MCW	2/3/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	EPA 200.7		1	0.01	0.05		0.108	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.0741	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	DLJ	2/6/2017	SM 2540C		1		25		271	mg/L
* Chloride, Total	SES	1/27/2017	EPA 300.0		1	0.04	0.25		24.4	mg/L
* Sulfate, Total	SES	1/27/2017	EPA 300.0		10	3.0	10		101	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AX02041

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02043	Molybdenum, Total	mg/L	0.0000159	0.0044	0.100	0.0826	0.0925	0.0906	0.085 to 0.115	82.6	70 to 130	11.3	20
AX02043	Lithium, Total	mg/L	0.000120	0.022	0.20	0.179	0.180	0.182	0.17 to 0.23	89.7	70 to 130	0.441	20
AX02043	Barium, Total	mg/L	0.00000136	0.0044	0.100	0.0829	0.0925	0.0934	0.085 to 0.115	82.9	70 to 130	10.9	20
AX02043	Antimony, Total	mg/L	0.000151	0.00132	0.100	0.0820	0.0919	0.0916	0.085 to 0.115	81.0	70 to 130	11.4	20
AX02043	Boron, Total	mg/L	0.000452	0.044	1.00	0.960	0.963	0.954	0.85 to 1.15	96.0	70 to 130	0.357	20
AX02043	Selenium, Total	mg/L	0.0000484	0.0044	0.100	0.0850	0.0957	0.0986	0.085 to 0.115	85.0	70 to 130	11.8	20
AX02043	Thallium, Total	mg/L	0.0000317	0.00044	0.100	0.0953	0.105	0.101	0.085 to 0.115	95.3	70 to 130	9.69	20
AX02043	Calcium, Total	mg/L	-0.00145	0.22	5.00	4.96	4.96	4.91	4.25 to 5.75	99.3	70 to 130	0.0292	20
AX02043	Cobalt, Total	mg/L	0.0000139	0.0044	0.100	0.0911	0.102	0.0979	0.085 to 0.115	91.1	70 to 130	11.3	20
AX02043	Arsenic, Total	mg/L	0.0000239	0.0022	0.100	0.0879	0.0979	0.0993	0.085 to 0.115	87.9	70 to 130	10.8	20
AX02043	Beryllium, Total	mg/L	0.0000323	0.00132	0.100	0.0941	0.104	0.108	0.085 to 0.115	94.1	70 to 130	9.99	20
AX02043	Cadmium, Total	mg/L	0.0000176	0.00044	0.100	0.0858	0.0968	0.0982	0.085 to 0.115	85.8	70 to 130	12.0	20
AX02043	Chromium, Total	mg/L	0.000113	0.0044	0.100	0.0908	0.101	0.0982	0.085 to 0.115	90.8	70 to 130	10.6	20
AX02043	Lead, Total	mg/L	0.0000163	0.0022	0.100	0.0932	0.104	0.104	0.085 to 0.115	93.2	70 to 130	11.0	20
AX02043	Mercury, Total by CVAA	mg/L	0.000101	0.0005	0.004	0.00395	0.00396	0.00392	0.0034 to 0.0046	98.6	70 to 130	0.475	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AX02041

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02039	Chloride, Total	mg/L	0.000	0.25	10.00	30.2	22.0	10.6	9 to 11	82.0	80 to 120	0.00	20
AX02039	Sulfate, Total	mg/L	0.033	1.0	200	297	112	18.8	18 to 22	92.0	80 to 120	0.889	20
AX02046	Solids, Dissolved	mg/L	0.00	25			984	56.0	40 to 60			0.613	5

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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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AX02042

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	U	Not Detected	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.0371	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/28/2017	EPA 200.7		1	0.02	0.1		0.133	mg/L
* Calcium, Total	HRG	2/28/2017	EPA 200.7		1	0.1	0.5		36.8	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	U	Not Detected	mg/L
* Mercury, Total by CVAA	MCW	2/3/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	EPA 200.7		1	0.01	0.05		0.107	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.0398	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	DLJ	2/6/2017	SM 2540C		1		25		277	mg/L
* Chloride, Total	SES	1/27/2017	EPA 300.0		1	0.04	0.25		24.7	mg/L
* Sulfate, Total	SES	1/27/2017	EPA 300.0		10	3.0	10		103	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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AX02042

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02043	Molybdenum, Total	mg/L	0.0000159	0.0044	0.100	0.0826	0.0925	0.0906	0.085 to 0.115	82.6	70 to 130	11.3	20
AX02043	Barium, Total	mg/L	0.00000136	0.0044	0.100	0.0829	0.0925	0.0934	0.085 to 0.115	82.9	70 to 130	10.9	20
AX02043	Lithium, Total	mg/L	0.000120	0.022	0.20	0.179	0.180	0.182	0.17 to 0.23	89.7	70 to 130	0.441	20
AX02043	Antimony, Total	mg/L	0.000151	0.00132	0.100	0.0820	0.0919	0.0916	0.085 to 0.115	81.0	70 to 130	11.4	20
AX02043	Boron, Total	mg/L	0.000452	0.044	1.00	0.960	0.963	0.954	0.85 to 1.15	96.0	70 to 130	0.357	20
AX02043	Calcium, Total	mg/L	-0.00145	0.22	5.00	4.96	4.96	4.91	4.25 to 5.75	99.3	70 to 130	0.0292	20
AX02043	Cobalt, Total	mg/L	0.0000139	0.0044	0.100	0.0911	0.102	0.0979	0.085 to 0.115	91.1	70 to 130	11.3	20
AX02043	Selenium, Total	mg/L	0.0000484	0.0044	0.100	0.0850	0.0957	0.0986	0.085 to 0.115	85.0	70 to 130	11.8	20
AX02043	Thallium, Total	mg/L	0.0000317	0.00044	0.100	0.0953	0.105	0.101	0.085 to 0.115	95.3	70 to 130	9.69	20
AX02043	Arsenic, Total	mg/L	0.0000239	0.0022	0.100	0.0879	0.0979	0.0993	0.085 to 0.115	87.9	70 to 130	10.8	20
AX02043	Beryllium, Total	mg/L	0.0000323	0.00132	0.100	0.0941	0.104	0.108	0.085 to 0.115	94.1	70 to 130	9.99	20
AX02043	Cadmium, Total	mg/L	0.0000176	0.00044	0.100	0.0858	0.0968	0.0982	0.085 to 0.115	85.8	70 to 130	12.0	20
AX02043	Chromium, Total	mg/L	0.000113	0.0044	0.100	0.0908	0.101	0.0982	0.085 to 0.115	90.8	70 to 130	10.6	20
AX02043	Lead, Total	mg/L	0.0000163	0.0022	0.100	0.0932	0.104	0.104	0.085 to 0.115	93.2	70 to 130	11.0	20
AX02043	Mercury, Total by CVAA	mg/L	0.000101	0.0005	0.004	0.00395	0.00396	0.00392	0.0034 to 0.0046	98.6	70 to 130	0.475	20

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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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AX02042

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02039	Chloride, Total	mg/L	0.000	0.25	10.00	30.2	22.0	10.6	9 to 11	82.0	80 to 120	0.00	20
AX02039	Sulfate, Total	mg/L	0.033	1.0	200	297	112	18.8	18 to 22	92.0	80 to 120	0.889	20
AX02046	Solids, Dissolved	mg/L	0.00	25			984	56.0	40 to 60			0.613	5

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Comments:

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Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AX02043

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	0.000996	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	2/28/2017	EPA 200.7		1	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	2/28/2017	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	MCW	2/3/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	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	DLJ	2/6/2017	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total	SES	1/27/2017	EPA 300.0		1	0.04	0.25	U	Not Detected	mg/L
* Sulfate, Total	SES	1/27/2017	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

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AX02043

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02043	Lithium, Total	mg/L	0.000120	0.022	0.20	0.179	0.180	0.182	0.17 to 0.23	89.7	70 to 130	0.441	20
AX02043	Barium, Total	mg/L	0.00000136	0.0044	0.100	0.0829	0.0925	0.0934	0.085 to 0.115	82.9	70 to 130	10.9	20
AX02043	Molybdenum, Total	mg/L	0.0000159	0.0044	0.100	0.0826	0.0925	0.0906	0.085 to 0.115	82.6	70 to 130	11.3	20
AX02043	Antimony, Total	mg/L	0.000151	0.00132	0.100	0.0820	0.0919	0.0916	0.085 to 0.115	81.0	70 to 130	11.4	20
AX02043	Boron, Total	mg/L	0.000452	0.044	1.00	0.960	0.963	0.954	0.85 to 1.15	96.0	70 to 130	0.357	20
AX02043	Selenium, Total	mg/L	0.0000484	0.0044	0.100	0.0850	0.0957	0.0986	0.085 to 0.115	85.0	70 to 130	11.8	20
AX02043	Thallium, Total	mg/L	0.0000317	0.00044	0.100	0.0953	0.105	0.101	0.085 to 0.115	95.3	70 to 130	9.69	20
AX02043	Arsenic, Total	mg/L	0.0000239	0.0022	0.100	0.0879	0.0979	0.0993	0.085 to 0.115	87.9	70 to 130	10.8	20
AX02043	Beryllium, Total	mg/L	0.0000323	0.00132	0.100	0.0941	0.104	0.108	0.085 to 0.115	94.1	70 to 130	9.99	20
AX02043	Cadmium, Total	mg/L	0.0000176	0.00044	0.100	0.0858	0.0968	0.0982	0.085 to 0.115	85.8	70 to 130	12.0	20
AX02043	Chromium, Total	mg/L	0.000113	0.0044	0.100	0.0908	0.101	0.0982	0.085 to 0.115	90.8	70 to 130	10.6	20
AX02043	Lead, Total	mg/L	0.0000163	0.0022	0.100	0.0932	0.104	0.104	0.085 to 0.115	93.2	70 to 130	11.0	20
AX02043	Mercury, Total by CVAA	mg/L	0.000101	0.0005	0.004	0.00395	0.00396	0.00392	0.0034 to 0.0046	98.6	70 to 130	0.475	20
AX02043	Calcium, Total	mg/L	-0.00145	0.22	5.00	4.96	4.96	4.91	4.25 to 5.75	99.3	70 to 130	0.0292	20
AX02043	Cobalt, Total	mg/L	0.0000139	0.0044	0.100	0.0911	0.102	0.0979	0.085 to 0.115	91.1	70 to 130	11.3	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAPEB
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AX02043

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02039	Chloride, Total	mg/L	0.000	0.25	10.00	30.2	22.0	10.6	9 to 11	82.0	80 to 120	0.00	20
AX02039	Sulfate, Total	mg/L	0.033	1.0	200	297	112	18.8	18 to 22	92.0	80 to 120	0.889	20
AX02046	Solids, Dissolved	mg/L	0.00	25			984	56.0	40 to 60			0.613	5

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

CC:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AX02044

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	0.000728	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005		0.386	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.472	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/28/2017	EPA 200.7		1	0.02	0.1		0.475	mg/L
* Calcium, Total	HRG	3/1/2017	EPA 200.7		10	1.0	5.0		61.0	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	0.00858	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	MCW	2/3/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	EPA 200.7		1	0.01	0.05		0.0940	mg/L
* Molybdenum, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010	J	0.00336	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	1/30/2017	SM 2540C		1		50		336	mg/L
* Chloride, Total	SES	1/27/2017	EPA 300.0		1	0.04	0.25		15.1	mg/L
* Sulfate, Total	SES	1/27/2017	EPA 300.0		1	0.3	1		28.9	mg/L

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Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AX02044

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02048	Calcium, Total	mg/L	-0.00113	0.22	5.00	63.7	63.4	4.69	4.25 to 5.75	76.7	70 to 130	0.499	20
AX02645	Selenium, Total	mg/L	0.0000484	0.0044	0.100	0.0938	0.0885	0.0986	0.085 to 0.115	93.8	70 to 130	5.81	20
AX02645	Beryllium, Total	mg/L	0.0000323	0.00132	0.100	0.101	0.0979	0.108	0.085 to 0.115	101	70 to 130	3.12	20
AX02645	Molybdenum, Total	mg/L	0.0000159	0.0044	0.100	0.0906	0.0857	0.0906	0.085 to 0.115	90.6	70 to 130	5.56	20
AX02048	Lithium, Total	mg/L	0.000105	0.022	0.20	0.240	0.249	0.179	0.17 to 0.23	102	70 to 130	3.61	20
AX02645	Barium, Total	mg/L	0.00000136	0.0044	0.100	0.195	0.185	0.0934	0.085 to 0.115	95.0	70 to 130	5.26	20
AX02645	Antimony, Total	mg/L	0.000151	0.00132	0.100	0.0897	0.0842	0.0916	0.085 to 0.115	88.9	70 to 130	6.33	20
AX02645	Cadmium, Total	mg/L	0.0000176	0.00044	0.100	0.0935	0.0875	0.0982	0.085 to 0.115	93.5	70 to 130	6.63	20
AX02645	Chromium, Total	mg/L	0.000113	0.0044	0.100	0.0976	0.0924	0.0982	0.085 to 0.115	97.6	70 to 130	5.47	20
AX02645	Lead, Total	mg/L	0.0000163	0.0022	0.100	0.102	0.0972	0.104	0.085 to 0.115	102	70 to 130	4.82	20
AX02087	Mercury, Total by CVAA	mg/L	0.000105	0.0005	0.004	0.00396	0.00398	0.00389	0.0034 to 0.0046	99.0	70 to 130	0.506	20
AX02645	Cobalt, Total	mg/L	0.0000139	0.0044	0.100	0.0990	0.0941	0.0979	0.085 to 0.115	99.0	70 to 130	5.08	20
AX02048	Boron, Total	mg/L	0.0000182	0.044	1.00	1.56	1.61	0.952	0.85 to 1.15	97.6	70 to 130	2.94	20
AX02645	Arsenic, Total	mg/L	0.0000239	0.0022	0.100	0.0956	0.0903	0.0993	0.085 to 0.115	95.6	70 to 130	5.70	20
AX02645	Thallium, Total	mg/L	0.0000317	0.00044	0.100	0.102	0.101	0.101	0.085 to 0.115	102	70 to 130	0.985	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AX02044

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02045	Solids, Dissolved	mg/L	7.00	25			720	53.0	40 to 60			1.69	5
AX02048	Chloride, Total	mg/L	0.000	0.25	10.00	28.5	20.1	10.6	9 to 11	85.0	80 to 120	0.499	20
AX02048	Sulfate, Total	mg/L	0.035	1.0	20.00	62.3	44.0	20.0	18 to 22	91.5	80 to 120	0.00	20

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Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AX02045

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	0.000792	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		0.0476	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/28/2017	EPA 200.7		1	0.02	0.1		1.62	mg/L
* Calcium, Total	HRG	3/1/2017	EPA 200.7		10	1.0	5.0		110	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	MCW	2/3/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	EPA 200.7		1	0.01	0.05		0.0591	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	1/30/2017	SM 2540C		1		100		696	mg/L
* Chloride, Total	SES	1/27/2017	EPA 300.0		10	0.40	2.5		38.1	mg/L
* Sulfate, Total	SES	1/27/2017	EPA 300.0		10	3.0	10		129	mg/L

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Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
Version: 2.0

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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AX02045

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02048	Calcium, Total	mg/L	-0.00113	0.22	5.00	63.7	63.4	4.69	4.25 to 5.75	76.7	70 to 130	0.499	20
AX02645	Selenium, Total	mg/L	0.0000484	0.0044	0.100	0.0938	0.0885	0.0986	0.085 to 0.115	93.8	70 to 130	5.81	20
AX02048	Lithium, Total	mg/L	0.000105	0.022	0.20	0.240	0.249	0.179	0.17 to 0.23	102	70 to 130	3.61	20
AX02645	Barium, Total	mg/L	0.00000136	0.0044	0.100	0.195	0.185	0.0934	0.085 to 0.115	95.0	70 to 130	5.26	20
AX02087	Mercury, Total by CVAA	mg/L	0.000105	0.0005	0.004	0.00396	0.00398	0.00389	0.0034 to 0.0046	99.0	70 to 130	0.506	20
AX02645	Cobalt, Total	mg/L	0.0000139	0.0044	0.100	0.0990	0.0941	0.0979	0.085 to 0.115	99.0	70 to 130	5.08	20
AX02645	Antimony, Total	mg/L	0.000151	0.00132	0.100	0.0897	0.0842	0.0916	0.085 to 0.115	88.9	70 to 130	6.33	20
AX02645	Cadmium, Total	mg/L	0.0000176	0.00044	0.100	0.0935	0.0875	0.0982	0.085 to 0.115	93.5	70 to 130	6.63	20
AX02645	Chromium, Total	mg/L	0.000113	0.0044	0.100	0.0976	0.0924	0.0982	0.085 to 0.115	97.6	70 to 130	5.47	20
AX02645	Lead, Total	mg/L	0.0000163	0.0022	0.100	0.102	0.0972	0.104	0.085 to 0.115	102	70 to 130	4.82	20
AX02645	Beryllium, Total	mg/L	0.0000323	0.00132	0.100	0.101	0.0979	0.108	0.085 to 0.115	101	70 to 130	3.12	20
AX02645	Molybdenum, Total	mg/L	0.0000159	0.0044	0.100	0.0906	0.0857	0.0906	0.085 to 0.115	90.6	70 to 130	5.56	20
AX02048	Boron, Total	mg/L	0.0000182	0.044	1.00	1.56	1.61	0.952	0.85 to 1.15	97.6	70 to 130	2.94	20
AX02645	Arsenic, Total	mg/L	0.0000239	0.0022	0.100	0.0956	0.0903	0.0993	0.085 to 0.115	95.6	70 to 130	5.70	20
AX02645	Thallium, Total	mg/L	0.0000317	0.00044	0.100	0.102	0.101	0.101	0.085 to 0.115	102	70 to 130	0.985	20

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 24-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AX02045

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02045	Solids, Dissolved	mg/L	7.00	25			720	53.0	40 to 60			1.69	5
AX02048	Chloride, Total	mg/L	0.000	0.25	10.00	28.5	20.1	10.6	9 to 11	85.0	80 to 120	0.499	20
AX02048	Sulfate, Total	mg/L	0.035	1.0	20.00	62.3	44.0	20.0	18 to 22	91.5	80 to 120	0.00	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

CC:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AX02046

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	0.000839	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		0.0670	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/28/2017	EPA 200.7		1	0.02	0.1		0.529	mg/L
* Calcium, Total	HRG	3/1/2017	EPA 200.7		10	1.0	5.0		137	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	MCW	2/3/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	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	DLJ	2/6/2017	SM 2540C		1		100		972	mg/L
* Chloride, Total	SES	1/27/2017	EPA 300.0		10	0.40	2.5		44.8	mg/L
* Sulfate, Total	SES	1/27/2017	EPA 300.0		10	3.0	10		243	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AX02046

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02645	Selenium, Total	mg/L	0.0000484	0.0044	0.100	0.0938	0.0885	0.0986	0.085 to 0.115	93.8	70 to 130	5.81	20
AX02048	Calcium, Total	mg/L	-0.00113	0.22	5.00	63.7	63.4	4.69	4.25 to 5.75	76.7	70 to 130	0.499	20
AX02645	Beryllium, Total	mg/L	0.0000323	0.00132	0.100	0.101	0.0979	0.108	0.085 to 0.115	101	70 to 130	3.12	20
AX02645	Molybdenum, Total	mg/L	0.0000159	0.0044	0.100	0.0906	0.0857	0.0906	0.085 to 0.115	90.6	70 to 130	5.56	20
AX02048	Lithium, Total	mg/L	0.000105	0.022	0.20	0.240	0.249	0.179	0.17 to 0.23	102	70 to 130	3.61	20
AX02645	Barium, Total	mg/L	0.00000136	0.0044	0.100	0.195	0.185	0.0934	0.085 to 0.115	95.0	70 to 130	5.26	20
AX02645	Antimony, Total	mg/L	0.000151	0.00132	0.100	0.0897	0.0842	0.0916	0.085 to 0.115	88.9	70 to 130	6.33	20
AX02645	Cadmium, Total	mg/L	0.0000176	0.00044	0.100	0.0935	0.0875	0.0982	0.085 to 0.115	93.5	70 to 130	6.63	20
AX02645	Chromium, Total	mg/L	0.000113	0.0044	0.100	0.0976	0.0924	0.0982	0.085 to 0.115	97.6	70 to 130	5.47	20
AX02645	Lead, Total	mg/L	0.0000163	0.0022	0.100	0.102	0.0972	0.104	0.085 to 0.115	102	70 to 130	4.82	20
AX02048	Boron, Total	mg/L	0.0000182	0.044	1.00	1.56	1.61	0.952	0.85 to 1.15	97.6	70 to 130	2.94	20
AX02645	Arsenic, Total	mg/L	0.0000239	0.0022	0.100	0.0956	0.0903	0.0993	0.085 to 0.115	95.6	70 to 130	5.70	20
AX02645	Thallium, Total	mg/L	0.0000317	0.00044	0.100	0.102	0.101	0.101	0.085 to 0.115	102	70 to 130	0.985	20
AX02087	Mercury, Total by CVAA	mg/L	0.000105	0.0005	0.004	0.00396	0.00398	0.00389	0.0034 to 0.0046	99.0	70 to 130	0.506	20
AX02645	Cobalt, Total	mg/L	0.0000139	0.0044	0.100	0.0990	0.0941	0.0979	0.085 to 0.115	99.0	70 to 130	5.08	20

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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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AX02046

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02046	Solids, Dissolved	mg/L	0.00	25			984	56.0	40 to 60			0.613	5
AX02048	Chloride, Total	mg/L	0.000	0.25	10.00	28.5	20.1	10.6	9 to 11	85.0	80 to 120	0.499	20
AX02048	Sulfate, Total	mg/L	0.035	1.0	20.00	62.3	44.0	20.0	18 to 22	91.5	80 to 120	0.00	20

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Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AX02047

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	0.000833	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		0.0963	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/28/2017	EPA 200.7		1	0.02	0.1		1.89	mg/L
* Calcium, Total	HRG	3/1/2017	EPA 200.7		10	1.0	5.0		76.1	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		0.0115	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	MCW	2/3/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	EPA 200.7		1	0.01	0.05	J	0.0272	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	DLJ	2/6/2017	SM 2540C		1		50		596	mg/L
* Chloride, Total	SES	1/27/2017	EPA 300.0		5	0.20	1.25		53.6	mg/L
* Sulfate, Total	SES	1/27/2017	EPA 300.0		1	0.3	1		31.3	mg/L

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AX02047

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02048	Calcium, Total	mg/L	-0.00113	0.22	5.00	63.7	63.4	4.69	4.25 to 5.75	76.7	70 to 130	0.499	20
AX02645	Selenium, Total	mg/L	0.0000484	0.0044	0.100	0.0938	0.0885	0.0986	0.085 to 0.115	93.8	70 to 130	5.81	20
AX02645	Beryllium, Total	mg/L	0.0000323	0.00132	0.100	0.101	0.0979	0.108	0.085 to 0.115	101	70 to 130	3.12	20
AX02645	Molybdenum, Total	mg/L	0.0000159	0.0044	0.100	0.0906	0.0857	0.0906	0.085 to 0.115	90.6	70 to 130	5.56	20
AX02645	Antimony, Total	mg/L	0.000151	0.00132	0.100	0.0897	0.0842	0.0916	0.085 to 0.115	88.9	70 to 130	6.33	20
AX02645	Cadmium, Total	mg/L	0.0000176	0.00044	0.100	0.0935	0.0875	0.0982	0.085 to 0.115	93.5	70 to 130	6.63	20
AX02645	Chromium, Total	mg/L	0.000113	0.0044	0.100	0.0976	0.0924	0.0982	0.085 to 0.115	97.6	70 to 130	5.47	20
AX02645	Lead, Total	mg/L	0.0000163	0.0022	0.100	0.102	0.0972	0.104	0.085 to 0.115	102	70 to 130	4.82	20
AX02087	Mercury, Total by CVAA	mg/L	0.000105	0.0005	0.004	0.00396	0.00398	0.00389	0.0034 to 0.0046	99.0	70 to 130	0.506	20
AX02645	Cobalt, Total	mg/L	0.0000139	0.0044	0.100	0.0990	0.0941	0.0979	0.085 to 0.115	99.0	70 to 130	5.08	20
AX02048	Boron, Total	mg/L	0.0000182	0.044	1.00	1.56	1.61	0.952	0.85 to 1.15	97.6	70 to 130	2.94	20
AX02645	Arsenic, Total	mg/L	0.0000239	0.0022	0.100	0.0956	0.0903	0.0993	0.085 to 0.115	95.6	70 to 130	5.70	20
AX02645	Thallium, Total	mg/L	0.0000317	0.00044	0.100	0.102	0.101	0.101	0.085 to 0.115	102	70 to 130	0.985	20
AX02048	Lithium, Total	mg/L	0.000105	0.022	0.20	0.240	0.249	0.179	0.17 to 0.23	102	70 to 130	3.61	20
AX02645	Barium, Total	mg/L	0.00000136	0.0044	0.100	0.195	0.185	0.0934	0.085 to 0.115	95.0	70 to 130	5.26	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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AX02047

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02048	Chloride, Total	mg/L	0.000	0.25	10.00	28.5	20.1	10.6	9 to 11	85.0	80 to 120	0.499	20
AX02048	Solids, Dissolved	mg/L	0.00	25			352	56.0	40 to 60			2.92	5
AX02048	Sulfate, Total	mg/L	0.035	1.0	20.00	62.3	44.0	20.0	18 to 22	91.5	80 to 120	0.00	20

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AX02048

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	0.000847	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005		0.00728	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.0864	mg/L
* Beryllium, Total	JHK	2/15/2017	EPA 200.8		5	0.00060	0.0030	U	Not Detected	mg/L
* Boron, Total	HRG	2/28/2017	EPA 200.7		1	0.02	0.1		0.586	mg/L
* Calcium, Total	HRG	3/1/2017	EPA 200.7		10	1.0	5.0		59.9	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		0.0109	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	MCW	2/3/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	2/28/2017	EPA 200.7		1	0.01	0.05	J	0.0366	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	DLJ	2/6/2017	SM 2540C		1		50		332	mg/L
* Chloride, Total	SES	1/27/2017	EPA 300.0		1	0.04	0.25		20.0	mg/L
* Sulfate, Total	SES	1/27/2017	EPA 300.0		1	0.3	1		44.0	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AX02048

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02048	Calcium, Total	mg/L	-0.00113	0.22	5.00	63.7	63.4	4.69	4.25 to 5.75	76.7	70 to 130	0.499	20
AX02645	Selenium, Total	mg/L	0.0000484	0.0044	0.100	0.0938	0.0885	0.0986	0.085 to 0.115	93.8	70 to 130	5.81	20
AX02645	Beryllium, Total	mg/L	0.0000323	0.00132	0.100	0.101	0.0979	0.108	0.085 to 0.115	101	70 to 130	3.12	20
AX02645	Molybdenum, Total	mg/L	0.0000159	0.0044	0.100	0.0906	0.0857	0.0906	0.085 to 0.115	90.6	70 to 130	5.56	20
AX02645	Antimony, Total	mg/L	0.000151	0.00132	0.100	0.0897	0.0842	0.0916	0.085 to 0.115	88.9	70 to 130	6.33	20
AX02645	Cadmium, Total	mg/L	0.0000176	0.00044	0.100	0.0935	0.0875	0.0982	0.085 to 0.115	93.5	70 to 130	6.63	20
AX02645	Chromium, Total	mg/L	0.000113	0.0044	0.100	0.0976	0.0924	0.0982	0.085 to 0.115	97.6	70 to 130	5.47	20
AX02645	Lead, Total	mg/L	0.0000163	0.0022	0.100	0.102	0.0972	0.104	0.085 to 0.115	102	70 to 130	4.82	20
AX02048	Lithium, Total	mg/L	0.000105	0.022	0.20	0.240	0.249	0.179	0.17 to 0.23	102	70 to 130	3.61	20
AX02645	Barium, Total	mg/L	0.00000136	0.0044	0.100	0.195	0.185	0.0934	0.085 to 0.115	95.0	70 to 130	5.26	20
AX02087	Mercury, Total by CVAA	mg/L	0.000105	0.0005	0.004	0.00396	0.00398	0.00389	0.0034 to 0.0046	99.0	70 to 130	0.506	20
AX02645	Cobalt, Total	mg/L	0.0000139	0.0044	0.100	0.0990	0.0941	0.0979	0.085 to 0.115	99.0	70 to 130	5.08	20
AX02048	Boron, Total	mg/L	0.0000182	0.044	1.00	1.56	1.61	0.952	0.85 to 1.15	97.6	70 to 130	2.94	20
AX02645	Arsenic, Total	mg/L	0.0000239	0.0022	0.100	0.0956	0.0903	0.0993	0.085 to 0.115	95.6	70 to 130	5.70	20
AX02645	Thallium, Total	mg/L	0.0000317	0.00044	0.100	0.102	0.101	0.101	0.085 to 0.115	102	70 to 130	0.985	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:

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 25-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AX02048

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02048	Chloride, Total	mg/L	0.000	0.25	10.00	28.5	20.1	10.6	9 to 11	85.0	80 to 120	0.499	20
AX02048	Solids, Dissolved	mg/L	0.00	25			352	56.0	40 to 60			2.92	5
AX02048	Sulfate, Total	mg/L	0.035	1.0	20.00	62.3	44.0	20.0	18 to 22	91.5	80 to 120	0.00	20

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Version: 2.0

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 26-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AX02087

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	0.000920	mg/L
* Arsenic, Total	JHK	2/15/2017	EPA 200.8		5	0.0010	0.005	J	0.00169	mg/L
* Barium, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.0674	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	0.5		1.03	mg/L
* Cadmium, Total	JHK	2/15/2017	EPA 200.8		5	0.0002	0.0010	J	0.000228	mg/L
* Cobalt, Total	JHK	2/15/2017	EPA 200.8		5	0.0020	0.010		0.0104	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	MCW	2/3/2017	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	0.05	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	DLJ	2/6/2017	SM 2540C		1		25		32.7	mg/L
* Chloride, Total	SES	1/27/2017	EPA 300.0		1	0.04	0.25		2.31	mg/L
* Sulfate, Total	SES	1/27/2017	EPA 300.0		1	0.3	1	J	0.60	mg/L

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Calera, AL 35040
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 26-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AX02087

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02645	Selenium, Total	mg/L	0.0000484	0.0044	0.100	0.0938	0.0885	0.0986	0.085 to 0.115	93.8	70 to 130	5.81	20
AX02645	Barium, Total	mg/L	0.00000136	0.0044	0.100	0.195	0.185	0.0934	0.085 to 0.115	95.0	70 to 130	5.26	20
AX02645	Beryllium, Total	mg/L	0.0000323	0.00132	0.100	0.101	0.0979	0.108	0.085 to 0.115	101	70 to 130	3.12	20
AX02645	Molybdenum, Total	mg/L	0.0000159	0.0044	0.100	0.0906	0.0857	0.0906	0.085 to 0.115	90.6	70 to 130	5.56	20
AX02087	Mercury, Total by CVAA	mg/L	0.000105	0.0005	0.004	0.00396	0.00398	0.00389	0.0034 to 0.0046	99.0	70 to 130	0.506	20
AX02645	Cobalt, Total	mg/L	0.0000139	0.0044	0.100	0.0990	0.0941	0.0979	0.085 to 0.115	99.0	70 to 130	5.08	20
AX02645	Antimony, Total	mg/L	0.000151	0.00132	0.100	0.0897	0.0842	0.0916	0.085 to 0.115	88.9	70 to 130	6.33	20
AX02645	Cadmium, Total	mg/L	0.0000176	0.00044	0.100	0.0935	0.0875	0.0982	0.085 to 0.115	93.5	70 to 130	6.63	20
AX02645	Chromium, Total	mg/L	0.000113	0.0044	0.100	0.0976	0.0924	0.0982	0.085 to 0.115	97.6	70 to 130	5.47	20
AX02645	Lead, Total	mg/L	0.0000163	0.0022	0.100	0.102	0.0972	0.104	0.085 to 0.115	102	70 to 130	4.82	20
AX02645	Arsenic, Total	mg/L	0.0000239	0.0022	0.100	0.0956	0.0903	0.0993	0.085 to 0.115	95.6	70 to 130	5.70	20
AX02645	Thallium, Total	mg/L	0.0000317	0.00044	0.100	0.102	0.101	0.101	0.085 to 0.115	102	70 to 130	0.985	20
AX02650	Boron, Total	mg/L	0.000626	0.044	1.00	0.973	0.982	0.962	0.85 to 1.15	97.3	70 to 130	0.895	20
AX02650	Calcium, Total	mg/L	-0.00379	0.22	5.00	6.17	6.25	4.83	4.25 to 5.75	96.0	70 to 130	1.38	20
AX02650	Lithium, Total	mg/L	-0.0000600	0.022	0.20	0.194	0.192	0.187	0.17 to 0.23	96.8	70 to 130	0.843	20

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Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer
John Pugh

Customer Account: WMWGREAP
Sample Date: 26-Jan-17
Customer ID:
Delivery Date: 26-Jan-17

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AX02087

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX02048	Chloride, Total	mg/L	0.000	0.25	10.00	28.5	20.1	10.6	9 to 11	85.0	80 to 120	0.499	20
AX02048	Solids, Dissolved	mg/L	0.00	25			352	56.0	40 to 60			2.92	5
AX02048	Sulfate, Total	mg/L	0.035	1.0	20.00	62.3	44.0	20.0	18 to 22	91.5	80 to 120	0.00	20

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CC:

Reported: 7/24/2017
Version: 2.0

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

Alabama Power

Lab & Field SERVICES

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

Alabama Power

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

☑ Field Complete
☑ Lab Complete

Lab ETA: 01/25/2017 08:00

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Greene Ash Pond

Analysis Requested: Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle

Comments:
MW-30 Radium Duplicate
AX01903 deleted due to lack of required field data for Turbidity. Will resample. SGC
No Fluoride results reported due to hold time exceedance. All samples will be re-sampled for Fluoride. SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-30	01/23/2017	13:35	5	Groundwater		AX01902
MW-1	01/24/2017	11:07	3	Groundwater		AX01904
MW-2	01/24/2017	12:16	3	Groundwater		AX01905
MW-3	01/24/2017	13:10	3	Groundwater		AX01906
MW-3DUP	01/24/2017	13:10	3	Sample Duplicate		AX01907
FB-2	01/24/2017	13:22	3	Field Blank		AX01908

Relinquished By	Received By	Date/Time
Anthony Goggins		01/24/2017 13:49
	Sarah Copeland (Digitally signed by Sarah Copeland, DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US, Date: 2017.01.25 09:49:59 -06'00')	01/25/2017 09:49

SmarTroll ID: 5151-26193-1-1
Turbidity ID: 4677-23343-4-2

All metals and radiological bottles have pH < 2 ☑

Cooler Temp: 1.0 degrees C
Thermometer ID: 5408-27568-2-2
pH Strip ID: 5521-28267-20-11

4.1

Alabama Power Lab & Field SERVICES

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

☑ Field Complete
☑ Lab Complete

Lab ETA: 01/25/2017 08:00

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Jason Rouss	Location	Greene 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	No Fluoride results reported due to hold time exceedance. All samples will be re-sampled for Fluoride. SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-18	01/24/2017	10:05	3	Groundwater		AX01898
MW-17	01/24/2017	11:05	3	Groundwater		AX01899
MW-17 Dup	01/24/2017	11:05	3	Sample Duplicate		AX01900
MW-16	01/24/2017	12:53	3	Groundwater		AX01901

Relinquished By	Received By	Date/Time
		01/24/2017 13:22
	Sarah Copeland Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US Date: 2017.01.25 09:49:06 -06'00'	01/25/2017 09:49

SmarTroll ID	4696-23443-3-2
Turbidity ID	4677-23342-4-1

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	1.0 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	5521-28267-20-11

Alabama Power

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

☑ Field Complete
☑ Lab Complete

Lab ETA: 01/25/2017 08:00

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Ben Rothschadl	Location	Greene Ash Pond

Analysis Requested	Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle
Comments	Radium Duplicate collected at MW-28 No Fluoride results reported due to hold time exceedance. All samples will be re-sampled for Fluoride. SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-26	01/23/2017	12:40	3	Groundwater		AX01892
MW-27	01/23/2017	13:50	3	Groundwater		AX01893
FB-1	01/23/2017	15:15	3	Field Blank		AX01894
MW-23	01/24/2017	10:07	3	Groundwater		AX01895
MW-28	01/24/2017	11:30	5	Groundwater		AX01896
MW-31	01/24/2017	12:57	3	Groundwater		AX01897

Relinquished By	Received By	Date/Time
Ben Rothschadl		01/24/2017 14:01
	Sarah Copeland (Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US Date: 2017.01.25 09:48:17 -06'00')	01/25/2017 09:48

SmarTroll ID	4696-23441-1-1
Turbidity ID	3901-20010-2-2

All metals and radiological bottles have pH < 2 ☑

Cooler Temp	1.0 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	5521-28267-20-11

Alabama Power

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

✔ Field Complete
✔ Lab Complete

Lab ETA 01/26/2017 10:30

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Jason Rouss	Location	Greene 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	No Fluoride results reported due to hold time exceedance. All samples will be re-sampled for Fluoride. SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-25	01/24/2017	14:27	3	Groundwater		AX02036
MW-15	01/24/2017	15:32	3	Groundwater		AX02037
MW-14	01/25/2017	10:08	3	Groundwater		AX02038
MW-13	01/25/2017	11:15	3	Groundwater		AX02039
FB-3	01/25/2017	11:24	3	Field Blank		AX02040
MW-12	01/25/2017	12:15	3	Groundwater		AX02041
MW-21	01/25/2017	13:06	3	Groundwater		AX02042
EB-1	01/25/2017	13:20	3	Equipment Blank		AX02043

Relinquished By	Received By	Date/Time
	Sarah Copeland Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US Date: 2017.01.26 11:54:57 -06'00'	01/26/2017 11:54

SmarTroll ID	4696-23443-3-2
Turbidity ID	4677-23342-4-1

All metals and radiological bottles have pH < 2 ✔

Cooler Temp	0.0 degrees C
Thermometer ID	5408-27568-2-2
pH Strip ID	5521-28270-20-14

Alabama Power

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

☑ Field Complete
☑ Lab Complete

Lab ETA: 01/26/2017 10:29

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Greene 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	No Fluoride results reported due to hold time exceedance. All samples will be re-sampled for Fluoride. SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-5	01/24/2017	14:43	3	Groundwater		AX02044
MW-6	01/24/2017	15:38	3	Groundwater		AX02045
MW-7	01/25/2017	10:02	3	Groundwater		AX02046
MW-8	01/25/2017	11:11	3	Groundwater		AX02047
MW-9	01/25/2017	12:16	3	Groundwater		AX02048

Relinquished By	Received By	Date/Time
Anthony Goggins		01/26/2017 07:44
	Sarah Copeland (Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US Date: 2017.01.26 11:56:56 -06'00')	01/26/2017 11:56

SmarTroll ID	5151-26193-1-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23343-4-2	Cooler Temp	0.0 degrees C
		Thermometer ID	5408-27568-2-2
		pH Strip ID	5521-28270-20-14

Alabama Power

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

☑ Field Complete
☑ Lab Complete

Lab ETA: 01/26/2017 11:00

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Ben Rothschadl	Location	Greene 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	No Fluoride results reported due to hold time exceedance. All samples will be re-sampled for Fluoride. SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-32	01/24/2017	14:15	3	Groundwater		AX02030
MW-24	01/24/2017	15:33	3	Groundwater		AX02031
MW-24 DUP	01/24/2017	15:33	3	Sample Duplicate		AX02032
MW-11	01/25/2017	10:25	3	Groundwater		AX02033
MW-10	01/25/2017	11:30	3	Groundwater		AX02034
MW-33	01/25/2017	12:50	3	Groundwater		AX02035

Relinquished By	Received By	Date/Time
Ben Rothschadl	Sarah Copeland Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US Date: 2017.01.26 11:58:12 -06'00'	01/26/2017 11:58

SmarTroll ID	4696-23441-1-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	0.1 degrees C
		Thermometer ID	5408-27568-2-2
		pH Strip ID	5521-28270-20-14

Alabama Power

Chain of Custody Groundwater

APC General Testing Laboratory
General Service Complex Building 8

☑ Field Complete
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, John Pugh, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Greene Ash Pond

Analysis Requested	Bottle 1: Radium 226 & 228 (1) 1L bottle, Bottle 2: Metals and Hg (1) 500 mL bottle, Bottle 3: TDS and Anions (1) 500 mL bottle
Comments	Resample event for MW-29 due to lack of required field data for Turbidity. SGC No Fluoride results reported due to hold time exceedance. All samples will be re-sampled for Fluoride. SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-29	01/26/2017	13:53	3	Groundwater		AX02087

Relinquished By	Received By	Date/Time
Anthony Goggins	Sarah Copeland Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US Date: 2017.01.26 16:25:48 -06'00'	01/26/2017 16:25

SmarTroll ID	5151-26193-1-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23343-4-2	Cooler Temp	1.0 degrees C
		Thermometer ID	5408-27568-2-2
		pH Strip ID	5521-28270-20-14

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THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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TestAmerica Job ID: 400-133564-1
TestAmerica SDG: Greene County Ash Pond (6)
Client Project/Site: CCR Plant Greene

For:
Alabama Power General Test Laboratory
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GSC #8
Calera, Alabama 35040

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Authorized for release by:
3/18/2017 3:07:36 PM

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

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

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Job ID: 400-133564-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-133564-1

RAD

Method(s) 9320: Radium-228 Prep Batch 160-293134: The absolute value of the negative result for the following sample is outside the three sigma uncertainty: AX01897 MW-31 (400-133564-6). A recount was not possible due to the passing of a full decay cycle of actinium-228. The data have been qualified and reported.

Method(s) PrecSep_0: Radium 228 Prep batch 160-293367: The following samples were prepped at a reduced aliquot due to limited sample volume: AX02032 MW-24 DUP (400-133564-19), AX02033 MW-11 (400-133564-20), AX02034 MW-10 (400-133564-21), AX02035 MW-33 (400-133564-22), AX02036 MW-25 (400-133564-23), AX02037 MW-15 (400-133564-24), AX02038 MW-14 (400-133564-25), AX02039 MW-13 (400-133564-26), AX02040 FB-3 (400-133564-27), AX02041 MW-12 (400-133564-28), AX02042 MW-21 (400-133564-29), AX02043 EB-1 (400-133564-30), AX02044 MW-5 (400-133564-31), AX02045 MW-6 (400-133564-32), AX02046 MW-7 (400-133564-33), AX02047 MW-8 (400-133564-34), AX02048 MW-9 (400-133564-35) and AX02087 MW-29 (400-133564-36)

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: AX01892 MW-26 (400-133564-1), AX01893 MW-27 (400-133564-2), AX01894 FB-1 (400-133564-3), AX01895 MW-23 (400-133564-4), AX01896 MW-28 (400-133564-5), AX01896 MW-28 (400-133564-5[DU]), AX01897 MW-31 (400-133564-6), AX01898 MW-18 (400-133564-7), AX01899 MW-17 (400-133564-8), AX01900 MW-17 DUP (400-133564-9), AX01901 MW-16 (400-133564-10), AX01902 MW-30 (400-133564-11), AX01902 MW-30 (400-133564-11[DU]), AX01904 MW-1 (400-133564-12), AX01905 MW-2 (400-133564-13), AX01906 MW-30 (400-133564-14), AX01907 MW-3 DUP (400-133564-15), AX01908 FB-2 (400-133564-16), AX02030 MW-32 (400-133564-17) and AX02031 MW-24 (400-133564-18).

Method(s) PrecSep_0: Radium-228 Prep Batch 160-293367: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: AX02032 MW-24 DUP (400-133564-19), AX02033 MW-11 (400-133564-20), AX02034 MW-10 (400-133564-21), AX02035 MW-33 (400-133564-22), AX02036 MW-25 (400-133564-23), AX02037 MW-15 (400-133564-24), AX02038 MW-14 (400-133564-25), AX02039 MW-13 (400-133564-26), AX02040 FB-3 (400-133564-27), AX02041 MW-12 (400-133564-28), AX02042 MW-21 (400-133564-29), AX02043 EB-1 (400-133564-30), AX02044 MW-5 (400-133564-31), AX02045 MW-6 (400-133564-32), AX02046 MW-7 (400-133564-33), AX02047 MW-8 (400-133564-34), AX02048 MW-9 (400-133564-35) and AX02087 MW-29 (400-133564-36). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method(s) PrecSep-21: Radium 226 Prep batch 160-293352: The following samples were prepped at a reduced aliquot due to limited sample volume. AX02032 MW-24 DUP (400-133564-19), AX02033 MW-11 (400-133564-20), AX02034 MW-10 (400-133564-21), AX02035 MW-33 (400-133564-22), AX02036 MW-25 (400-133564-23), AX02037 MW-15 (400-133564-24), AX02038 MW-14 (400-133564-25), AX02039 MW-13 (400-133564-26), AX02040 FB-3 (400-133564-27), AX02041 MW-12 (400-133564-28), AX02042 MW-21 (400-133564-29), AX02043 EB-1 (400-133564-30), AX02044 MW-5 (400-133564-31), AX02045 MW-6 (400-133564-32), AX02046 MW-7 (400-133564-33), AX02047 MW-8 (400-133564-34), AX02048 MW-9 (400-133564-35) and AX02087 MW-29 (400-133564-36)

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 :AX01892 MW-26 (400-133564-1), AX01893 MW-27 (400-133564-2), AX01894 FB-1 (400-133564-3), AX01895 MW-23 (400-133564-4), AX01896 MW-28 (400-133564-5), AX01896 MW-28 (400-133564-5[DU]), AX01897 MW-31 (400-133564-6), AX01898 MW-18 (400-133564-7), AX01899 MW-17 (400-133564-8), AX01900 MW-17 DUP (400-133564-9), AX01901 MW-16 (400-133564-10), AX01902 MW-30 (400-133564-11), AX01902 MW-30 (400-133564-11[DU]), AX01904 MW-1 (400-133564-12), AX01905 MW-2 (400-133564-13), AX01906 MW-30 (400-133564-14), AX01907 MW-3 DUP (400-133564-15), AX01908 FB-2 (400-133564-16), AX02030 MW-32 (400-133564-17) and AX02031 MW-24 (400-133564-18).

Method(s) PrecSep-21: Radium-226 Prep Batch 160-293352: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: AX02032 MW-24 DUP (400-133564-19), AX02033 MW-11 (400-133564-20), AX02034 MW-10 (400-133564-21), AX02035 MW-33 (400-133564-22), AX02036 MW-25 (400-133564-23), AX02037 MW-15 (400-133564-24), AX02038 MW-14 (400-133564-25), AX02039 MW-13 (400-133564-26), AX02040 FB-3 (400-133564-27), AX02041 MW-12 (400-133564-28), AX02042 MW-21 (400-133564-29), AX02043 EB-1 (400-133564-30), AX02044 MW-5 (400-133564-31), AX02045 MW-6 (400-133564-32), AX02046 MW-7 (400-133564-33), AX02047 MW-8 (400-133564-34), AX02048 MW-9 (400-133564-35) and AX02087 MW-29 (400-133564-36). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Job ID: 400-133564-1 (Continued)

Laboratory: TestAmerica Pensacola (Continued)

Method Summary

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

TestAmerica Job ID: 400-133564-1
SDG: Greene County 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 Greene

TestAmerica Job ID: 400-133564-1
SDG: Greene County Ash Pond (6)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-133564-1	AX01892 MW-26	Water	01/23/17 12:40	02/06/17 14:00
400-133564-2	AX01893 MW-27	Water	01/23/17 13:50	02/06/17 14:00
400-133564-3	AX01894 FB-1	Water	01/23/17 15:15	02/06/17 14:00
400-133564-4	AX01895 MW-23	Water	01/24/17 10:07	02/06/17 14:00
400-133564-5	AX01896 MW-28	Water	01/24/17 11:30	02/06/17 14:00
400-133564-6	AX01897 MW-31	Water	01/24/17 12:57	02/06/17 14:00
400-133564-7	AX01898 MW-18	Water	01/24/17 10:05	02/06/17 14:00
400-133564-8	AX01899 MW-17	Water	01/24/17 11:05	02/06/17 14:00
400-133564-9	AX01900 MW-17 DUP	Water	01/24/17 11:05	02/06/17 14:00
400-133564-10	AX01901 MW-16	Water	01/24/17 12:53	02/06/17 14:00
400-133564-11	AX01902 MW-30	Water	01/23/17 13:35	02/06/17 14:00
400-133564-12	AX01904 MW-1	Water	01/24/17 11:07	02/06/17 14:00
400-133564-13	AX01905 MW-2	Water	01/24/17 12:16	02/06/17 14:00
400-133564-14	AX01906 MW-30	Water	01/24/17 13:10	02/06/17 14:00
400-133564-15	AX01907 MW-3 DUP	Water	01/24/17 13:10	02/06/17 14:00
400-133564-16	AX01908 FB-2	Water	01/24/17 13:22	02/06/17 14:00
400-133564-17	AX02030 MW-32	Water	01/24/17 14:15	02/06/17 14:00
400-133564-18	AX02031 MW-24	Water	01/24/17 15:33	02/06/17 14:00
400-133564-19	AX02032 MW-24 DUP	Water	01/24/17 15:33	02/06/17 14:00
400-133564-20	AX02033 MW-11	Water	01/25/17 10:25	02/06/17 14:00
400-133564-21	AX02034 MW-10	Water	01/25/17 11:30	02/06/17 14:00
400-133564-22	AX02035 MW-33	Water	01/25/17 12:50	02/06/17 14:00
400-133564-23	AX02036 MW-25	Water	01/24/17 14:27	02/06/17 14:00
400-133564-24	AX02037 MW-15	Water	01/24/17 15:32	02/06/17 14:00
400-133564-25	AX02038 MW-14	Water	01/25/17 10:08	02/06/17 14:00
400-133564-26	AX02039 MW-13	Water	01/25/17 11:15	02/06/17 14:00
400-133564-27	AX02040 FB-3	Water	01/25/17 11:24	02/06/17 14:00
400-133564-28	AX02041 MW-12	Water	01/25/17 12:15	02/06/17 14:00
400-133564-29	AX02042 MW-21	Water	01/25/17 13:06	02/06/17 14:00
400-133564-30	AX02043 EB-1	Water	01/25/17 13:20	02/06/17 14:00
400-133564-31	AX02044 MW-5	Water	01/24/17 14:43	02/06/17 14:00
400-133564-32	AX02045 MW-6	Water	01/24/17 15:38	02/06/17 14:00
400-133564-33	AX02046 MW-7	Water	01/25/17 10:02	02/06/17 14:00
400-133564-34	AX02047 MW-8	Water	01/25/17 11:11	02/06/17 14:00
400-133564-35	AX02048 MW-9	Water	01/25/17 12:16	02/06/17 14:00
400-133564-36	AX02087 MW-29	Water	01/26/17 13:53	02/06/17 14:00

Client Sample ID: AX01892 MW-26

Date Collected: 01/23/17 12:40
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-1

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	**0.404**		0.168	0.172	1.00	0.186	pCi/L	02/17/17 10:50	03/13/17 04:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.2*		*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	0.468	U	0.321	0.324	1.00	0.496	pCi/L	02/17/17 18:16	03/08/17 14:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.2*		*40 - 110*	*02/17/17 18:16*	*03/08/17 14:53*	*1*
Y Carrier	*86.7*		*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	**0.871**		0.362	0.366	5.00	0.496	pCi/L		03/14/17 12:39	1

Client Sample ID: AX01893 MW-27

Date Collected: 01/23/17 13:50
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-2

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	0.154	U	0.128	0.129	1.00	0.193	pCi/L	02/17/17 10:50	03/13/17 04:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.0*		*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	0.276	U	0.293	0.294	1.00	0.478	pCi/L	02/17/17 18:16	03/08/17 14:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*95.0*		*40 - 110*	*02/17/17 18:16*	*03/08/17 14:53*	*1*
Y Carrier	*89.7*		*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	0.429	U	0.319	0.321	5.00	0.478	pCi/L		03/14/17 12:39	1

Client Sample ID: AX01894 FB-1

Date Collected: 01/23/17 15:15
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-3

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	-0.0174	U	0.0908	0.0908	1.00	0.194	pCi/L	02/17/17 10:50	03/13/17 04:15	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.2*		*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	-0.152	U	0.250	0.250	1.00	0.480	pCi/L	02/17/17 18:16	03/08/17 14:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*91.2*		*40 - 110*	*02/17/17 18:16*	*03/08/17 14:53*	*1*
Y Carrier	*89.7*		*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	-0.169	U	0.266	0.266	5.00	0.480	pCi/L		03/14/17 12:39	1

Client Sample ID: AX01895 MW-23

Date Collected: 01/24/17 10:07
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-4

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	**0.197**		0.128	0.129	1.00	0.174	pCi/L	02/17/17 10:50	03/13/17 04:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*40 - 110*	*02/17/17 10:50*	*03/13/17 04:16*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0544	U	0.295	0.295	1.00	0.519	pCi/L	02/17/17 18:16	03/08/17 14:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.0*		*40 - 110*	*02/17/17 18:16*	*03/08/17 14:53*	*1*
Y Carrier	*90.8*		*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	0.251	U	0.321	0.322	5.00	0.519	pCi/L		03/14/17 12:39	1

Client Sample ID: AX01896 MW-28

Date Collected: 01/24/17 11:30
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-5

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	0.414		0.163	0.167	1.00	0.179	pCi/L	02/17/17 10:50	03/13/17 04:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.8*		*40 - 110*	*02/17/17 10:50*	*03/13/17 04:16*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.454	U	0.298	0.301	1.00	0.455	pCi/L	02/17/17 18:16	03/08/17 14:53	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.8*		*40 - 110*	*02/17/17 18:16*	*03/08/17 14:53*	*1*
Y Carrier	*83.7*		*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	0.868		0.339	0.344	5.00	0.455	pCi/L		03/14/17 12:39	1

Client Sample ID: AX01897 MW-31

Date Collected: 01/24/17 12:57
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-6

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	0.0939	U	0.0955	0.0958	1.00	0.148	pCi/L	02/17/17 10:50	03/13/17 04:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.9*		*40 - 110*	*02/17/17 10:50*	*03/13/17 04:16*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.516	U	0.275	0.279	1.00	0.582	pCi/L	02/17/17 18:16	03/08/17 14:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*90.9*		*40 - 110*	*02/17/17 18:16*	*03/08/17 14:54*	*1*
Y Carrier	*84.9*		*40 - 110*	*02/17/17 18:16*	*03/08/17 14:54*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.422	U	0.291	0.295	5.00	0.582	pCi/L		03/14/17 12:39	1

Client Sample ID: AX01898 MW-18

Date Collected: 01/24/17 10:05
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-7

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	**0.550**		0.176	0.182	1.00	0.156	pCi/L	02/17/17 10:50	03/13/17 04:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.2*		*40 - 110*	*02/17/17 10:50*	*03/13/17 04:16*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.339	U	0.291	0.293	1.00	0.463	pCi/L	02/17/17 18:16	03/08/17 14:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.2*		*40 - 110*	*02/17/17 18:16*	*03/08/17 14:54*	*1*
Y Carrier	*88.6*		*40 - 110*	*02/17/17 18:16*	*03/08/17 14:54*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.889**		0.340	0.345	5.00	0.463	pCi/L		03/14/17 12:39	1

Client Sample ID: AX01899 MW-17

Date Collected: 01/24/17 11:05
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-8

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	**0.493**		0.194	0.199	1.00	0.206	pCi/L	02/17/17 10:50	03/13/17 04:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*74.6*		*40 - 110*	*02/17/17 10:50*	*03/13/17 04:16*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.425	U	0.398	0.400	1.00	0.641	pCi/L	02/17/17 18:16	03/08/17 14:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*74.6*		*40 - 110*	*02/17/17 18:16*	*03/08/17 14:54*	*1*
Y Carrier	*85.2*		*40 - 110*	*02/17/17 18:16*	*03/08/17 14:54*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**0.918**		0.443	0.447	5.00	0.641	pCi/L		03/14/17 12:39	1

Client Sample ID: AX01900 MW-17 DUP

Lab Sample ID: 400-133564-9

Date Collected: 01/24/17 11:05

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	**0.302**		0.150	0.153	1.00	0.180	pCi/L	02/17/17 10:50	03/13/17 04:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.6*		*40 - 110*	*02/17/17 10:50*	*03/13/17 04:16*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0601	U	0.369	0.369	1.00	0.645	pCi/L	02/17/17 18:16	03/08/17 14:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*87.6*		*40 - 110*	*02/17/17 18:16*	*03/08/17 14:54*	*1*
Y Carrier	*83.7*		*40 - 110*	*02/17/17 18:16*	*03/08/17 14:54*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.362	U	0.398	0.399	5.00	0.645	pCi/L		03/14/17 12:39	1

Client Sample ID: AX01901 MW-16

Date Collected: 01/24/17 12:53
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-10

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	0.131	U	0.120	0.120	1.00	0.182	pCi/L	02/17/17 10:50	03/13/17 04:16	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.7*		*40 - 110*	*02/17/17 10:50*	*03/13/17 04:16*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.138	U	0.315	0.315	1.00	0.543	pCi/L	02/17/17 18:16	03/08/17 14:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*81.7*		*40 - 110*	*02/17/17 18:16*	*03/08/17 14:54*	*1*
Y Carrier	*86.7*		*40 - 110*	*02/17/17 18:16*	*03/08/17 14:54*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.269	U	0.337	0.337	5.00	0.543	pCi/L		03/14/17 12:39	1

Client Sample ID: AX01902 MW-30

Date Collected: 01/23/17 13:35
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-11

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	0.133	U	0.111	0.112	1.00	0.167	pCi/L	02/17/17 10:50	03/13/17 04:17	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.5*		*40 - 110*	*02/17/17 10:50*	*03/13/17 04:17*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0942	U	0.363	0.363	1.00	0.629	pCi/L	02/17/17 18:16	03/08/17 14:54	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.5*		*40 - 110*	*02/17/17 18:16*	*03/08/17 14:54*	*1*
Y Carrier	*87.1*		*40 - 110*	*02/17/17 18:16*	*03/08/17 14:54*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.227	U	0.380	0.380	5.00	0.629	pCi/L		03/14/17 12:39	1

Client Sample ID: AX01904 MW-1

Date Collected: 01/24/17 11:07
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-12

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	**0.775**		0.220	0.231	1.00	0.186	pCi/L	02/17/17 10:50	03/13/17 05:32	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.7*		*40 - 110*	*02/17/17 10:50*	*03/13/17 05:32*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.522	U	0.424	0.427	1.00	0.677	pCi/L	02/17/17 18:16	03/08/17 15:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*84.7*		*40 - 110*	*02/17/17 18:16*	*03/08/17 15:00*	*1*
Y Carrier	*86.0*		*40 - 110*	*02/17/17 18:16*	*03/08/17 15:00*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.30**		0.478	0.485	5.00	0.677	pCi/L		03/14/17 12:39	1

Client Sample ID: AX01905 MW-2

Date Collected: 01/24/17 12:16
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-13

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	**0.390**		0.158	0.161	1.00	0.167	pCi/L	02/17/17 10:50	03/13/17 04:19	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.5*		*40 - 110*	*02/17/17 10:50*	*03/13/17 04:19*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.125	U	0.373	0.374	1.00	0.642	pCi/L	02/17/17 18:16	03/08/17 15:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*93.5*		*40 - 110*	*02/17/17 18:16*	*03/08/17 15:00*	*1*
Y Carrier	*84.9*		*40 - 110*	*02/17/17 18:16*	*03/08/17 15:00*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.515	U	0.405	0.407	5.00	0.642	pCi/L		03/14/17 12:39	1

Client Sample ID: AX01906 MW-30

Date Collected: 01/24/17 13:10
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-14

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	**0.706**		0.202	0.211	1.00	0.165	pCi/L	02/17/17 10:50	03/13/17 04:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.4*		*40 - 110*	*02/17/17 10:50*	*03/13/17 04:20*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.389	U	0.408	0.410	1.00	0.668	pCi/L	02/17/17 18:16	03/08/17 15:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*89.4*		*40 - 110*	*02/17/17 18:16*	*03/08/17 15:00*	*1*
Y Carrier	*90.8*		*40 - 110*	*02/17/17 18:16*	*03/08/17 15:00*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.10**		0.455	0.461	5.00	0.668	pCi/L		03/14/17 12:39	1

Client Sample ID: AX01907 MW-3 DUP

Date Collected: 01/24/17 13:10
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-15

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	**0.650**		0.193	0.202	1.00	0.160	pCi/L	02/17/17 10:50	03/13/17 04:20	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.3*		*40 - 110*	*02/17/17 10:50*	*03/13/17 04:20*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.411	U	0.383	0.385	1.00	0.620	pCi/L	02/17/17 18:16	03/08/17 15:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*92.3*		*40 - 110*	*02/17/17 18:16*	*03/08/17 15:00*	*1*
Y Carrier	*83.4*		*40 - 110*	*02/17/17 18:16*	*03/08/17 15:00*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	**1.06**		0.429	0.435	5.00	0.620	pCi/L		03/14/17 12:39	1

Client Sample ID: AX01908 FB-2

Date Collected: 01/24/17 13:22
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-16

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	0.00756	U	0.0874	0.0874	1.00	0.178	pCi/L	02/17/17 10:50	03/13/17 04:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.3*		*40 - 110*	*02/17/17 10:50*	*03/13/17 04:31*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0694	U	0.311	0.311	1.00	0.545	pCi/L	02/17/17 18:16	03/08/17 15:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.3*		*40 - 110*	*02/17/17 18:16*	*03/08/17 15:00*	*1*
Y Carrier	*81.5*		*40 - 110*	*02/17/17 18:16*	*03/08/17 15:00*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0770	U	0.323	0.323	5.00	0.545	pCi/L		03/14/17 12:39	1

Client Sample ID: AX02030 MW-32

Date Collected: 01/24/17 14:15
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-17

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	0.0792	U	0.110	0.110	1.00	0.186	pCi/L	02/17/17 10:50	03/13/17 04:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.4*		*40 - 110*	*02/17/17 10:50*	*03/13/17 04:31*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.104	U	0.356	0.356	1.00	0.616	pCi/L	02/17/17 18:16	03/08/17 15:00	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.4*		*40 - 110*	*02/17/17 18:16*	*03/08/17 15:00*	*1*
Y Carrier	*82.6*		*40 - 110*	*02/17/17 18:16*	*03/08/17 15:00*	*1*

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.184	U	0.373	0.373	5.00	0.616	pCi/L		03/14/17 12:39	1

Client Sample ID: AX02031 MW-24

Date Collected: 01/24/17 15:33
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-18

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	**0.369**		0.158	0.161	1.00	0.170	pCi/L	02/17/17 10:50	03/13/17 04:31	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.6*		*40 - 110*	*02/17/17 10:50*	*03/13/17 04:31*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0341	U	0.303	0.303	1.00	0.536	pCi/L	02/17/17 18:16	03/08/17 15:01	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.6*		*40 - 110*	*02/17/17 18:16*	*03/08/17 15:01*	*1*
Y Carrier	*87.5*		*40 - 110*	*02/17/17 18:16*	*03/08/17 15:01*	*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	0.403	U	0.342	0.343	5.00	0.536	pCi/L		03/14/17 12:39	1

Client Sample ID: AX02032 MW-24 DUP

Date Collected: 01/24/17 15:33
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-19

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	0.268		0.145	0.147	1.00	0.190	pCi/L	02/20/17 09:38	03/14/17 06:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*102*		*40 - 110*	*02/20/17 09:38*	*03/14/17 06:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.677		0.355	0.360	1.00	0.536	pCi/L	02/20/17 10:05	03/09/17 14:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*102*		*40 - 110*	*02/20/17 10:05*	*03/09/17 14:38*	*1*
Y Carrier	*88.6*		*40 - 110*	*02/20/17 10:05*	*03/09/17 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	0.945		0.383	0.389	5.00	0.536	pCi/L		03/14/17 12:39	1

Client Sample ID: AX02033 MW-11

Date Collected: 01/25/17 10:25
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-20

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	0.173	U	0.125	0.126	1.00	0.178	pCi/L	02/20/17 09:38	03/14/17 06:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.1*		*40 - 110*	*02/20/17 09:38*	*03/14/17 06:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.616**		0.300	0.305	1.00	0.435	pCi/L	02/20/17 10:05	03/09/17 14:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.1*		*40 - 110*	*02/20/17 10:05*	*03/09/17 14:38*	*1*
Y Carrier	*90.8*		*40 - 110*	*02/20/17 10:05*	*03/09/17 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	**0.789**		0.325	0.330	5.00	0.435	pCi/L		03/14/17 12:39	1

Client Sample ID: AX02034 MW-10

Date Collected: 01/25/17 11:30
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-21

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	0.370		0.161	0.164	1.00	0.189	pCi/L	02/20/17 09:38	03/14/17 06:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.2*		*40 - 110*	*02/20/17 09:38*	*03/14/17 06:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.831		0.336	0.345	1.00	0.472	pCi/L	02/20/17 10:05	03/09/17 14:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*98.2*		*40 - 110*	*02/20/17 10:05*	*03/09/17 14:38*	*1*
Y Carrier	*87.9*		*40 - 110*	*02/20/17 10:05*	*03/09/17 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	1.20		0.373	0.382	5.00	0.472	pCi/L		03/14/17 12:39	1

Client Sample ID: AX02035 MW-33

Date Collected: 01/25/17 12:50
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-22

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	0.0307	U	0.0983	0.0983	1.00	0.184	pCi/L	02/20/17 09:38	03/14/17 06:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.6*		*40 - 110*	*02/20/17 09:38*	*03/14/17 06:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.574**		0.308	0.312	1.00	0.457	pCi/L	02/20/17 10:05	03/09/17 14:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.6*		*40 - 110*	*02/20/17 10:05*	*03/09/17 14:38*	*1*
Y Carrier	*87.9*		*40 - 110*	*02/20/17 10:05*	*03/09/17 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	**0.605**		0.323	0.327	5.00	0.457	pCi/L		03/14/17 12:39	1

Client Sample ID: AX02036 MW-25

Date Collected: 01/24/17 14:27
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-23

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	0.0941	U	0.108	0.109	1.00	0.176	pCi/L	02/20/17 09:38	03/14/17 06:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.1*		*40 - 110*	*02/20/17 09:38*	*03/14/17 06:39*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.491	U	0.322	0.325	1.00	0.497	pCi/L	02/20/17 10:05	03/09/17 14:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.1*		*40 - 110*	*02/20/17 10:05*	*03/09/17 14:38*	*1*
Y Carrier	*86.4*		*40 - 110*	*02/20/17 10:05*	*03/09/17 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	**0.585**		0.339	0.342	5.00	0.497	pCi/L		03/14/17 12:39	1

Client Sample ID: AX02037 MW-15

Date Collected: 01/24/17 15:32
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-24

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	0.0429	U	0.0918	0.0918	1.00	0.166	pCi/L	02/20/17 09:38	03/14/17 06:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*104*		*40 - 110*	*02/20/17 09:38*	*03/14/17 06:40*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.307	U	0.294	0.295	1.00	0.476	pCi/L	02/20/17 10:05	03/09/17 14:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*104*		*40 - 110*	*02/20/17 10:05*	*03/09/17 14:38*	*1*
Y Carrier	*88.6*		*40 - 110*	*02/20/17 10:05*	*03/09/17 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	0.350	U	0.308	0.309	5.00	0.476	pCi/L		03/14/17 12:39	1

Client Sample ID: AX02038 MW-14

Date Collected: 01/25/17 10:08
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-25

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	0.159		0.107	0.108	1.00	0.141	pCi/L	02/20/17 09:38	03/14/17 06:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.8*		*40 - 110*	*02/20/17 09:38*	*03/14/17 06:40*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.297	U	0.362	0.364	1.00	0.599	pCi/L	02/20/17 10:05	03/09/17 14:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.8*		*40 - 110*	*02/20/17 10:05*	*03/09/17 14:38*	*1*
Y Carrier	*86.7*		*40 - 110*	*02/20/17 10:05*	*03/09/17 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	0.455	U	0.378	0.379	5.00	0.599	pCi/L		03/14/17 12:39	1

Client Sample ID: AX02039 MW-13

Date Collected: 01/25/17 11:15
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-26

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	0.0939	U	0.0939	0.0943	1.00	0.146	pCi/L	02/20/17 09:38	03/14/17 06:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*102*		*40 - 110*	*02/20/17 09:38*	*03/14/17 06:40*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.215	U	0.299	0.300	1.00	0.499	pCi/L	02/20/17 10:05	03/09/17 14:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*102*		*40 - 110*	*02/20/17 10:05*	*03/09/17 14:38*	*1*
Y Carrier	*89.0*		*40 - 110*	*02/20/17 10:05*	*03/09/17 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	0.309	U	0.313	0.314	5.00	0.499	pCi/L		03/14/17 12:39	1

Client Sample ID: AX02040 FB-3

Date Collected: 01/25/17 11:24
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-27

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	-0.0131	U	0.0728	0.0728	1.00	0.159	pCi/L	02/20/17 09:38	03/14/17 06:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*02/20/17 09:38*	*03/14/17 06:40*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.468**		0.295	0.298	1.00	0.450	pCi/L	02/20/17 10:05	03/09/17 14:38	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*02/20/17 10:05*	*03/09/17 14:38*	*1*
Y Carrier	*87.1*		*40 - 110*	*02/20/17 10:05*	*03/09/17 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	**0.455**		0.303	0.307	5.00	0.450	pCi/L		03/14/17 12:39	1

Client Sample ID: AX02041 MW-12

Date Collected: 01/25/17 12:15
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-28

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	0.0577	U	0.0935	0.0937	1.00	0.163	pCi/L	02/20/17 09:38	03/14/17 06:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.7*		*40 - 110*	*02/20/17 09:38*	*03/14/17 06:40*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.207	U	0.291	0.292	1.00	0.486	pCi/L	02/20/17 10:05	03/09/17 14:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.7*		*40 - 110*	*02/20/17 10:05*	*03/09/17 14:39*	*1*
Y Carrier	*89.0*		*40 - 110*	*02/20/17 10:05*	*03/09/17 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	0.265	U	0.306	0.306	5.00	0.486	pCi/L		03/14/17 12:39	1

Client Sample ID: AX02042 MW-21

Date Collected: 01/25/17 13:06
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-29

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	0.0871	U	0.0950	0.0953	1.00	0.152	pCi/L	02/20/17 09:38	03/14/17 06:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*02/20/17 09:38*	*03/14/17 06:40*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.463	U	0.315	0.318	1.00	0.491	pCi/L	02/20/17 10:05	03/09/17 14:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*103*		*40 - 110*	*02/20/17 10:05*	*03/09/17 14:39*	*1*
Y Carrier	*87.5*		*40 - 110*	*02/20/17 10:05*	*03/09/17 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	**0.550**		0.329	0.332	5.00	0.491	pCi/L		03/14/17 12:39	1

Client Sample ID: AX02043 EB-1

Date Collected: 01/25/17 13:20
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-30

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	0.00206	U	0.0779	0.0779	1.00	0.158	pCi/L	02/20/17 09:38	03/14/17 06:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*100*		*40 - 110*	*02/20/17 09:38*	*03/14/17 06:40*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.183	U	0.270	0.270	1.00	0.453	pCi/L	02/20/17 10:05	03/09/17 14:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*100*		*40 - 110*	*02/20/17 10:05*	*03/09/17 14:39*	*1*
Y Carrier	*87.1*		*40 - 110*	*02/20/17 10:05*	*03/09/17 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	0.185	U	0.281	0.281	5.00	0.453	pCi/L		03/14/17 12:39	1

Client Sample ID: AX02044 MW-5

Date Collected: 01/24/17 14:43
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-31

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	1.31		0.245	0.272	1.00	0.142	pCi/L	02/20/17 09:38	03/14/17 06:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*106*		*40 - 110*	*02/20/17 09:38*	*03/14/17 06:40*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.608		0.319	0.324	1.00	0.477	pCi/L	02/20/17 10:05	03/09/17 14:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*106*		*40 - 110*	*02/20/17 10:05*	*03/09/17 14:39*	*1*
Y Carrier	*87.9*		*40 - 110*	*02/20/17 10:05*	*03/09/17 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	1.92		0.402	0.423	5.00	0.477	pCi/L		03/14/17 12:39	1

Client Sample ID: AX02045 MW-6

Date Collected: 01/24/17 15:38
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-32

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	**0.178**		0.117	0.118	1.00	0.158	pCi/L	02/20/17 09:38	03/14/17 06:40	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*02/20/17 09:38*	*03/14/17 06:40*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.318	U	0.304	0.305	1.00	0.492	pCi/L	02/20/17 10:05	03/09/17 14:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*101*		*40 - 110*	*02/20/17 10:05*	*03/09/17 14:39*	*1*
Y Carrier	*87.1*		*40 - 110*	*02/20/17 10:05*	*03/09/17 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	**0.496**		0.326	0.327	5.00	0.492	pCi/L		03/14/17 12:39	1

Client Sample ID: AX02046 MW-7

Date Collected: 01/25/17 10:02
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-33

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	0.135	U	0.108	0.109	1.00	0.156	pCi/L	02/20/17 09:38	03/14/17 06:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.8*		*40 - 110*	*02/20/17 09:38*	*03/14/17 06:41*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.583**		0.309	0.314	1.00	0.459	pCi/L	02/20/17 10:05	03/09/17 14:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*96.8*		*40 - 110*	*02/20/17 10:05*	*03/09/17 14:39*	*1*
Y Carrier	*90.8*		*40 - 110*	*02/20/17 10:05*	*03/09/17 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	**0.718**		0.328	0.332	5.00	0.459	pCi/L		03/14/17 12:39	1

Client Sample ID: AX02047 MW-8

Date Collected: 01/25/17 11:11
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-34

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	0.235		0.126	0.128	1.00	0.151	pCi/L	02/20/17 09:38	03/14/17 06:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.4*		*40 - 110*	*02/20/17 09:38*	*03/14/17 06:41*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.885		0.350	0.360	1.00	0.489	pCi/L	02/20/17 10:05	03/09/17 14:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*99.4*		*40 - 110*	*02/20/17 10:05*	*03/09/17 14:39*	*1*
Y Carrier	*84.1*		*40 - 110*	*02/20/17 10:05*	*03/09/17 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	1.12		0.372	0.382	5.00	0.489	pCi/L		03/14/17 12:39	1

Client Sample ID: AX02048 MW-9

Date Collected: 01/25/17 12:16
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-35

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	0.450		0.180	0.185	1.00	0.194	pCi/L	02/20/17 09:38	03/14/17 06:42	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.4*		*40 - 110*	*02/20/17 09:38*	*03/14/17 06:42*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.00		0.347	0.359	1.00	0.459	pCi/L	02/20/17 10:05	03/09/17 14:39	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*94.4*		*40 - 110*	*02/20/17 10:05*	*03/09/17 14:39*	*1*
Y Carrier	*88.2*		*40 - 110*	*02/20/17 10:05*	*03/09/17 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	1.46		0.391	0.404	5.00	0.459	pCi/L		03/14/17 12:39	1

Client Sample ID: AX02087 MW-29

Date Collected: 01/26/17 13:53
Date Received: 02/06/17 14:00

Lab Sample ID: 400-133564-36

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	0.158	U	0.121	0.122	1.00	0.172	pCi/L	02/20/17 09:38	03/14/17 06:43	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.1*		*40 - 110*	*02/20/17 09:38*	*03/14/17 06:43*	*1*

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	**0.695**		0.320	0.326	1.00	0.465	pCi/L	02/20/17 10:05	03/09/17 14:41	1

Carrier	*%Yield*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Ba Carrier	*97.1*		*40 - 110*	*02/20/17 10:05*	*03/09/17 14:41*	*1*
Y Carrier	*93.5*		*40 - 110*	*02/20/17 10:05*	*03/09/17 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	**0.852**		0.342	0.348	5.00	0.465	pCi/L		03/14/17 12:39	1

Qualifiers

Rad

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

Glossary

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

Client Sample ID: AX01892 MW-26

Lab Sample ID: 400-133564-1
Matrix: Water
Date Collected: 01/23/17 12:40
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 04:16	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

Client Sample ID: AX01893 MW-27

Lab Sample ID: 400-133564-2
Matrix: Water
Date Collected: 01/23/17 13:50
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

Client Sample ID: AX01894 FB-1

Lab Sample ID: 400-133564-3
Matrix: Water
Date Collected: 01/23/17 15:15
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

Client Sample ID: AX01895 MW-23

Lab Sample ID: 400-133564-4
Matrix: Water
Date Collected: 01/24/17 10:07
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 04:16	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

Client Sample ID: AX01896 MW-28

Lab Sample ID: 400-133564-5

Date Collected: 01/24/17 11:30

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 04:16	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

Client Sample ID: AX01897 MW-31

Lab Sample ID: 400-133564-6

Date Collected: 01/24/17 12:57

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 04:16	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 14:54	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX01898 MW-18

Lab Sample ID: 400-133564-7

Date Collected: 01/24/17 10:05

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			293084	02/17/17 10:50	PJM	TAL SL
Total/NA	Analysis	9315		1	297321	03/13/17 04:16	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 14:54	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX01899 MW-17

Lab Sample ID: 400-133564-8

Date Collected: 01/24/17 11:05

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			293084	02/17/17 10:50	PJM	TAL SL
Total/NA	Analysis	9315		1	297321	03/13/17 04:16	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 14:54	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX01900 MW-17 DUP

Lab Sample ID: 400-133564-9

Date Collected: 01/24/17 11:05

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			293084	02/17/17 10:50	PJM	TAL SL
Total/NA	Analysis	9315		1	297321	03/13/17 04:16	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 14:54	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX01901 MW-16

Lab Sample ID: 400-133564-10

Date Collected: 01/24/17 12:53

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 04:16	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 14:54	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX01902 MW-30

Lab Sample ID: 400-133564-11

Date Collected: 01/23/17 13:35

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			293084	02/17/17 10:50	PJM	TAL SL
Total/NA	Analysis	9315		1	297321	03/13/17 04:17	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 14:54	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX01904 MW-1

Lab Sample ID: 400-133564-12

Date Collected: 01/24/17 11:07

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			293084	02/17/17 10:50	PJM	TAL SL
Total/NA	Analysis	9315		1	297320	03/13/17 05:32	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293134	02/17/17 18:16	PJM	TAL SL
Total/NA	Analysis	9320		1	296638	03/08/17 15:00	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX01905 MW-2

Lab Sample ID: 400-133564-13
Date Collected: 01/24/17 12:16
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 04:19	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293134	02/17/17 18:16	PJM	TAL SL
Total/NA	Analysis	9320		1	296638	03/08/17 15:00	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX01906 MW-30

Lab Sample ID: 400-133564-14
Date Collected: 01/24/17 13:10
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			293084	02/17/17 10:50	PJM	TAL SL
Total/NA	Analysis	9315		1	297321	03/13/17 04:20	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293134	02/17/17 18:16	PJM	TAL SL
Total/NA	Analysis	9320		1	296638	03/08/17 15:00	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX01907 MW-3 DUP

Lab Sample ID: 400-133564-15
Date Collected: 01/24/17 13:10
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			293084	02/17/17 10:50	PJM	TAL SL
Total/NA	Analysis	9315		1	297321	03/13/17 04:20	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293134	02/17/17 18:16	PJM	TAL SL
Total/NA	Analysis	9320		1	296638	03/08/17 15:00	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX01908 FB-2

Lab Sample ID: 400-133564-16
Date Collected: 01/24/17 13:22
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	297322	03/13/17 04:31	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293134	02/17/17 18:16	PJM	TAL SL
Total/NA	Analysis	9320		1	296638	03/08/17 15:00	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02030 MW-32

Lab Sample ID: 400-133564-17
Date Collected: 01/24/17 14:15
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			293084	02/17/17 10:50	PJM	TAL SL
Total/NA	Analysis	9315		1	297322	03/13/17 04:31	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293134	02/17/17 18:16	PJM	TAL SL
Total/NA	Analysis	9320		1	296638	03/08/17 15:00	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02031 MW-24

Lab Sample ID: 400-133564-18
Date Collected: 01/24/17 15:33
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	297322	03/13/17 04:31	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293134	02/17/17 18:16	PJM	TAL SL
Total/NA	Analysis	9320		1	296638	03/08/17 15:01	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02032 MW-24 DUP

Lab Sample ID: 400-133564-19
Date Collected: 01/24/17 15:33
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			293352	02/20/17 09:38	BME	TAL SL
Total/NA	Analysis	9315		1	297616	03/14/17 06:39	KLS	TAL SL
Total/NA	Prep	PrecSep_0			293367	02/20/17 10:05	BME	TAL SL
Total/NA	Analysis	9320		1	296682	03/09/17 14:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02033 MW-11

Lab Sample ID: 400-133564-20
Date Collected: 01/25/17 10:25
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			293352	02/20/17 09:38	BME	TAL SL
Total/NA	Analysis	9315		1	297616	03/14/17 06:39	KLS	TAL SL
Total/NA	Prep	PrecSep_0			293367	02/20/17 10:05	BME	TAL SL
Total/NA	Analysis	9320		1	296682	03/09/17 14:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02034 MW-10

Lab Sample ID: 400-133564-21

Date Collected: 01/25/17 11:30

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			293352	02/20/17 09:38	BME	TAL SL
Total/NA	Analysis	9315		1	297616	03/14/17 06:39	KLS	TAL SL
Total/NA	Prep	PrecSep_0			293367	02/20/17 10:05	BME	TAL SL
Total/NA	Analysis	9320		1	296682	03/09/17 14:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02035 MW-33

Lab Sample ID: 400-133564-22

Date Collected: 01/25/17 12:50

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			293352	02/20/17 09:38	BME	TAL SL
Total/NA	Analysis	9315		1	297616	03/14/17 06:39	KLS	TAL SL
Total/NA	Prep	PrecSep_0			293367	02/20/17 10:05	BME	TAL SL
Total/NA	Analysis	9320		1	296682	03/09/17 14:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02036 MW-25

Lab Sample ID: 400-133564-23

Date Collected: 01/24/17 14:27

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			293352	02/20/17 09:38	BME	TAL SL
Total/NA	Analysis	9315		1	297616	03/14/17 06:39	KLS	TAL SL
Total/NA	Prep	PrecSep_0			293367	02/20/17 10:05	BME	TAL SL
Total/NA	Analysis	9320		1	296682	03/09/17 14:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02037 MW-15

Lab Sample ID: 400-133564-24

Date Collected: 01/24/17 15:32

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			293352	02/20/17 09:38	BME	TAL SL
Total/NA	Analysis	9315		1	297616	03/14/17 06:40	KLS	TAL SL
Total/NA	Prep	PrecSep_0			293367	02/20/17 10:05	BME	TAL SL
Total/NA	Analysis	9320		1	296682	03/09/17 14:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02038 MW-14

Lab Sample ID: 400-133564-25
Date Collected: 01/25/17 10:08
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			293352	02/20/17 09:38	BME	TAL SL
Total/NA	Analysis	9315		1	297616	03/14/17 06:40	KLS	TAL SL
Total/NA	Prep	PrecSep_0			293367	02/20/17 10:05	BME	TAL SL
Total/NA	Analysis	9320		1	296682	03/09/17 14:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02039 MW-13

Lab Sample ID: 400-133564-26
Date Collected: 01/25/17 11:15
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			293352	02/20/17 09:38	BME	TAL SL
Total/NA	Analysis	9315		1	297616	03/14/17 06:40	KLS	TAL SL
Total/NA	Prep	PrecSep_0			293367	02/20/17 10:05	BME	TAL SL
Total/NA	Analysis	9320		1	296682	03/09/17 14:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02040 FB-3

Lab Sample ID: 400-133564-27
Date Collected: 01/25/17 11:24
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			293352	02/20/17 09:38	BME	TAL SL
Total/NA	Analysis	9315		1	297616	03/14/17 06:40	KLS	TAL SL
Total/NA	Prep	PrecSep_0			293367	02/20/17 10:05	BME	TAL SL
Total/NA	Analysis	9320		1	296682	03/09/17 14:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02041 MW-12

Lab Sample ID: 400-133564-28
Date Collected: 01/25/17 12:15
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			293352	02/20/17 09:38	BME	TAL SL
Total/NA	Analysis	9315		1	297616	03/14/17 06:40	KLS	TAL SL
Total/NA	Prep	PrecSep_0			293367	02/20/17 10:05	BME	TAL SL
Total/NA	Analysis	9320		1	296682	03/09/17 14:39	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02042 MW-21

Lab Sample ID: 400-133564-29

Date Collected: 01/25/17 13:06

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			293352	02/20/17 09:38	BME	TAL SL
Total/NA	Analysis	9315		1	297616	03/14/17 06:40	KLS	TAL SL
Total/NA	Prep	PrecSep_0			293367	02/20/17 10:05	BME	TAL SL
Total/NA	Analysis	9320		1	296682	03/09/17 14:39	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02043 EB-1

Lab Sample ID: 400-133564-30

Date Collected: 01/25/17 13:20

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			293352	02/20/17 09:38	BME	TAL SL
Total/NA	Analysis	9315		1	297616	03/14/17 06:40	KLS	TAL SL
Total/NA	Prep	PrecSep_0			293367	02/20/17 10:05	BME	TAL SL
Total/NA	Analysis	9320		1	296682	03/09/17 14:39	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02044 MW-5

Lab Sample ID: 400-133564-31

Date Collected: 01/24/17 14:43

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			293352	02/20/17 09:38	BME	TAL SL
Total/NA	Analysis	9315		1	297616	03/14/17 06:40	KLS	TAL SL
Total/NA	Prep	PrecSep_0			293367	02/20/17 10:05	BME	TAL SL
Total/NA	Analysis	9320		1	296682	03/09/17 14:39	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02045 MW-6

Lab Sample ID: 400-133564-32

Date Collected: 01/24/17 15:38

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			293352	02/20/17 09:38	BME	TAL SL
Total/NA	Analysis	9315		1	297616	03/14/17 06:40	KLS	TAL SL
Total/NA	Prep	PrecSep_0			293367	02/20/17 10:05	BME	TAL SL
Total/NA	Analysis	9320		1	296682	03/09/17 14:39	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02046 MW-7

Lab Sample ID: 400-133564-33
Date Collected: 01/25/17 10:02
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			293352	02/20/17 09:38	BME	TAL SL
Total/NA	Analysis	9315		1	297616	03/14/17 06:41	KLS	TAL SL
Total/NA	Prep	PrecSep_0			293367	02/20/17 10:05	BME	TAL SL
Total/NA	Analysis	9320		1	296682	03/09/17 14:39	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02047 MW-8

Lab Sample ID: 400-133564-34
Date Collected: 01/25/17 11:11
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			293352	02/20/17 09:38	BME	TAL SL
Total/NA	Analysis	9315		1	297616	03/14/17 06:41	KLS	TAL SL
Total/NA	Prep	PrecSep_0			293367	02/20/17 10:05	BME	TAL SL
Total/NA	Analysis	9320		1	296682	03/09/17 14:39	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02048 MW-9

Lab Sample ID: 400-133564-35
Date Collected: 01/25/17 12:16
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			293352	02/20/17 09:38	BME	TAL SL
Total/NA	Analysis	9315		1	297618	03/14/17 06:42	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293367	02/20/17 10:05	BME	TAL SL
Total/NA	Analysis	9320		1	296682	03/09/17 14:39	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	297652	03/14/17 12:39	RTM	TAL SL

Client Sample ID: AX02087 MW-29

Lab Sample ID: 400-133564-36
Date Collected: 01/26/17 13:53
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			293352	02/20/17 09:38	BME	TAL SL
Total/NA	Analysis	9315		1	297618	03/14/17 06:43	RTM	TAL SL
Total/NA	Prep	PrecSep_0			293367	02/20/17 10:05	BME	TAL SL
Total/NA	Analysis	9320		1	296683	03/09/17 14:41	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

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Prep Batch: 293084

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-133564-1	AX01892 MW-26	Total/NA	Water	PrecSep-21	
400-133564-2	AX01893 MW-27	Total/NA	Water	PrecSep-21	
400-133564-3	AX01894 FB-1	Total/NA	Water	PrecSep-21	
400-133564-4	AX01895 MW-23	Total/NA	Water	PrecSep-21	
400-133564-5	AX01896 MW-28	Total/NA	Water	PrecSep-21	
400-133564-6	AX01897 MW-31	Total/NA	Water	PrecSep-21	
400-133564-7	AX01898 MW-18	Total/NA	Water	PrecSep-21	
400-133564-8	AX01899 MW-17	Total/NA	Water	PrecSep-21	
400-133564-9	AX01900 MW-17 DUP	Total/NA	Water	PrecSep-21	
400-133564-10	AX01901 MW-16	Total/NA	Water	PrecSep-21	
400-133564-11	AX01902 MW-30	Total/NA	Water	PrecSep-21	
400-133564-12	AX01904 MW-1	Total/NA	Water	PrecSep-21	
400-133564-13	AX01905 MW-2	Total/NA	Water	PrecSep-21	
400-133564-14	AX01906 MW-30	Total/NA	Water	PrecSep-21	
400-133564-15	AX01907 MW-3 DUP	Total/NA	Water	PrecSep-21	
400-133564-16	AX01908 FB-2	Total/NA	Water	PrecSep-21	
400-133564-17	AX02030 MW-32	Total/NA	Water	PrecSep-21	
400-133564-18	AX02031 MW-24	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	
400-133564-5 DU	AX01896 MW-28	Total/NA	Water	PrecSep-21	
400-133564-11 DU	AX01902 MW-30	Total/NA	Water	PrecSep-21	

Prep Batch: 293134

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-133564-1	AX01892 MW-26	Total/NA	Water	PrecSep_0	
400-133564-2	AX01893 MW-27	Total/NA	Water	PrecSep_0	
400-133564-3	AX01894 FB-1	Total/NA	Water	PrecSep_0	
400-133564-4	AX01895 MW-23	Total/NA	Water	PrecSep_0	
400-133564-5	AX01896 MW-28	Total/NA	Water	PrecSep_0	
400-133564-6	AX01897 MW-31	Total/NA	Water	PrecSep_0	
400-133564-7	AX01898 MW-18	Total/NA	Water	PrecSep_0	
400-133564-8	AX01899 MW-17	Total/NA	Water	PrecSep_0	
400-133564-9	AX01900 MW-17 DUP	Total/NA	Water	PrecSep_0	
400-133564-10	AX01901 MW-16	Total/NA	Water	PrecSep_0	
400-133564-11	AX01902 MW-30	Total/NA	Water	PrecSep_0	
400-133564-12	AX01904 MW-1	Total/NA	Water	PrecSep_0	
400-133564-13	AX01905 MW-2	Total/NA	Water	PrecSep_0	
400-133564-14	AX01906 MW-30	Total/NA	Water	PrecSep_0	
400-133564-15	AX01907 MW-3 DUP	Total/NA	Water	PrecSep_0	
400-133564-16	AX01908 FB-2	Total/NA	Water	PrecSep_0	
400-133564-17	AX02030 MW-32	Total/NA	Water	PrecSep_0	
400-133564-18	AX02031 MW-24	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	
400-133564-5 DU	AX01896 MW-28	Total/NA	Water	PrecSep_0	
400-133564-11 DU	AX01902 MW-30	Total/NA	Water	PrecSep_0	

Prep Batch: 293352

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-133564-19	AX02032 MW-24 DUP	Total/NA	Water	PrecSep-21	

Rad (Continued)

Prep Batch: 293352 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-133564-20	AX02033 MW-11	Total/NA	Water	PrecSep-21	
400-133564-21	AX02034 MW-10	Total/NA	Water	PrecSep-21	
400-133564-22	AX02035 MW-33	Total/NA	Water	PrecSep-21	
400-133564-23	AX02036 MW-25	Total/NA	Water	PrecSep-21	
400-133564-24	AX02037 MW-15	Total/NA	Water	PrecSep-21	
400-133564-25	AX02038 MW-14	Total/NA	Water	PrecSep-21	
400-133564-26	AX02039 MW-13	Total/NA	Water	PrecSep-21	
400-133564-27	AX02040 FB-3	Total/NA	Water	PrecSep-21	
400-133564-28	AX02041 MW-12	Total/NA	Water	PrecSep-21	
400-133564-29	AX02042 MW-21	Total/NA	Water	PrecSep-21	
400-133564-30	AX02043 EB-1	Total/NA	Water	PrecSep-21	
400-133564-31	AX02044 MW-5	Total/NA	Water	PrecSep-21	
400-133564-32	AX02045 MW-6	Total/NA	Water	PrecSep-21	
400-133564-33	AX02046 MW-7	Total/NA	Water	PrecSep-21	
400-133564-34	AX02047 MW-8	Total/NA	Water	PrecSep-21	
400-133564-35	AX02048 MW-9	Total/NA	Water	PrecSep-21	
400-133564-36	AX02087 MW-29	Total/NA	Water	PrecSep-21	
MB 160-293352/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-293352/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-293352/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 293367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-133564-19	AX02032 MW-24 DUP	Total/NA	Water	PrecSep_0	
400-133564-20	AX02033 MW-11	Total/NA	Water	PrecSep_0	
400-133564-21	AX02034 MW-10	Total/NA	Water	PrecSep_0	
400-133564-22	AX02035 MW-33	Total/NA	Water	PrecSep_0	
400-133564-23	AX02036 MW-25	Total/NA	Water	PrecSep_0	
400-133564-24	AX02037 MW-15	Total/NA	Water	PrecSep_0	
400-133564-25	AX02038 MW-14	Total/NA	Water	PrecSep_0	
400-133564-26	AX02039 MW-13	Total/NA	Water	PrecSep_0	
400-133564-27	AX02040 FB-3	Total/NA	Water	PrecSep_0	
400-133564-28	AX02041 MW-12	Total/NA	Water	PrecSep_0	
400-133564-29	AX02042 MW-21	Total/NA	Water	PrecSep_0	
400-133564-30	AX02043 EB-1	Total/NA	Water	PrecSep_0	
400-133564-31	AX02044 MW-5	Total/NA	Water	PrecSep_0	
400-133564-32	AX02045 MW-6	Total/NA	Water	PrecSep_0	
400-133564-33	AX02046 MW-7	Total/NA	Water	PrecSep_0	
400-133564-34	AX02047 MW-8	Total/NA	Water	PrecSep_0	
400-133564-35	AX02048 MW-9	Total/NA	Water	PrecSep_0	
400-133564-36	AX02087 MW-29	Total/NA	Water	PrecSep_0	
MB 160-293367/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-293367/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-293367/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

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: 400-133564-5 DU
Matrix: Water
Analysis Batch: 297321

Client Sample ID: AX01896 MW-28
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: 400-133564-11 DU
Matrix: Water
Analysis Batch: 297321

Client Sample ID: AX01902 MW-30
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	0.133	U		0.05446	U	0.0878	1.00	0.153	pCi/L			0.39	1

Carrier	*DU %Yield*	*DU Qualifier*	*Limits*
Ba Carrier	*97.1*		*40 - 110*

Lab Sample ID: MB 160-293352/1-A
Matrix: Water
Analysis Batch: 297616

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 293352

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.03202	U	0.0905	0.0905	1.00	0.194	pCi/L	02/20/17 09:38	03/14/17 06:39	1

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

Lab Sample ID: MB 160-293352/1-A
Matrix: Water
Analysis Batch: 297616

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 293352

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110	02/20/17 09:38	03/14/17 06:39	1

Lab Sample ID: LCS 160-293352/2-A
Matrix: Water
Analysis Batch: 297616

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 293352

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-226			15.2	14.28		1.51	1.00	0.158	pCi/L	94	68 - 137		

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	101		40 - 110

Lab Sample ID: LCSD 160-293352/3-A
Matrix: Water
Analysis Batch: 297616

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 293352

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226			15.2	13.80		1.47	1.00	0.186	pCi/L	91	68 - 137	0.16	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	99.1		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

Carrier	MB %Yield	MB 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		

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

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	93.2		40 - 110
Y Carrier	89.7		40 - 110

Lab Sample ID: 400-133564-5 DU
Matrix: Water
Analysis Batch: 296549

Client Sample ID: AX01896 MW-28
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

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	94.4		40 - 110
Y Carrier	85.6		40 - 110

Lab Sample ID: 400-133564-11 DU
Matrix: Water
Analysis Batch: 296638

Client Sample ID: AX01902 MW-30
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			0.17	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	97.1		40 - 110
Y Carrier	89.7		40 - 110

Lab Sample ID: MB 160-293367/1-A
Matrix: Water
Analysis Batch: 296682

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 293367

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2586	U	0.304	0.304	1.00	0.500	pCi/L	02/20/17 10:05	03/09/17 14:38	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110	02/20/17 10:05	03/09/17 14:38	1
Y Carrier	86.0		40 - 110	02/20/17 10:05	03/09/17 14:38	1

Lab Sample ID: LCS 160-293367/2-A
Matrix: Water
Analysis Batch: 296682

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 293367

Analyte			Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits		
Radium-228			18.3	18.24		1.95	1.00	0.456	pCi/L	100	56 - 140		

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

Lab Sample ID: LCS 160-293367/2-A
Matrix: Water
Analysis Batch: 296682

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 293367

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	101		40 - 110
Y Carrier	89.7		40 - 110

Lab Sample ID: LCSD 160-293367/3-A
Matrix: Water
Analysis Batch: 296682

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 293367

Analyte			Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228			18.3	19.01		2.03	1.00	0.456	pCi/L	104	56 - 140	0.19	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	99.1		40 - 110
Y Carrier	87.5		40 - 110

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

Lab Sample ID: 400-133564-5 DU
Matrix: Water
Analysis Batch: 297652

Client Sample ID: AX01896 MW-28
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	0.868			0.8847		0.364	5.00	0.491	pCi/L			0.02	

Lab Sample ID: 400-133564-11 DU
Matrix: Water
Analysis Batch: 297652

Client Sample ID: AX01902 MW-30
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	0.227	U		0.2682	U	0.362	5.00	0.590	pCi/L			0.06	

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 Rothschadl/ Jason Rouss	Lab PM: Whitmire, Cheyenne R	Carrier Tracking No(s):	COC No: 400-56525-24537.1
Client Contact: Sarah Copeland	Phone:	E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 1 of 4
Company: Alabama Power General Test Laboratory		Analysis Requested		Job #: 400-133564
Address: 744 County Rd 87 GSC #8	Due Date Requested:			Preservation Codes:
City: Calera	TAT Requested (days): Routine			A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S E - NaHSO4 Q - Na2SO3 F - MeOH R - Na2S2O3 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) Other:
State, Zip: AL, 35040				
Phone: 205-664-6121(Tel)	PO #:			
Email: sgcopela@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Greene County Ash Pond (6)	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra226, Ra228Ra228_GFPC	400-133564 COC	Total Number of containers	Special Instructions/Note:
			Preservation Code:							
AX01892	1/23/17	1240	G	Water			X			MW-26
AX01893	1/23/17	1350	G	Water			X			MW-27
AX01894	1/23/17	1515	G	Water			X			FB-1 (Field Blank)
AX01895	1/24/17	1007	G	Water			X			MW-23
AX01896	1/24/17	1130	G	Water		Y	X			MW-28
AX01897	1/24/17	1257	G	Water			X			MW-31
AX01898	1/24/17	1005	G	Water			X			MW-18
AX01899	1/24/17	1105	G	Water			X			MW-17
AX01900	1/24/17	1105	G	Water			X			MW-17 Dup (Sample Duplicate)
AX01901	1/24/17	1253	G	Water			X			MW-16

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Sarah Copeland	Date/Time: 2/7/2017; 1045	Company APC	Received by:	Date/Time: 2-6-17 1400	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

3/18/2017

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Anthony Goggins/ Ben Rothschadl	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 2 of 4
Company: Alabama Power General Test Laboratory				Job #: 400-133564

Address: 744 County Rd 87 GSC #8	Due Date Requested:	Analysis Requested
City: Calera	TAT Requested (days): Routine	
State, Zip: AL, 35040		
Phone: 205-664-6121(Tel)	PO #:	
Email: sgcopela@southernco.com	WO #:	
Project Name: CCR	Project #: 40007143	
Site: Greene County Ash Pond (6)	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, 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), Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9316_Ra226, 9320_Ra226, Ra228Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
AX01902	1/23/17	1335	G	Water	Y	X			MW-30
AX01904	1/24/17	1107	G	Water		X			MW-1
AX01905	1/24/17	1216	G	Water		X			MW-2
AX01906	1/24/17	1310	G	Water		X			MW-30
AX01907	1/24/17	1310	G	Water		X			MW-3 Dup (Sample Duplicate)
AX01908	1/24/17	1322	G	Water		X			FB-2 (Field Blank)
AX02030	1/24/17	1415	G	Water		X			MW-32
AX02031	1/24/17	1533	G	Water		X			MW-24
AX02032	1/24/17	1533	G	Water		X			MW-24 Dup (Sample Duplicate)
AX02033	1/25/17	1025	G	Water		X			MW-11
AX02034	1/25/17	1130	G	Water		X			MW-10
AX02035	1/25/17	1250	G	Water		X			MW-33

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Sarah Copeland	Date/Time: 2/7/2017; 1045	Company APC	Received by:	Date/Time: 2/16/17 1450	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

3/18/2017

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Jason Rouss/ Anthony Goggins	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 3 of 4
Company: Alabama Power General Test Laboratory		Analysis Requested		Job #: 400-133564
Address: 744 County Rd 87 GSC #8	Due Date Requested:			Preservation Codes:
City: Calera	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, 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)
State, Zip: AL, 35040				
Phone: 205-664-6121(Tel)	PO #:			Other:
Email: sgcopela@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Greene County Ash Pond (8)	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	8316_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
AX02036	1/24/17	1427	G	Water			X		MW-25
AX02037	1/24/17	1532	G	Water			X		MW-15
AX02038	1/25/17	1008	G	Water			X		MW-14
AX02039	1/25/17	1115	G	Water			X		MW-13
AX02040	1/25/17	1124	G	Water			X		FB-3 (Field Blank)
AX02041	1/25/17	1215	G	Water			X		MW-12
AX02042	1/25/17	1306	G	Water			X		MW-21
AX02043	1/25/17	1320	G	Water			X		EB-1 (Equipment Blank)
AX02044	1/24/17	1443	G	Water			X		MW-5
AX02045	1/24/17	1538	G	Water			X		MW-6
AX02046	1/25/17	1002	G	Water			X		MW-7
AX02047	1/25/17	1111	G	Water			X		MW-8

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

	Date/Time	Company		Date/Time	Company
Relinquished by: Sarah Copeland	Date/Time: 2/7/2017, 1045	Company APC	Received by:	Date/Time: 2/7/17 1400	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

3/18/2017

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Pensacola, FL 32514
Phone (850) 474-1001 Fax (850) 478-2671

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Anthony Coggins	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 4 of 4
Company: Alabama Power General Test Laboratory		Analysis Requested		Job #: 400-133564
Address: 744 County Rd 87 GSC #8	Due Date Requested:			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, 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)
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6121(Tel)	PO #:			Other:
Email: sgcopela@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Greene County Ash Pond (6)	SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	9315_Ra226, 9320_Ra228, Ra226Ra228_GFPC	Total Number of containers	Special Instructions/Note:
			Preservation Code:						
AX02048	1/25/17	1216	G	Water			X		MW-9
AX02087	1/26/17	1353	G	Water			X		MW-29

Possible Hazard Identification
☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Sarah Copeland	Date/Time: 2/7/2017; 1045	Company APC	Received by:	Date/Time: 2/6/17 1400	Company TA
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks:

3/18/2017

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-133564-1
SDG Number: Greene County Ash Pond (6)

Login Number: 133564
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.	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	Sample MW-30 was labeled as MW-3 on the bottle.
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

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

TestAmerica Job ID: 400-133564-1
SDG: Greene County 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 Greene

TestAmerica Job ID: 400-133564-1
SDG: Greene County 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

Alabama Power

Lab & Field SERVICES

Sample Group : WMWGREAP_1094

Project/Site : Greene County Ash Pond
Demopolis, AL 36732

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

Alabama Power

Lab & Field SERVICES

Anions

Greene County Ash Pond

WMWGREAP_1094

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
400-137928-1
General Chemistry

Method(s) SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 354000 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/) recoveries for analytical batch 353919 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) SM 4500 SO4 E: The following samples were diluted to bring the concentration of target analytes within the calibration range: AX11010 MW-26 (400-137928-1), AX11018 MW-24 (400-137928-9), AX11022 MW-1 (400-137928-13), AX11023 MW-2 (400-137928-14), AX11026 MW-11 (400-137928-17), AX11027 MW-6 (400-137928-18), AX11028 MW-7 (400-137928-19), AX11030 MW-9 (400-137928-21), AX11032 MW-1 DUP (400-137928-23), AX11066 MW-25 (400-137928-25), AX11067 MW-21 (400-137928-26), AX11068 MW-21 DUP (400-137928-27), AX11069 MW-12 (400-137928-28), AX11070 MW-13 (400-137928-29), AX11071 MW-14 (400-137928-30), AX11072 MW-15 (400-137928-31), AX11073 MW-16 (400-137928-32) and AX11074 MW-17 (400-137928-33). Elevated reporting limits (RLs) are provided.

Method(s) SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 354001 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

Case Narrative

Alabama Power

Lab & Field SERVICES

Metals ICP

Greene County Ash Pond

WMWGREAP_1094

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

Sample ID	Batch ID	Project ID
AX11010	20170519K	WMWGREAP_1094
AX11011	20170519K	WMWGREAP_1094
AX11012	20170519K	WMWGREAP_1094
AX11013	20170519K	WMWGREAP_1094
AX11014	20170519K	WMWGREAP_1094
AX11015	20170519K	WMWGREAP_1094
AX11016	20170519K	WMWGREAP_1094
AX11017	20170519K	WMWGREAP_1094
AX11018	20170519K	WMWGREAP_1094
AX11019	20170519K	WMWGREAP_1094
AX11020	20170519AK	WMWGREAP_1094
AX11021	20170519AK	WMWGREAP_1094
AX11022	20170519AK_20170520A	WMWGREAP_1094
AX11023	20170519AK	WMWGREAP_1094
AX11024	20170519AK_20170520A	WMWGREAP_1094
AX11025	20170519AK	WMWGREAP_1094
AX11026	20170519AK	WMWGREAP_1094
AX11027	20170519AK_20170520A	WMWGREAP_1094
AX11028	20170519AK_20170520A	WMWGREAP_1094
AX11029	20170519AK	WMWGREAP_1094
AX11030	20170519C	WMWGREAP_1094
AX11031	20170519C	WMWGREAP_1094
AX11032	20170519C_20170520	WMWGREAP_1094
AX11033	20170519C	WMWGREAP_1094
AX11066	20170519C	WMWGREAP_1094
AX11067	20170519C	WMWGREAP_1094
AX11068	20170519C	WMWGREAP_1094
AX11069	20170519C	WMWGREAP_1094
AX11070	20170519C	WMWGREAP_1094
AX11071	20170519C	WMWGREAP_1094
AX11072	20170519D	WMWGREAP_1094
AX11073	20170519D	WMWGREAP_1094
AX11074	20170519D	WMWGREAP_1094

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AX11075	20170519D	WMWGREAP_1094
AX11076	20170519D	WMWGREAP_1094
AX11077	20170519D	WMWGREAP_1094

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.

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7. All samples were analyzed at a x2 dilution to compensate for any matrix effects. The following samples were diluted due to analyzed sample concentration over the high standard of the calibration curve.

Sample ID	Analyte	Dilution Factor
AX11022	Calcium	x10
AX11024	Calcium	x10
AX11027	Calcium	x10
AX11028	Calcium	x10
AX11032	Calcium	x10

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

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Metals ICPMS

Greene County Ash Pond

WMWGREAP_1094

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

Sample ID	Batch ID	Project ID
AX11010	594285	WMWGREAP_1094
AX11011	594285	WMWGREAP_1094
AX11012	594285	WMWGREAP_1094
AX11013	594285	WMWGREAP_1094
AX11014	594285	WMWGREAP_1094
AX11015	594285	WMWGREAP_1094
AX11016	594285	WMWGREAP_1094
AX11017	594285	WMWGREAP_1094
AX11018	594285	WMWGREAP_1094
AX11019	594285	WMWGREAP_1094
AX11020	594286	WMWGREAP_1094
AX11021	594286	WMWGREAP_1094
AX11022	594286	WMWGREAP_1094
AX11023	594286	WMWGREAP_1094
AX11024	594286	WMWGREAP_1094
AX11025	594286	WMWGREAP_1094
AX11026	594286	WMWGREAP_1094
AX11027	594286	WMWGREAP_1094
AX11028	594286	WMWGREAP_1094
AX11029	594286	WMWGREAP_1094
AX11030	594287	WMWGREAP_1094
AX11031	594287	WMWGREAP_1094
AX11032	594287	WMWGREAP_1094
AX11033	594287	WMWGREAP_1094
AX11066	594287	WMWGREAP_1094
AX11067	594287	WMWGREAP_1094
AX11068	594287	WMWGREAP_1094
AX11069	594287	WMWGREAP_1094
AX11070	594287	WMWGREAP_1094
AX11071	594287	WMWGREAP_1094
AX11072	594288	WMWGREAP_1094
AX11073	594288	WMWGREAP_1094
AX11074	594288	WMWGREAP_1094

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AX11075	594288	WMWGREAP_1094
AX11076	594288	WMWGREAP_1094
AX11077	594288	WMWGREAP_1094

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.

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Mercury

Greene County Ash Pond

WMWGREAP_1094

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

Sample ID	Batch ID	Project ID
AX11010	594417	WMWGREAP_1094
AX11011	594417	WMWGREAP_1094
AX11012	594417	WMWGREAP_1094
AX11013	594417	WMWGREAP_1094
AX11014	594417	WMWGREAP_1094
AX11015	594417	WMWGREAP_1094
AX11016	594417	WMWGREAP_1094
AX11017	594417	WMWGREAP_1094
AX11018	594417	WMWGREAP_1094
AX11019	594417	WMWGREAP_1094
AX11020	594418	WMWGREAP_1094
AX11021	594418	WMWGREAP_1094
AX11022	594418	WMWGREAP_1094
AX11023	594418	WMWGREAP_1094
AX11024	594418	WMWGREAP_1094
AX11025	594418	WMWGREAP_1094
AX11026	594418	WMWGREAP_1094
AX11027	594418	WMWGREAP_1094
AX11028	594418	WMWGREAP_1094
AX11029	594418	WMWGREAP_1094
AX11030	594419	WMWGREAP_1094
AX11031	594419	WMWGREAP_1094
AX11032	594419	WMWGREAP_1094
AX11033	594419	WMWGREAP_1094
AX11066	594419	WMWGREAP_1094
AX11067	594419	WMWGREAP_1094
AX11068	594419	WMWGREAP_1094
AX11069	594419	WMWGREAP_1094
AX11070	594419	WMWGREAP_1094
AX11071	594419	WMWGREAP_1094
AX11072	594576	WMWGREAP_1094
AX11073	594576	WMWGREAP_1094
AX11074	594576	WMWGREAP_1094

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AX11075	594576	WMWGREAP_1094
AX11076	594576	WMWGREAP_1094
AX11077	594576	WMWGREAP_1094

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.

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TDS

Greene County Ash Pond

WMWGREAP_1094

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

Sample ID	Batch ID	Project ID
AX11010	594110	WMWGREAP_1094
AX11011	594110	WMWGREAP_1094
AX11012	594110	WMWGREAP_1094
AX11013	594110	WMWGREAP_1094
AX11014	594110	WMWGREAP_1094
AX11015	594110	WMWGREAP_1094
AX11016	594110	WMWGREAP_1094
AX11017	594110	WMWGREAP_1094
AX11018	594110	WMWGREAP_1094
AX11019	594110	WMWGREAP_1094
AX11020	594111	WMWGREAP_1094
AX11021	594111	WMWGREAP_1094
AX11022	594111	WMWGREAP_1094
AX11023	594111	WMWGREAP_1094
AX11024	594111	WMWGREAP_1094
AX11025	594111	WMWGREAP_1094
AX11026	594111	WMWGREAP_1094
AX11027	594111	WMWGREAP_1094
AX11028	594111	WMWGREAP_1094
AX11029	594111	WMWGREAP_1094
AX11030	594069	WMWGREAP_1094
AX11031	594069	WMWGREAP_1094
AX11032	594069	WMWGREAP_1094
AX11033	594069	WMWGREAP_1094
AX11066	594069	WMWGREAP_1094
AX11067	594069	WMWGREAP_1094
AX11068	594069	WMWGREAP_1094
AX11069	594069	WMWGREAP_1094
AX11070	594069	WMWGREAP_1094
AX11071	594069	WMWGREAP_1094
AX11072	594070	WMWGREAP_1094
AX11073	594070	WMWGREAP_1094
AX11074	594070	WMWGREAP_1094

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AX11075	594070	WMWGREAP_1094
AX11076	594070	WMWGREAP_1094
AX11077	594070	WMWGREAP_1094

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 AX11011, AX11017, AX11033, AX11075 and AX11077 that did not meet the 2.5mg requirement.

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AX11010

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	J	0.00138	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0691	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	J	0.00226	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		15.7	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	J	0.000706	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0167	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	J	0.00720	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/18/2017	SM 2540C		1		25		126	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		2.5	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10		0.25	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		5	7.00	25		55	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

Reported: 7/24/2017
Version: 2.0

Alabama Power General Test Laboratory
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AX11010

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11019	Thallium, Total	mg/L	0.0000158	0.00044	0.10	0.102	0.102	0.100	0.085 to 0.115	102	70 to 130	0.0655	20
AX11019	Chromium, Total	mg/L	0.0000134	0.0044	0.10	0.101	0.102	0.100	0.085 to 0.115	101	70 to 130	0.546	20
AX11019	Cobalt, Total	mg/L	0.00000512	0.0044	0.10	0.101	0.102	0.104	0.085 to 0.115	101	70 to 130	1.10	20
AX11019	Antimony, Total	mg/L	0.0000674	0.00132	0.10	0.0920	0.0915	0.0924	0.085 to 0.115	92.0	70 to 130	0.600	20
AX11019	Barium, Total	mg/L	0.0000149	0.0044	0.10	0.111	0.111	0.0975	0.085 to 0.115	96.8	70 to 130	0.00272	20
AX11019	Arsenic, Total	mg/L	0.00000852	0.0022	0.10	0.102	0.102	0.103	0.085 to 0.115	102	70 to 130	0.360	20
AX11019	Lead, Total	mg/L	0.00000498	0.0022	0.10	0.100	0.0988	0.101	0.085 to 0.115	100	70 to 130	1.35	20
AX11019	Lithium, Total	mg/L	-0.0000456	0.022	0.20	0.196	0.194	0.188	0.17 to 0.23	98.0	70 to 130	0.863	20
AX11019	Mercury, Total by CVAA	mg/L	0.0000266	0.0005	0.004	0.00365	0.00364	0.00369	0.0034 to 0.0046	91.3	70 to 130	0.200	20
AX11019	Boron, Total	mg/L	-0.000756	0.044	1.00	0.951	0.981	0.954	0.85 to 1.15	95.1	70 to 130	3.10	20
AX11019	Calcium, Total	mg/L	-0.0162	0.22	5.00	14.8	14.7	4.68	4.25 to 5.75	99.9	70 to 130	0.916	20
AX11019	Beryllium, Total	mg/L	0.0000153	0.00132	0.10	0.0879	0.0878	0.0985	0.085 to 0.115	87.9	70 to 130	0.0904	20
AX11019	Cadmium, Total	mg/L	-0.00000190	0.00044	0.10	0.101	0.102	0.100	0.085 to 0.115	101	70 to 130	0.955	20
AX11019	Molybdenum, Total	mg/L	0.0000114	0.0044	0.10	0.0928	0.0926	0.0913	0.085 to 0.115	92.8	70 to 130	0.255	20
AX11019	Selenium, Total	mg/L	0.0000134	0.0044	0.10	0.101	0.103	0.104	0.085 to 0.115	101	70 to 130	1.28	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

Reported: 7/24/2017
Version: 2.0

Alabama Power General Test Laboratory
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AX11010

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11019	Solids, Dissolved	mg/L	-3.0	25			45.3	43.0	40 to 60			1.52	5

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report
Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

Reported: 7/24/2017
Version: 2.0

Alabama Power General Test Laboratory
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AX11011

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0836	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5	J	0.289	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	J	0.000277	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0119	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/18/2017	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		2.3	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10	U	<0.032	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AX11011

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11019	Thallium, Total	mg/L	0.0000158	0.00044	0.10	0.102	0.102	0.100	0.085 to 0.115	102	70 to 130	0.0655	20
AX11019	Chromium, Total	mg/L	0.0000134	0.0044	0.10	0.101	0.102	0.100	0.085 to 0.115	101	70 to 130	0.546	20
AX11019	Cobalt, Total	mg/L	0.00000512	0.0044	0.10	0.101	0.102	0.104	0.085 to 0.115	101	70 to 130	1.10	20
AX11019	Antimony, Total	mg/L	0.0000674	0.00132	0.10	0.0920	0.0915	0.0924	0.085 to 0.115	92.0	70 to 130	0.600	20
AX11019	Barium, Total	mg/L	0.0000149	0.0044	0.10	0.111	0.111	0.0975	0.085 to 0.115	96.8	70 to 130	0.00272	20
AX11019	Arsenic, Total	mg/L	0.00000852	0.0022	0.10	0.102	0.102	0.103	0.085 to 0.115	102	70 to 130	0.360	20
AX11019	Lead, Total	mg/L	0.00000498	0.0022	0.10	0.100	0.0988	0.101	0.085 to 0.115	100	70 to 130	1.35	20
AX11019	Lithium, Total	mg/L	-0.0000456	0.022	0.20	0.196	0.194	0.188	0.17 to 0.23	98.0	70 to 130	0.863	20
AX11019	Mercury, Total by CVAA	mg/L	0.0000266	0.0005	0.004	0.00365	0.00364	0.00369	0.0034 to 0.0046	91.3	70 to 130	0.200	20
AX11019	Boron, Total	mg/L	-0.000756	0.044	1.00	0.951	0.981	0.954	0.85 to 1.15	95.1	70 to 130	3.10	20
AX11019	Calcium, Total	mg/L	-0.0162	0.22	5.00	14.8	14.7	4.68	4.25 to 5.75	99.9	70 to 130	0.916	20
AX11019	Beryllium, Total	mg/L	0.0000153	0.00132	0.10	0.0879	0.0878	0.0985	0.085 to 0.115	87.9	70 to 130	0.0904	20
AX11019	Cadmium, Total	mg/L	-0.00000190	0.00044	0.10	0.101	0.102	0.100	0.085 to 0.115	101	70 to 130	0.955	20
AX11019	Molybdenum, Total	mg/L	0.0000114	0.0044	0.10	0.0928	0.0926	0.0913	0.085 to 0.115	92.8	70 to 130	0.255	20
AX11019	Selenium, Total	mg/L	0.0000134	0.0044	0.10	0.101	0.103	0.104	0.085 to 0.115	101	70 to 130	1.28	20

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Comments: Test America, Pensacola NELAP ID: E81010

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Version: 2.0

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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AX11011

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11019	Solids, Dissolved	mg/L	-3.0	25			45.3	43.0	40 to 60			1.52	5

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AX11012

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0409	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		0.823	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/18/2017	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		2.8	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10	U	<0.032	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		1	1.40	5.00	U	<1.4	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AX11012

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11019	Thallium, Total	mg/L	0.0000158	0.00044	0.10	0.102	0.102	0.100	0.085 to 0.115	102	70 to 130	0.0655	20
AX11019	Chromium, Total	mg/L	0.0000134	0.0044	0.10	0.101	0.102	0.100	0.085 to 0.115	101	70 to 130	0.546	20
AX11019	Cobalt, Total	mg/L	0.00000512	0.0044	0.10	0.101	0.102	0.104	0.085 to 0.115	101	70 to 130	1.10	20
AX11019	Boron, Total	mg/L	-0.000756	0.044	1.00	0.951	0.981	0.954	0.85 to 1.15	95.1	70 to 130	3.10	20
AX11019	Calcium, Total	mg/L	-0.0162	0.22	5.00	14.8	14.7	4.68	4.25 to 5.75	99.9	70 to 130	0.916	20
AX11019	Beryllium, Total	mg/L	0.0000153	0.00132	0.10	0.0879	0.0878	0.0985	0.085 to 0.115	87.9	70 to 130	0.0904	20
AX11019	Cadmium, Total	mg/L	-0.00000190	0.00044	0.10	0.101	0.102	0.100	0.085 to 0.115	101	70 to 130	0.955	20
AX11019	Molybdenum, Total	mg/L	0.0000114	0.0044	0.10	0.0928	0.0926	0.0913	0.085 to 0.115	92.8	70 to 130	0.255	20
AX11019	Selenium, Total	mg/L	0.0000134	0.0044	0.10	0.101	0.103	0.104	0.085 to 0.115	101	70 to 130	1.28	20
AX11019	Arsenic, Total	mg/L	0.00000852	0.0022	0.10	0.102	0.102	0.103	0.085 to 0.115	102	70 to 130	0.360	20
AX11019	Lead, Total	mg/L	0.00000498	0.0022	0.10	0.100	0.0988	0.101	0.085 to 0.115	100	70 to 130	1.35	20
AX11019	Lithium, Total	mg/L	-0.0000456	0.022	0.20	0.196	0.194	0.188	0.17 to 0.23	98.0	70 to 130	0.863	20
AX11019	Mercury, Total by CVAA	mg/L	0.0000266	0.0005	0.004	0.00365	0.00364	0.00369	0.0034 to 0.0046	91.3	70 to 130	0.200	20
AX11019	Antimony, Total	mg/L	0.0000674	0.00132	0.10	0.0920	0.0915	0.0924	0.085 to 0.115	92.0	70 to 130	0.600	20
AX11019	Barium, Total	mg/L	0.0000149	0.0044	0.10	0.111	0.111	0.0975	0.085 to 0.115	96.8	70 to 130	0.00272	20

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Comments: Test America, Pensacola NELAP ID: E81010

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Version: 2.0

Alabama Power General Test Laboratory
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(205) 664-6032 or 6171
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AX11012

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11019	Solids, Dissolved	mg/L	-3.0	25			45.3	43.0	40 to 60			1.52	5

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-30 Dup

Laboratory ID Number: AX11013

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0384	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		0.824	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/18/2017	SM 2540C		1		25		25.3	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		2.8	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10	U	<0.032	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		1	1.40	5.00	U	<1.4	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-30 Dup

Laboratory ID Number: AX11013

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11019	Thallium, Total	mg/L	0.0000158	0.00044	0.10	0.102	0.102	0.100	0.085 to 0.115	102	70 to 130	0.0655	20
AX11019	Chromium, Total	mg/L	0.0000134	0.0044	0.10	0.101	0.102	0.100	0.085 to 0.115	101	70 to 130	0.546	20
AX11019	Cobalt, Total	mg/L	0.00000512	0.0044	0.10	0.101	0.102	0.104	0.085 to 0.115	101	70 to 130	1.10	20
AX11019	Antimony, Total	mg/L	0.0000674	0.00132	0.10	0.0920	0.0915	0.0924	0.085 to 0.115	92.0	70 to 130	0.600	20
AX11019	Barium, Total	mg/L	0.0000149	0.0044	0.10	0.111	0.111	0.0975	0.085 to 0.115	96.8	70 to 130	0.00272	20
AX11019	Boron, Total	mg/L	-0.000756	0.044	1.00	0.951	0.981	0.954	0.85 to 1.15	95.1	70 to 130	3.10	20
AX11019	Calcium, Total	mg/L	-0.0162	0.22	5.00	14.8	14.7	4.68	4.25 to 5.75	99.9	70 to 130	0.916	20
AX11019	Beryllium, Total	mg/L	0.0000153	0.00132	0.10	0.0879	0.0878	0.0985	0.085 to 0.115	87.9	70 to 130	0.0904	20
AX11019	Cadmium, Total	mg/L	-0.00000190	0.00044	0.10	0.101	0.102	0.100	0.085 to 0.115	101	70 to 130	0.955	20
AX11019	Molybdenum, Total	mg/L	0.0000114	0.0044	0.10	0.0928	0.0926	0.0913	0.085 to 0.115	92.8	70 to 130	0.255	20
AX11019	Selenium, Total	mg/L	0.0000134	0.0044	0.10	0.101	0.103	0.104	0.085 to 0.115	101	70 to 130	1.28	20
AX11019	Arsenic, Total	mg/L	0.00000852	0.0022	0.10	0.102	0.102	0.103	0.085 to 0.115	102	70 to 130	0.360	20
AX11019	Lead, Total	mg/L	0.00000498	0.0022	0.10	0.100	0.0988	0.101	0.085 to 0.115	100	70 to 130	1.35	20
AX11019	Lithium, Total	mg/L	-0.0000456	0.022	0.20	0.196	0.194	0.188	0.17 to 0.23	98.0	70 to 130	0.863	20
AX11019	Mercury, Total by CVAA	mg/L	0.0000266	0.0005	0.004	0.00365	0.00364	0.00369	0.0034 to 0.0046	91.3	70 to 130	0.200	20

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Sample Date: 09-May-17
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Delivery Date: 12-May-17

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Laboratory ID Number: AX11013

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11019	Solids, Dissolved	mg/L	-3.0	25			45.3	43.0	40 to 60			1.52	5

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AX11014

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0611	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		0.538	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/18/2017	SM 2540C		1		25		28.7	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		2.2	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10	U	<0.032	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AX11014

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11019	Thallium, Total	mg/L	0.0000158	0.00044	0.10	0.102	0.102	0.100	0.085 to 0.115	102	70 to 130	0.0655	20
AX11019	Chromium, Total	mg/L	0.0000134	0.0044	0.10	0.101	0.102	0.100	0.085 to 0.115	101	70 to 130	0.546	20
AX11019	Cobalt, Total	mg/L	0.00000512	0.0044	0.10	0.101	0.102	0.104	0.085 to 0.115	101	70 to 130	1.10	20
AX11019	Arsenic, Total	mg/L	0.00000852	0.0022	0.10	0.102	0.102	0.103	0.085 to 0.115	102	70 to 130	0.360	20
AX11019	Lead, Total	mg/L	0.00000498	0.0022	0.10	0.100	0.0988	0.101	0.085 to 0.115	100	70 to 130	1.35	20
AX11019	Lithium, Total	mg/L	-0.0000456	0.022	0.20	0.196	0.194	0.188	0.17 to 0.23	98.0	70 to 130	0.863	20
AX11019	Mercury, Total by CVAA	mg/L	0.0000266	0.0005	0.004	0.00365	0.00364	0.00369	0.0034 to 0.0046	91.3	70 to 130	0.200	20
AX11019	Beryllium, Total	mg/L	0.0000153	0.00132	0.10	0.0879	0.0878	0.0985	0.085 to 0.115	87.9	70 to 130	0.0904	20
AX11019	Cadmium, Total	mg/L	-0.00000190	0.00044	0.10	0.101	0.102	0.100	0.085 to 0.115	101	70 to 130	0.955	20
AX11019	Molybdenum, Total	mg/L	0.0000114	0.0044	0.10	0.0928	0.0926	0.0913	0.085 to 0.115	92.8	70 to 130	0.255	20
AX11019	Selenium, Total	mg/L	0.0000134	0.0044	0.10	0.101	0.103	0.104	0.085 to 0.115	101	70 to 130	1.28	20
AX11019	Boron, Total	mg/L	-0.000756	0.044	1.00	0.951	0.981	0.954	0.85 to 1.15	95.1	70 to 130	3.10	20
AX11019	Calcium, Total	mg/L	-0.0162	0.22	5.00	14.8	14.7	4.68	4.25 to 5.75	99.9	70 to 130	0.916	20
AX11019	Antimony, Total	mg/L	0.0000674	0.00132	0.10	0.0920	0.0915	0.0924	0.085 to 0.115	92.0	70 to 130	0.600	20
AX11019	Barium, Total	mg/L	0.0000149	0.0044	0.10	0.111	0.111	0.0975	0.085 to 0.115	96.8	70 to 130	0.00272	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AX11014

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11019	Solids, Dissolved	mg/L	-3.0	25			45.3	43.0	40 to 60			1.52	5

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CC:

Reported: 7/24/2017
Version: 2.0

Alabama Power General Test Laboratory
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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AX11015

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.322	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		3.28	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	J	0.000746	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/18/2017	SM 2540C		1		25		49.3	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		2.1	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10	U	<0.032	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		1	1.40	5.00		5.6	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AX11015

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11019	Thallium, Total	mg/L	0.0000158	0.00044	0.10	0.102	0.102	0.100	0.085 to 0.115	102	70 to 130	0.0655	20
AX11019	Chromium, Total	mg/L	0.0000134	0.0044	0.10	0.101	0.102	0.100	0.085 to 0.115	101	70 to 130	0.546	20
AX11019	Cobalt, Total	mg/L	0.00000512	0.0044	0.10	0.101	0.102	0.104	0.085 to 0.115	101	70 to 130	1.10	20
AX11019	Antimony, Total	mg/L	0.0000674	0.00132	0.10	0.0920	0.0915	0.0924	0.085 to 0.115	92.0	70 to 130	0.600	20
AX11019	Barium, Total	mg/L	0.0000149	0.0044	0.10	0.111	0.111	0.0975	0.085 to 0.115	96.8	70 to 130	0.00272	20
AX11019	Arsenic, Total	mg/L	0.00000852	0.0022	0.10	0.102	0.102	0.103	0.085 to 0.115	102	70 to 130	0.360	20
AX11019	Lead, Total	mg/L	0.00000498	0.0022	0.10	0.100	0.0988	0.101	0.085 to 0.115	100	70 to 130	1.35	20
AX11019	Lithium, Total	mg/L	-0.0000456	0.022	0.20	0.196	0.194	0.188	0.17 to 0.23	98.0	70 to 130	0.863	20
AX11019	Mercury, Total by CVAA	mg/L	0.0000266	0.0005	0.004	0.00365	0.00364	0.00369	0.0034 to 0.0046	91.3	70 to 130	0.200	20
AX11019	Beryllium, Total	mg/L	0.0000153	0.00132	0.10	0.0879	0.0878	0.0985	0.085 to 0.115	87.9	70 to 130	0.0904	20
AX11019	Cadmium, Total	mg/L	-0.00000190	0.00044	0.10	0.101	0.102	0.100	0.085 to 0.115	101	70 to 130	0.955	20
AX11019	Molybdenum, Total	mg/L	0.0000114	0.0044	0.10	0.0928	0.0926	0.0913	0.085 to 0.115	92.8	70 to 130	0.255	20
AX11019	Selenium, Total	mg/L	0.0000134	0.0044	0.10	0.101	0.103	0.104	0.085 to 0.115	101	70 to 130	1.28	20
AX11019	Boron, Total	mg/L	-0.000756	0.044	1.00	0.951	0.981	0.954	0.85 to 1.15	95.1	70 to 130	3.10	20
AX11019	Calcium, Total	mg/L	-0.0162	0.22	5.00	14.8	14.7	4.68	4.25 to 5.75	99.9	70 to 130	0.916	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AX11015

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11019	Solids, Dissolved	mg/L	-3.0	25			45.3	43.0	40 to 60			1.52	5

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Calera, AL 35040
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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AX11016

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0257	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		29.3	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/18/2017	SM 2540C		1		25		80.7	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		2.4	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10	J	0.080	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		1	1.40	5.00		14	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
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Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
Version: 2.0

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AX11016

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11019	Thallium, Total	mg/L	0.0000158	0.00044	0.10	0.102	0.102	0.100	0.085 to 0.115	102	70 to 130	0.0655	20
AX11019	Chromium, Total	mg/L	0.0000134	0.0044	0.10	0.101	0.102	0.100	0.085 to 0.115	101	70 to 130	0.546	20
AX11019	Cobalt, Total	mg/L	0.00000512	0.0044	0.10	0.101	0.102	0.104	0.085 to 0.115	101	70 to 130	1.10	20
AX11019	Antimony, Total	mg/L	0.0000674	0.00132	0.10	0.0920	0.0915	0.0924	0.085 to 0.115	92.0	70 to 130	0.600	20
AX11019	Barium, Total	mg/L	0.0000149	0.0044	0.10	0.111	0.111	0.0975	0.085 to 0.115	96.8	70 to 130	0.00272	20
AX11019	Boron, Total	mg/L	-0.000756	0.044	1.00	0.951	0.981	0.954	0.85 to 1.15	95.1	70 to 130	3.10	20
AX11019	Calcium, Total	mg/L	-0.0162	0.22	5.00	14.8	14.7	4.68	4.25 to 5.75	99.9	70 to 130	0.916	20
AX11019	Arsenic, Total	mg/L	0.00000852	0.0022	0.10	0.102	0.102	0.103	0.085 to 0.115	102	70 to 130	0.360	20
AX11019	Lead, Total	mg/L	0.00000498	0.0022	0.10	0.100	0.0988	0.101	0.085 to 0.115	100	70 to 130	1.35	20
AX11019	Lithium, Total	mg/L	-0.0000456	0.022	0.20	0.196	0.194	0.188	0.17 to 0.23	98.0	70 to 130	0.863	20
AX11019	Mercury, Total by CVAA	mg/L	0.0000266	0.0005	0.004	0.00365	0.00364	0.00369	0.0034 to 0.0046	91.3	70 to 130	0.200	20
AX11019	Beryllium, Total	mg/L	0.0000153	0.00132	0.10	0.0879	0.0878	0.0985	0.085 to 0.115	87.9	70 to 130	0.0904	20
AX11019	Cadmium, Total	mg/L	-0.00000190	0.00044	0.10	0.101	0.102	0.100	0.085 to 0.115	101	70 to 130	0.955	20
AX11019	Molybdenum, Total	mg/L	0.0000114	0.0044	0.10	0.0928	0.0926	0.0913	0.085 to 0.115	92.8	70 to 130	0.255	20
AX11019	Selenium, Total	mg/L	0.0000134	0.0044	0.10	0.101	0.103	0.104	0.085 to 0.115	101	70 to 130	1.28	20

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AX11016

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11019	Solids, Dissolved	mg/L	-3.0	25			45.3	43.0	40 to 60			1.52	5

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

* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report
Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX11017

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/18/2017	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00	U	<0.60	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10	U	<0.032	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX11017

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11019	Chromium, Total	mg/L	0.0000134	0.0044	0.10	0.101	0.102	0.100	0.085 to 0.115	101	70 to 130	0.546	20
AX11019	Thallium, Total	mg/L	0.0000158	0.00044	0.10	0.102	0.102	0.100	0.085 to 0.115	102	70 to 130	0.0655	20
AX11019	Cobalt, Total	mg/L	0.00000512	0.0044	0.10	0.101	0.102	0.104	0.085 to 0.115	101	70 to 130	1.10	20
AX11019	Antimony, Total	mg/L	0.0000674	0.00132	0.10	0.0920	0.0915	0.0924	0.085 to 0.115	92.0	70 to 130	0.600	20
AX11019	Barium, Total	mg/L	0.0000149	0.0044	0.10	0.111	0.111	0.0975	0.085 to 0.115	96.8	70 to 130	0.00272	20
AX11019	Boron, Total	mg/L	-0.000756	0.044	1.00	0.951	0.981	0.954	0.85 to 1.15	95.1	70 to 130	3.10	20
AX11019	Calcium, Total	mg/L	-0.0162	0.22	5.00	14.8	14.7	4.68	4.25 to 5.75	99.9	70 to 130	0.916	20
AX11019	Arsenic, Total	mg/L	0.00000852	0.0022	0.10	0.102	0.102	0.103	0.085 to 0.115	102	70 to 130	0.360	20
AX11019	Lead, Total	mg/L	0.00000498	0.0022	0.10	0.100	0.0988	0.101	0.085 to 0.115	100	70 to 130	1.35	20
AX11019	Lithium, Total	mg/L	-0.0000456	0.022	0.20	0.196	0.194	0.188	0.17 to 0.23	98.0	70 to 130	0.863	20
AX11019	Mercury, Total by CVAA	mg/L	0.0000266	0.0005	0.004	0.00365	0.00364	0.00369	0.0034 to 0.0046	91.3	70 to 130	0.200	20
AX11019	Beryllium, Total	mg/L	0.0000153	0.00132	0.10	0.0879	0.0878	0.0985	0.085 to 0.115	87.9	70 to 130	0.0904	20
AX11019	Cadmium, Total	mg/L	-0.00000190	0.00044	0.10	0.101	0.102	0.100	0.085 to 0.115	101	70 to 130	0.955	20
AX11019	Molybdenum, Total	mg/L	0.0000114	0.0044	0.10	0.0928	0.0926	0.0913	0.085 to 0.115	92.8	70 to 130	0.255	20
AX11019	Selenium, Total	mg/L	0.0000134	0.0044	0.10	0.101	0.103	0.104	0.085 to 0.115	101	70 to 130	1.28	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX11017

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11019	Solids, Dissolved	mg/L	-3.0	25			45.3	43.0	40 to 60			1.52	5

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AX11018

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0568	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		12.4	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/18/2017	SM 2540C		1		25		92.7	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		5.9	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10	U	<0.032	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		2	2.80	10		33	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AX11018

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11019	Thallium, Total	mg/L	0.0000158	0.00044	0.10	0.102	0.102	0.100	0.085 to 0.115	102	70 to 130	0.0655	20
AX11019	Cobalt, Total	mg/L	0.00000512	0.0044	0.10	0.101	0.102	0.104	0.085 to 0.115	101	70 to 130	1.10	20
AX11019	Chromium, Total	mg/L	0.0000134	0.0044	0.10	0.101	0.102	0.100	0.085 to 0.115	101	70 to 130	0.546	20
AX11019	Antimony, Total	mg/L	0.0000674	0.00132	0.10	0.0920	0.0915	0.0924	0.085 to 0.115	92.0	70 to 130	0.600	20
AX11019	Barium, Total	mg/L	0.0000149	0.0044	0.10	0.111	0.111	0.0975	0.085 to 0.115	96.8	70 to 130	0.00272	20
AX11019	Arsenic, Total	mg/L	0.00000852	0.0022	0.10	0.102	0.102	0.103	0.085 to 0.115	102	70 to 130	0.360	20
AX11019	Lead, Total	mg/L	0.00000498	0.0022	0.10	0.100	0.0988	0.101	0.085 to 0.115	100	70 to 130	1.35	20
AX11019	Lithium, Total	mg/L	-0.0000456	0.022	0.20	0.196	0.194	0.188	0.17 to 0.23	98.0	70 to 130	0.863	20
AX11019	Mercury, Total by CVAA	mg/L	0.0000266	0.0005	0.004	0.00365	0.00364	0.00369	0.0034 to 0.0046	91.3	70 to 130	0.200	20
AX11019	Boron, Total	mg/L	-0.000756	0.044	1.00	0.951	0.981	0.954	0.85 to 1.15	95.1	70 to 130	3.10	20
AX11019	Calcium, Total	mg/L	-0.0162	0.22	5.00	14.8	14.7	4.68	4.25 to 5.75	99.9	70 to 130	0.916	20
AX11019	Beryllium, Total	mg/L	0.0000153	0.00132	0.10	0.0879	0.0878	0.0985	0.085 to 0.115	87.9	70 to 130	0.0904	20
AX11019	Cadmium, Total	mg/L	-0.00000190	0.00044	0.10	0.101	0.102	0.100	0.085 to 0.115	101	70 to 130	0.955	20
AX11019	Molybdenum, Total	mg/L	0.0000114	0.0044	0.10	0.0928	0.0926	0.0913	0.085 to 0.115	92.8	70 to 130	0.255	20
AX11019	Selenium, Total	mg/L	0.0000134	0.0044	0.10	0.101	0.103	0.104	0.085 to 0.115	101	70 to 130	1.28	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AX11018

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11019	Solids, Dissolved	mg/L	-3.0	25			45.3	43.0	40 to 60			1.52	5

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AX11019

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0142	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		9.81	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/18/2017	SM 2540C		1		25		46.7	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		4.4	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10	J	0.050	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	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

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Reported: 7/24/2017
Version: 2.0

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AX11019

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11019	Thallium, Total	mg/L	0.0000158	0.00044	0.10	0.102	0.102	0.100	0.085 to 0.115	102	70 to 130	0.0655	20
AX11019	Chromium, Total	mg/L	0.0000134	0.0044	0.10	0.101	0.102	0.100	0.085 to 0.115	101	70 to 130	0.546	20
AX11019	Cobalt, Total	mg/L	0.00000512	0.0044	0.10	0.101	0.102	0.104	0.085 to 0.115	101	70 to 130	1.10	20
AX11019	Boron, Total	mg/L	-0.000756	0.044	1.00	0.951	0.981	0.954	0.85 to 1.15	95.1	70 to 130	3.10	20
AX11019	Calcium, Total	mg/L	-0.0162	0.22	5.00	14.8	14.7	4.68	4.25 to 5.75	99.9	70 to 130	0.916	20
AX11019	Antimony, Total	mg/L	0.0000674	0.00132	0.10	0.0920	0.0915	0.0924	0.085 to 0.115	92.0	70 to 130	0.600	20
AX11019	Barium, Total	mg/L	0.0000149	0.0044	0.10	0.111	0.111	0.0975	0.085 to 0.115	96.8	70 to 130	0.00272	20
AX11019	Beryllium, Total	mg/L	0.0000153	0.00132	0.10	0.0879	0.0878	0.0985	0.085 to 0.115	87.9	70 to 130	0.0904	20
AX11019	Cadmium, Total	mg/L	-0.00000190	0.00044	0.10	0.101	0.102	0.100	0.085 to 0.115	101	70 to 130	0.955	20
AX11019	Molybdenum, Total	mg/L	0.0000114	0.0044	0.10	0.0928	0.0926	0.0913	0.085 to 0.115	92.8	70 to 130	0.255	20
AX11019	Selenium, Total	mg/L	0.0000134	0.0044	0.10	0.101	0.103	0.104	0.085 to 0.115	101	70 to 130	1.28	20
AX11019	Arsenic, Total	mg/L	0.00000852	0.0022	0.10	0.102	0.102	0.103	0.085 to 0.115	102	70 to 130	0.360	20
AX11019	Lead, Total	mg/L	0.00000498	0.0022	0.10	0.100	0.0988	0.101	0.085 to 0.115	100	70 to 130	1.35	20
AX11019	Lithium, Total	mg/L	-0.0000456	0.022	0.20	0.196	0.194	0.188	0.17 to 0.23	98.0	70 to 130	0.863	20
AX11019	Mercury, Total by CVAA	mg/L	0.0000266	0.0005	0.004	0.00365	0.00364	0.00369	0.0034 to 0.0046	91.3	70 to 130	0.200	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AX11019

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11019	Solids, Dissolved	mg/L	-3.0	25			45.3	43.0	40 to 60			1.52	5

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AX11020

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0798	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		2.27	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	J	0.00291	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/18/2017	SM 2540C		1		25		60.7	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		8.0	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10	J	0.060	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		1	1.40	5.00		12	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AX11020

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11029	Chromium, Total	mg/L	0.0000134	0.0044	0.10	0.100	0.101	0.100	0.085 to 0.115	100	70 to 130	0.717	20
AX11029	Lead, Total	mg/L	0.00000498	0.0022	0.10	0.102	0.0991	0.101	0.085 to 0.115	102	70 to 130	2.48	20
AX11029	Beryllium, Total	mg/L	0.0000153	0.00132	0.10	0.0869	0.0849	0.0985	0.085 to 0.115	86.9	70 to 130	2.38	20
AX11029	Thallium, Total	mg/L	0.0000158	0.00044	0.10	0.102	0.100	0.100	0.085 to 0.115	102	70 to 130	1.90	20
AX11029	Arsenic, Total	mg/L	0.00000852	0.0022	0.10	0.114	0.114	0.103	0.085 to 0.115	101	70 to 130	0.125	20
AX11029	Selenium, Total	mg/L	0.0000134	0.0044	0.10	0.102	0.101	0.104	0.085 to 0.115	102	70 to 130	0.996	20
AX11029	Boron, Total	mg/L	-0.000723	0.044	1.00	2.20	2.17	0.965	0.85 to 1.15	97.6	70 to 130	1.38	20
AX11029	Lithium, Total	mg/L	-0.000091	0.022	0.20	0.321	0.310	0.188	0.17 to 0.23	110	70 to 130	3.51	20
AX11029	Cobalt, Total	mg/L	0.00000512	0.0044	0.10	0.115	0.117	0.104	0.085 to 0.115	101	70 to 130	0.991	20
AX11029	Molybdenum, Total	mg/L	0.0000114	0.0044	0.10	0.101	0.102	0.0913	0.085 to 0.115	91.2	70 to 130	0.438	20
AX11029	Antimony, Total	mg/L	0.0000674	0.00132	0.10	0.0913	0.0912	0.0924	0.085 to 0.115	91.3	70 to 130	0.173	20
AX11029	Cadmium, Total	mg/L	-0.00000190	0.00044	0.10	0.0992	0.101	0.100	0.085 to 0.115	99.2	70 to 130	1.65	20
AX11029	Calcium, Total	mg/L	-0.010681	0.22	5.00	66.8	67.1	4.69	4.25 to 5.75	84.9	70 to 130	0.321	20
AX11029	Barium, Total	mg/L	0.0000149	0.0044	0.10	0.263	0.260	0.0975	0.085 to 0.115	94.4	70 to 130	1.14	20
AX11029	Mercury, Total by CVAA	mg/L	0.0000265	0.0005	0.004	0.00362	0.00363	0.00365	0.0034 to 0.0046	90.4	70 to 130	0.394	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AX11020

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11029	Solids, Dissolved	mg/L	-3.0	25			320	43.0	40 to 60			0.929	5

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Version: 2.0

Alabama Power General Test Laboratory
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Calera, AL 35040
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AX11021

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0246	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		15.7	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/18/2017	SM 2540C		1		25		31.3	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		5.8	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10	J	0.050	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		1	1.40	5.00	J	2.9	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AX11021

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11029	Chromium, Total	mg/L	0.0000134	0.0044	0.10	0.100	0.101	0.100	0.085 to 0.115	100	70 to 130	0.717	20
AX11029	Lead, Total	mg/L	0.00000498	0.0022	0.10	0.102	0.0991	0.101	0.085 to 0.115	102	70 to 130	2.48	20
AX11029	Boron, Total	mg/L	-0.000723	0.044	1.00	2.20	2.17	0.965	0.85 to 1.15	97.6	70 to 130	1.38	20
AX11029	Lithium, Total	mg/L	-0.000091	0.022	0.20	0.321	0.310	0.188	0.17 to 0.23	110	70 to 130	3.51	20
AX11029	Barium, Total	mg/L	0.0000149	0.0044	0.10	0.263	0.260	0.0975	0.085 to 0.115	94.4	70 to 130	1.14	20
AX11029	Mercury, Total by CVAA	mg/L	0.0000265	0.0005	0.004	0.00362	0.00363	0.00365	0.0034 to 0.0046	90.4	70 to 130	0.394	20
AX11029	Beryllium, Total	mg/L	0.0000153	0.00132	0.10	0.0869	0.0849	0.0985	0.085 to 0.115	86.9	70 to 130	2.38	20
AX11029	Thallium, Total	mg/L	0.0000158	0.00044	0.10	0.102	0.100	0.100	0.085 to 0.115	102	70 to 130	1.90	20
AX11029	Arsenic, Total	mg/L	0.00000852	0.0022	0.10	0.114	0.114	0.103	0.085 to 0.115	101	70 to 130	0.125	20
AX11029	Selenium, Total	mg/L	0.0000134	0.0044	0.10	0.102	0.101	0.104	0.085 to 0.115	102	70 to 130	0.996	20
AX11029	Cobalt, Total	mg/L	0.00000512	0.0044	0.10	0.115	0.117	0.104	0.085 to 0.115	101	70 to 130	0.991	20
AX11029	Molybdenum, Total	mg/L	0.0000114	0.0044	0.10	0.101	0.102	0.0913	0.085 to 0.115	91.2	70 to 130	0.438	20
AX11029	Antimony, Total	mg/L	0.0000674	0.00132	0.10	0.0913	0.0912	0.0924	0.085 to 0.115	91.3	70 to 130	0.173	20
AX11029	Cadmium, Total	mg/L	-0.00000190	0.00044	0.10	0.0992	0.101	0.100	0.085 to 0.115	99.2	70 to 130	1.65	20
AX11029	Calcium, Total	mg/L	-0.010681	0.22	5.00	66.8	67.1	4.69	4.25 to 5.75	84.9	70 to 130	0.321	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

Reported: 7/24/2017
Version: 2.0

Alabama Power General Test Laboratory
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AX11021

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11029	Solids, Dissolved	mg/L	-3.0	25			320	43.0	40 to 60			0.929	5

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AX11022

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005		0.0176	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0399	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1		0.235	mg/L
* Calcium, Total	HRG	5/20/2017	EPA 200.7		10	1	5		184	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0570	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/18/2017	SM 2540C		1		100		1540	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		30	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10	J	0.050	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		30	42.0	150		810	mg/L

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Issued By: State of Florida, Department of Health
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Comments: Test America, Pensacola NELAP ID: E81010

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AX11022

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11029	Chromium, Total	mg/L	0.0000134	0.0044	0.10	0.100	0.101	0.100	0.085 to 0.115	100	70 to 130	0.717	20
AX11029	Lead, Total	mg/L	0.00000498	0.0022	0.10	0.102	0.0991	0.101	0.085 to 0.115	102	70 to 130	2.48	20
AX11029	Antimony, Total	mg/L	0.0000674	0.00132	0.10	0.0913	0.0912	0.0924	0.085 to 0.115	91.3	70 to 130	0.173	20
AX11029	Cadmium, Total	mg/L	-0.00000190	0.00044	0.10	0.0992	0.101	0.100	0.085 to 0.115	99.2	70 to 130	1.65	20
AX11029	Calcium, Total	mg/L	-0.010681	0.22	5.00	66.8	67.1	4.69	4.25 to 5.75	84.9	70 to 130	0.321	20
AX11029	Cobalt, Total	mg/L	0.00000512	0.0044	0.10	0.115	0.117	0.104	0.085 to 0.115	101	70 to 130	0.991	20
AX11029	Molybdenum, Total	mg/L	0.0000114	0.0044	0.10	0.101	0.102	0.0913	0.085 to 0.115	91.2	70 to 130	0.438	20
AX11029	Arsenic, Total	mg/L	0.00000852	0.0022	0.10	0.114	0.114	0.103	0.085 to 0.115	101	70 to 130	0.125	20
AX11029	Selenium, Total	mg/L	0.0000134	0.0044	0.10	0.102	0.101	0.104	0.085 to 0.115	102	70 to 130	0.996	20
AX11029	Boron, Total	mg/L	-0.000723	0.044	1.00	2.20	2.17	0.965	0.85 to 1.15	97.6	70 to 130	1.38	20
AX11029	Lithium, Total	mg/L	-0.000091	0.022	0.20	0.321	0.310	0.188	0.17 to 0.23	110	70 to 130	3.51	20
AX11029	Barium, Total	mg/L	0.0000149	0.0044	0.10	0.263	0.260	0.0975	0.085 to 0.115	94.4	70 to 130	1.14	20
AX11029	Mercury, Total by CVAA	mg/L	0.0000265	0.0005	0.004	0.00362	0.00363	0.00365	0.0034 to 0.0046	90.4	70 to 130	0.394	20
AX11029	Beryllium, Total	mg/L	0.0000153	0.00132	0.10	0.0869	0.0849	0.0985	0.085 to 0.115	86.9	70 to 130	2.38	20
AX11029	Thallium, Total	mg/L	0.0000158	0.00044	0.10	0.102	0.100	0.100	0.085 to 0.115	102	70 to 130	1.90	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AX11022

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11029	Solids, Dissolved	mg/L	-3.0	25			320	43.0	40 to 60			0.929	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:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AX11023

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005		0.00989	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0285	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1		0.121	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		66.4	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	J	0.00975	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/18/2017	SM 2540C		1		50		510	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		16	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10	J	0.070	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		10	14.0	50		250	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AX11023

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11029	Chromium, Total	mg/L	0.0000134	0.0044	0.10	0.100	0.101	0.100	0.085 to 0.115	100	70 to 130	0.717	20
AX11029	Lead, Total	mg/L	0.00000498	0.0022	0.10	0.102	0.0991	0.101	0.085 to 0.115	102	70 to 130	2.48	20
AX11029	Arsenic, Total	mg/L	0.00000852	0.0022	0.10	0.114	0.114	0.103	0.085 to 0.115	101	70 to 130	0.125	20
AX11029	Selenium, Total	mg/L	0.0000134	0.0044	0.10	0.102	0.101	0.104	0.085 to 0.115	102	70 to 130	0.996	20
AX11029	Barium, Total	mg/L	0.0000149	0.0044	0.10	0.263	0.260	0.0975	0.085 to 0.115	94.4	70 to 130	1.14	20
AX11029	Mercury, Total by CVAA	mg/L	0.0000265	0.0005	0.004	0.00362	0.00363	0.00365	0.0034 to 0.0046	90.4	70 to 130	0.394	20
AX11029	Boron, Total	mg/L	-0.000723	0.044	1.00	2.20	2.17	0.965	0.85 to 1.15	97.6	70 to 130	1.38	20
AX11029	Lithium, Total	mg/L	-0.000091	0.022	0.20	0.321	0.310	0.188	0.17 to 0.23	110	70 to 130	3.51	20
AX11029	Antimony, Total	mg/L	0.0000674	0.00132	0.10	0.0913	0.0912	0.0924	0.085 to 0.115	91.3	70 to 130	0.173	20
AX11029	Cadmium, Total	mg/L	-0.00000190	0.00044	0.10	0.0992	0.101	0.100	0.085 to 0.115	99.2	70 to 130	1.65	20
AX11029	Calcium, Total	mg/L	-0.010681	0.22	5.00	66.8	67.1	4.69	4.25 to 5.75	84.9	70 to 130	0.321	20
AX11029	Beryllium, Total	mg/L	0.0000153	0.00132	0.10	0.0869	0.0849	0.0985	0.085 to 0.115	86.9	70 to 130	2.38	20
AX11029	Thallium, Total	mg/L	0.0000158	0.00044	0.10	0.102	0.100	0.100	0.085 to 0.115	102	70 to 130	1.90	20
AX11029	Cobalt, Total	mg/L	0.00000512	0.0044	0.10	0.115	0.117	0.104	0.085 to 0.115	101	70 to 130	0.991	20
AX11029	Molybdenum, Total	mg/L	0.0000114	0.0044	0.10	0.101	0.102	0.0913	0.085 to 0.115	91.2	70 to 130	0.438	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AX11023

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11029	Solids, Dissolved	mg/L	-3.0	25			320	43.0	40 to 60			0.929	5

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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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AX11024

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005		0.00766	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.105	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1	J	0.0298	mg/L
* Calcium, Total	HRG	5/20/2017	EPA 200.7		10	1	5		90.3	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	J	0.00396	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/18/2017	SM 2540C		1		50		368	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		27	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10	J	0.090	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AX11024

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11029	Chromium, Total	mg/L	0.0000134	0.0044	0.10	0.100	0.101	0.100	0.085 to 0.115	100	70 to 130	0.717	20
AX11029	Lead, Total	mg/L	0.00000498	0.0022	0.10	0.102	0.0991	0.101	0.085 to 0.115	102	70 to 130	2.48	20
AX11029	Beryllium, Total	mg/L	0.0000153	0.00132	0.10	0.0869	0.0849	0.0985	0.085 to 0.115	86.9	70 to 130	2.38	20
AX11029	Thallium, Total	mg/L	0.0000158	0.00044	0.10	0.102	0.100	0.100	0.085 to 0.115	102	70 to 130	1.90	20
AX11029	Arsenic, Total	mg/L	0.00000852	0.0022	0.10	0.114	0.114	0.103	0.085 to 0.115	101	70 to 130	0.125	20
AX11029	Selenium, Total	mg/L	0.0000134	0.0044	0.10	0.102	0.101	0.104	0.085 to 0.115	102	70 to 130	0.996	20
AX11029	Boron, Total	mg/L	-0.000723	0.044	1.00	2.20	2.17	0.965	0.85 to 1.15	97.6	70 to 130	1.38	20
AX11029	Lithium, Total	mg/L	-0.000091	0.022	0.20	0.321	0.310	0.188	0.17 to 0.23	110	70 to 130	3.51	20
AX11029	Barium, Total	mg/L	0.0000149	0.0044	0.10	0.263	0.260	0.0975	0.085 to 0.115	94.4	70 to 130	1.14	20
AX11029	Mercury, Total by CVAA	mg/L	0.0000265	0.0005	0.004	0.00362	0.00363	0.00365	0.0034 to 0.0046	90.4	70 to 130	0.394	20
AX11029	Cobalt, Total	mg/L	0.00000512	0.0044	0.10	0.115	0.117	0.104	0.085 to 0.115	101	70 to 130	0.991	20
AX11029	Molybdenum, Total	mg/L	0.0000114	0.0044	0.10	0.101	0.102	0.0913	0.085 to 0.115	91.2	70 to 130	0.438	20
AX11029	Antimony, Total	mg/L	0.0000674	0.00132	0.10	0.0913	0.0912	0.0924	0.085 to 0.115	91.3	70 to 130	0.173	20
AX11029	Cadmium, Total	mg/L	-0.00000190	0.00044	0.10	0.0992	0.101	0.100	0.085 to 0.115	99.2	70 to 130	1.65	20
AX11029	Calcium, Total	mg/L	-0.010681	0.22	5.00	66.8	67.1	4.69	4.25 to 5.75	84.9	70 to 130	0.321	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

Reported: 7/24/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AX11024

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11029	Solids, Dissolved	mg/L	-3.0	25			320	43.0	40 to 60			0.929	5

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Expiration: June 30, 2018

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Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AX11025

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005		0.406	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.512	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1		0.479	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		61.7	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	J	0.00755	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05		0.0865	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	J	0.00310	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/18/2017	SM 2540C		1		25		317	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		17	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10		0.21	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		1	1.40	5.00		25	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AX11025

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11029	Chromium, Total	mg/L	0.0000134	0.0044	0.10	0.100	0.101	0.100	0.085 to 0.115	100	70 to 130	0.717	20
AX11029	Lead, Total	mg/L	0.00000498	0.0022	0.10	0.102	0.0991	0.101	0.085 to 0.115	102	70 to 130	2.48	20
AX11029	Barium, Total	mg/L	0.0000149	0.0044	0.10	0.263	0.260	0.0975	0.085 to 0.115	94.4	70 to 130	1.14	20
AX11029	Mercury, Total by CVAA	mg/L	0.0000265	0.0005	0.004	0.00362	0.00363	0.00365	0.0034 to 0.0046	90.4	70 to 130	0.394	20
AX11029	Beryllium, Total	mg/L	0.0000153	0.00132	0.10	0.0869	0.0849	0.0985	0.085 to 0.115	86.9	70 to 130	2.38	20
AX11029	Thallium, Total	mg/L	0.0000158	0.00044	0.10	0.102	0.100	0.100	0.085 to 0.115	102	70 to 130	1.90	20
AX11029	Antimony, Total	mg/L	0.0000674	0.00132	0.10	0.0913	0.0912	0.0924	0.085 to 0.115	91.3	70 to 130	0.173	20
AX11029	Cadmium, Total	mg/L	-0.00000190	0.00044	0.10	0.0992	0.101	0.100	0.085 to 0.115	99.2	70 to 130	1.65	20
AX11029	Calcium, Total	mg/L	-0.010681	0.22	5.00	66.8	67.1	4.69	4.25 to 5.75	84.9	70 to 130	0.321	20
AX11029	Arsenic, Total	mg/L	0.00000852	0.0022	0.10	0.114	0.114	0.103	0.085 to 0.115	101	70 to 130	0.125	20
AX11029	Selenium, Total	mg/L	0.0000134	0.0044	0.10	0.102	0.101	0.104	0.085 to 0.115	102	70 to 130	0.996	20
AX11029	Cobalt, Total	mg/L	0.00000512	0.0044	0.10	0.115	0.117	0.104	0.085 to 0.115	101	70 to 130	0.991	20
AX11029	Molybdenum, Total	mg/L	0.0000114	0.0044	0.10	0.101	0.102	0.0913	0.085 to 0.115	91.2	70 to 130	0.438	20
AX11029	Boron, Total	mg/L	-0.000723	0.044	1.00	2.20	2.17	0.965	0.85 to 1.15	97.6	70 to 130	1.38	20
AX11029	Lithium, Total	mg/L	-0.000091	0.022	0.20	0.321	0.310	0.188	0.17 to 0.23	110	70 to 130	3.51	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AX11025

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11029	Solids, Dissolved	mg/L	-3.0	25			320	43.0	40 to 60			0.929	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:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AX11026

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005		0.00819	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.125	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1		0.528	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		18.0	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0471	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05		0.0646	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	J	0.00580	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/18/2017	SM 2540C		1		25		195	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		23	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10		0.11	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		5	7.00	25		44	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AX11026

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11029	Chromium, Total	mg/L	0.0000134	0.0044	0.10	0.100	0.101	0.100	0.085 to 0.115	100	70 to 130	0.717	20
AX11029	Lead, Total	mg/L	0.00000498	0.0022	0.10	0.102	0.0991	0.101	0.085 to 0.115	102	70 to 130	2.48	20
AX11029	Cobalt, Total	mg/L	0.00000512	0.0044	0.10	0.115	0.117	0.104	0.085 to 0.115	101	70 to 130	0.991	20
AX11029	Molybdenum, Total	mg/L	0.0000114	0.0044	0.10	0.101	0.102	0.0913	0.085 to 0.115	91.2	70 to 130	0.438	20
AX11029	Barium, Total	mg/L	0.0000149	0.0044	0.10	0.263	0.260	0.0975	0.085 to 0.115	94.4	70 to 130	1.14	20
AX11029	Mercury, Total by CVAA	mg/L	0.0000265	0.0005	0.004	0.00362	0.00363	0.00365	0.0034 to 0.0046	90.4	70 to 130	0.394	20
AX11029	Arsenic, Total	mg/L	0.00000852	0.0022	0.10	0.114	0.114	0.103	0.085 to 0.115	101	70 to 130	0.125	20
AX11029	Selenium, Total	mg/L	0.0000134	0.0044	0.10	0.102	0.101	0.104	0.085 to 0.115	102	70 to 130	0.996	20
AX11029	Antimony, Total	mg/L	0.0000674	0.00132	0.10	0.0913	0.0912	0.0924	0.085 to 0.115	91.3	70 to 130	0.173	20
AX11029	Cadmium, Total	mg/L	-0.00000190	0.00044	0.10	0.0992	0.101	0.100	0.085 to 0.115	99.2	70 to 130	1.65	20
AX11029	Calcium, Total	mg/L	-0.010681	0.22	5.00	66.8	67.1	4.69	4.25 to 5.75	84.9	70 to 130	0.321	20
AX11029	Beryllium, Total	mg/L	0.0000153	0.00132	0.10	0.0869	0.0849	0.0985	0.085 to 0.115	86.9	70 to 130	2.38	20
AX11029	Thallium, Total	mg/L	0.0000158	0.00044	0.10	0.102	0.100	0.100	0.085 to 0.115	102	70 to 130	1.90	20
AX11029	Boron, Total	mg/L	-0.000723	0.044	1.00	2.20	2.17	0.965	0.85 to 1.15	97.6	70 to 130	1.38	20
AX11029	Lithium, Total	mg/L	-0.000091	0.022	0.20	0.321	0.310	0.188	0.17 to 0.23	110	70 to 130	3.51	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AX11026

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11029	Solids, Dissolved	mg/L	-3.0	25			320	43.0	40 to 60			0.929	5

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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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AX11027

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0543	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1		1.62	mg/L
* Calcium, Total	HRG	5/20/2017	EPA 200.7		10	1	5		104	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05		0.0519	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/18/2017	SM 2540C		1		25		687	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		41	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10		0.19	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		10	14.0	50		120	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AX11027

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11029	Chromium, Total	mg/L	0.0000134	0.0044	0.10	0.100	0.101	0.100	0.085 to 0.115	100	70 to 130	0.717	20
AX11029	Lead, Total	mg/L	0.00000498	0.0022	0.10	0.102	0.0991	0.101	0.085 to 0.115	102	70 to 130	2.48	20
AX11029	Beryllium, Total	mg/L	0.0000153	0.00132	0.10	0.0869	0.0849	0.0985	0.085 to 0.115	86.9	70 to 130	2.38	20
AX11029	Thallium, Total	mg/L	0.0000158	0.00044	0.10	0.102	0.100	0.100	0.085 to 0.115	102	70 to 130	1.90	20
AX11029	Arsenic, Total	mg/L	0.00000852	0.0022	0.10	0.114	0.114	0.103	0.085 to 0.115	101	70 to 130	0.125	20
AX11029	Selenium, Total	mg/L	0.0000134	0.0044	0.10	0.102	0.101	0.104	0.085 to 0.115	102	70 to 130	0.996	20
AX11029	Cobalt, Total	mg/L	0.00000512	0.0044	0.10	0.115	0.117	0.104	0.085 to 0.115	101	70 to 130	0.991	20
AX11029	Molybdenum, Total	mg/L	0.0000114	0.0044	0.10	0.101	0.102	0.0913	0.085 to 0.115	91.2	70 to 130	0.438	20
AX11029	Boron, Total	mg/L	-0.000723	0.044	1.00	2.20	2.17	0.965	0.85 to 1.15	97.6	70 to 130	1.38	20
AX11029	Lithium, Total	mg/L	-0.000091	0.022	0.20	0.321	0.310	0.188	0.17 to 0.23	110	70 to 130	3.51	20
AX11029	Barium, Total	mg/L	0.0000149	0.0044	0.10	0.263	0.260	0.0975	0.085 to 0.115	94.4	70 to 130	1.14	20
AX11029	Mercury, Total by CVAA	mg/L	0.0000265	0.0005	0.004	0.00362	0.00363	0.00365	0.0034 to 0.0046	90.4	70 to 130	0.394	20
AX11029	Antimony, Total	mg/L	0.0000674	0.00132	0.10	0.0913	0.0912	0.0924	0.085 to 0.115	91.3	70 to 130	0.173	20
AX11029	Cadmium, Total	mg/L	-0.00000190	0.00044	0.10	0.0992	0.101	0.100	0.085 to 0.115	99.2	70 to 130	1.65	20
AX11029	Calcium, Total	mg/L	-0.010681	0.22	5.00	66.8	67.1	4.69	4.25 to 5.75	84.9	70 to 130	0.321	20

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Issued By: State of Florida, Department of Health
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Alabama Power General Test Laboratory
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Calera, AL 35040
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AX11027

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11029	Solids, Dissolved	mg/L	-3.0	25			320	43.0	40 to 60			0.929	5

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Alabama Power General Test Laboratory
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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AX11028

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0644	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1		0.533	mg/L
* Calcium, Total	HRG	5/20/2017	EPA 200.7		10	1	5		111	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/18/2017	SM 2540C		1		100		740	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		44	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10	J	0.090	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		10	14.0	50		210	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AX11028

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11029	Chromium, Total	mg/L	0.0000134	0.0044	0.10	0.100	0.101	0.100	0.085 to 0.115	100	70 to 130	0.717	20
AX11029	Lead, Total	mg/L	0.00000498	0.0022	0.10	0.102	0.0991	0.101	0.085 to 0.115	102	70 to 130	2.48	20
AX11029	Boron, Total	mg/L	-0.000723	0.044	1.00	2.20	2.17	0.965	0.85 to 1.15	97.6	70 to 130	1.38	20
AX11029	Lithium, Total	mg/L	-0.000091	0.022	0.20	0.321	0.310	0.188	0.17 to 0.23	110	70 to 130	3.51	20
AX11029	Arsenic, Total	mg/L	0.00000852	0.0022	0.10	0.114	0.114	0.103	0.085 to 0.115	101	70 to 130	0.125	20
AX11029	Selenium, Total	mg/L	0.0000134	0.0044	0.10	0.102	0.101	0.104	0.085 to 0.115	102	70 to 130	0.996	20
AX11029	Cobalt, Total	mg/L	0.00000512	0.0044	0.10	0.115	0.117	0.104	0.085 to 0.115	101	70 to 130	0.991	20
AX11029	Molybdenum, Total	mg/L	0.0000114	0.0044	0.10	0.101	0.102	0.0913	0.085 to 0.115	91.2	70 to 130	0.438	20
AX11029	Beryllium, Total	mg/L	0.0000153	0.00132	0.10	0.0869	0.0849	0.0985	0.085 to 0.115	86.9	70 to 130	2.38	20
AX11029	Thallium, Total	mg/L	0.0000158	0.00044	0.10	0.102	0.100	0.100	0.085 to 0.115	102	70 to 130	1.90	20
AX11029	Antimony, Total	mg/L	0.0000674	0.00132	0.10	0.0913	0.0912	0.0924	0.085 to 0.115	91.3	70 to 130	0.173	20
AX11029	Cadmium, Total	mg/L	-0.00000190	0.00044	0.10	0.0992	0.101	0.100	0.085 to 0.115	99.2	70 to 130	1.65	20
AX11029	Calcium, Total	mg/L	-0.010681	0.22	5.00	66.8	67.1	4.69	4.25 to 5.75	84.9	70 to 130	0.321	20
AX11029	Barium, Total	mg/L	0.0000149	0.0044	0.10	0.263	0.260	0.0975	0.085 to 0.115	94.4	70 to 130	1.14	20
AX11029	Mercury, Total by CVAA	mg/L	0.0000265	0.0005	0.004	0.00362	0.00363	0.00365	0.0034 to 0.0046	90.4	70 to 130	0.394	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

Reported: 7/24/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AX11028

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11029	Solids, Dissolved	mg/L	-3.0	25			320	43.0	40 to 60			0.929	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:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AX11029

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005		0.0135	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.169	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1		1.23	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		62.6	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0144	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05		0.101	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	J	0.00984	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/18/2017	SM 2540C		1		25		326	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		22	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10		0.25	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		1	1.40	5.00		11	mg/L

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AX11029

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11029	Chromium, Total	mg/L	0.0000134	0.0044	0.10	0.100	0.101	0.100	0.085 to 0.115	100	70 to 130	0.717	20
AX11029	Lead, Total	mg/L	0.00000498	0.0022	0.10	0.102	0.0991	0.101	0.085 to 0.115	102	70 to 130	2.48	20
AX11029	Beryllium, Total	mg/L	0.0000153	0.00132	0.10	0.0869	0.0849	0.0985	0.085 to 0.115	86.9	70 to 130	2.38	20
AX11029	Thallium, Total	mg/L	0.0000158	0.00044	0.10	0.102	0.100	0.100	0.085 to 0.115	102	70 to 130	1.90	20
AX11029	Arsenic, Total	mg/L	0.00000852	0.0022	0.10	0.114	0.114	0.103	0.085 to 0.115	101	70 to 130	0.125	20
AX11029	Selenium, Total	mg/L	0.0000134	0.0044	0.10	0.102	0.101	0.104	0.085 to 0.115	102	70 to 130	0.996	20
AX11029	Boron, Total	mg/L	-0.000723	0.044	1.00	2.20	2.17	0.965	0.85 to 1.15	97.6	70 to 130	1.38	20
AX11029	Lithium, Total	mg/L	-0.000091	0.022	0.20	0.321	0.310	0.188	0.17 to 0.23	110	70 to 130	3.51	20
AX11029	Antimony, Total	mg/L	0.0000674	0.00132	0.10	0.0913	0.0912	0.0924	0.085 to 0.115	91.3	70 to 130	0.173	20
AX11029	Cadmium, Total	mg/L	-0.00000190	0.00044	0.10	0.0992	0.101	0.100	0.085 to 0.115	99.2	70 to 130	1.65	20
AX11029	Calcium, Total	mg/L	-0.010681	0.22	5.00	66.8	67.1	4.69	4.25 to 5.75	84.9	70 to 130	0.321	20
AX11029	Cobalt, Total	mg/L	0.00000512	0.0044	0.10	0.115	0.117	0.104	0.085 to 0.115	101	70 to 130	0.991	20
AX11029	Molybdenum, Total	mg/L	0.0000114	0.0044	0.10	0.101	0.102	0.0913	0.085 to 0.115	91.2	70 to 130	0.438	20
AX11029	Barium, Total	mg/L	0.0000149	0.0044	0.10	0.263	0.260	0.0975	0.085 to 0.115	94.4	70 to 130	1.14	20
AX11029	Mercury, Total by CVAA	mg/L	0.0000265	0.0005	0.004	0.00362	0.00363	0.00365	0.0034 to 0.0046	90.4	70 to 130	0.394	20

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Expiration: June 30, 2018

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Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AX11029

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11029	Solids, Dissolved	mg/L	-3.0	25			320	43.0	40 to 60			0.929	5

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Calera, AL 35040
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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AX11030

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005		0.00818	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.105	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1		0.661	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		66.5	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0129	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	J	0.0390	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/17/2017	SM 2540C		1		25		361	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		24	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10		0.17	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		5	7.00	25		32	mg/L

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AX11030

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11071	Barium, Total	mg/L	0.00000869	0.0044	0.10	0.165	0.171	0.100	0.085 to 0.115	95.5	70 to 130	4.03	20
AX11071	Chromium, Total	mg/L	0.0000182	0.0044	0.10	0.100	0.105	0.101	0.085 to 0.115	100	70 to 130	4.72	20
AX11071	Mercury, Total by CVAA	mg/L	0.0000236	0.0005	0.004	0.00358	0.00364	0.00373	0.0034 to 0.0046	89.5	70 to 130	1.58	20
AX11071	Antimony, Total	mg/L	0.0000501	0.00132	0.10	0.0912	0.0945	0.0940	0.085 to 0.115	91.2	70 to 130	3.62	20
AX11071	Calcium, Total	mg/L	-0.016284	0.22	5.00	52.6	52.5	4.92	4.25 to 5.75	90.6	70 to 130	0.233	20
AX11071	Beryllium, Total	mg/L	0.0000189	0.00132	0.10	0.0830	0.0854	0.0977	0.085 to 0.115	83.0	70 to 130	2.86	20
AX11071	Cadmium, Total	mg/L	0.00000453	0.00044	0.10	0.100	0.104	0.101	0.085 to 0.115	100	70 to 130	4.26	20
AX11071	Lead, Total	mg/L	0.00000632	0.0022	0.10	0.0958	0.0976	0.100	0.085 to 0.115	95.8	70 to 130	1.90	20
AX11071	Thallium, Total	mg/L	0.0000178	0.00044	0.10	0.0971	0.0988	0.0997	0.085 to 0.115	97.1	70 to 130	1.75	20
AX11071	Arsenic, Total	mg/L	0.00000741	0.0022	0.10	0.139	0.144	0.104	0.085 to 0.115	103	70 to 130	3.82	20
AX11071	Cobalt, Total	mg/L	0.00000561	0.0044	0.10	0.106	0.109	0.105	0.085 to 0.115	101	70 to 130	3.12	20
AX11071	Lithium, Total	mg/L	0.000014	0.022	0.20	0.732	0.729	0.197	0.17 to 0.23	103	70 to 130	0.424	20
AX11071	Molybdenum, Total	mg/L	0.0000176	0.0044	0.10	0.102	0.107	0.0924	0.085 to 0.115	91.0	70 to 130	4.85	20
AX11071	Selenium, Total	mg/L	0.0000231	0.0044	0.10	0.101	0.104	0.105	0.085 to 0.115	101	70 to 130	2.73	20
AX11071	Boron, Total	mg/L	-0.001192	0.044	1.00	1.59	1.58	0.963	0.85 to 1.15	96.7	70 to 130	0.547	20

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Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AX11030

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11071	Solids, Dissolved	mg/L	-5.0	25			309	46.0	40 to 60			4.04	5

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AX11031

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.103	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1		1.94	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		78.6	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0125	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	J	0.0436	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/17/2017	SM 2540C		1		25		576	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		48	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10		0.10	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		1	1.40	5.00		30	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AX11031

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11071	Barium, Total	mg/L	0.00000869	0.0044	0.10	0.165	0.171	0.100	0.085 to 0.115	95.5	70 to 130	4.03	20
AX11071	Boron, Total	mg/L	-0.001192	0.044	1.00	1.59	1.58	0.963	0.85 to 1.15	96.7	70 to 130	0.547	20
AX11071	Chromium, Total	mg/L	0.0000182	0.0044	0.10	0.100	0.105	0.101	0.085 to 0.115	100	70 to 130	4.72	20
AX11071	Mercury, Total by CVAA	mg/L	0.0000236	0.0005	0.004	0.00358	0.00364	0.00373	0.0034 to 0.0046	89.5	70 to 130	1.58	20
AX11071	Antimony, Total	mg/L	0.0000501	0.00132	0.10	0.0912	0.0945	0.0940	0.085 to 0.115	91.2	70 to 130	3.62	20
AX11071	Calcium, Total	mg/L	-0.016284	0.22	5.00	52.6	52.5	4.92	4.25 to 5.75	90.6	70 to 130	0.233	20
AX11071	Arsenic, Total	mg/L	0.00000741	0.0022	0.10	0.139	0.144	0.104	0.085 to 0.115	103	70 to 130	3.82	20
AX11071	Cobalt, Total	mg/L	0.00000561	0.0044	0.10	0.106	0.109	0.105	0.085 to 0.115	101	70 to 130	3.12	20
AX11071	Lithium, Total	mg/L	0.000014	0.022	0.20	0.732	0.729	0.197	0.17 to 0.23	103	70 to 130	0.424	20
AX11071	Molybdenum, Total	mg/L	0.0000176	0.0044	0.10	0.102	0.107	0.0924	0.085 to 0.115	91.0	70 to 130	4.85	20
AX11071	Selenium, Total	mg/L	0.0000231	0.0044	0.10	0.101	0.104	0.105	0.085 to 0.115	101	70 to 130	2.73	20
AX11071	Beryllium, Total	mg/L	0.0000189	0.00132	0.10	0.0830	0.0854	0.0977	0.085 to 0.115	83.0	70 to 130	2.86	20
AX11071	Cadmium, Total	mg/L	0.00000453	0.00044	0.10	0.100	0.104	0.101	0.085 to 0.115	100	70 to 130	4.26	20
AX11071	Lead, Total	mg/L	0.00000632	0.0022	0.10	0.0958	0.0976	0.100	0.085 to 0.115	95.8	70 to 130	1.90	20
AX11071	Thallium, Total	mg/L	0.0000178	0.00044	0.10	0.0971	0.0988	0.0997	0.085 to 0.115	97.1	70 to 130	1.75	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AX11031

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11071	Solids, Dissolved	mg/L	-5.0	25			309	46.0	40 to 60			4.04	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:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-1 Dup

Laboratory ID Number: AX11032

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005		0.0183	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0406	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1		0.218	mg/L
* Calcium, Total	HRG	5/20/2017	EPA 200.7		10	1	5		187	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0601	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/17/2017	SM 2540C		1		100		1290	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		30	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10	J	0.050	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		30	42.0	150		860	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-1 Dup

Laboratory ID Number: AX11032

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11071	Barium, Total	mg/L	0.00000869	0.0044	0.10	0.165	0.171	0.100	0.085 to 0.115	95.5	70 to 130	4.03	20
AX11071	Boron, Total	mg/L	-0.001192	0.044	1.00	1.59	1.58	0.963	0.85 to 1.15	96.7	70 to 130	0.547	20
AX11071	Antimony, Total	mg/L	0.0000501	0.00132	0.10	0.0912	0.0945	0.0940	0.085 to 0.115	91.2	70 to 130	3.62	20
AX11071	Calcium, Total	mg/L	-0.016284	0.22	5.00	52.6	52.5	4.92	4.25 to 5.75	90.6	70 to 130	0.233	20
AX11071	Chromium, Total	mg/L	0.0000182	0.0044	0.10	0.100	0.105	0.101	0.085 to 0.115	100	70 to 130	4.72	20
AX11071	Mercury, Total by CVAA	mg/L	0.0000236	0.0005	0.004	0.00358	0.00364	0.00373	0.0034 to 0.0046	89.5	70 to 130	1.58	20
AX11071	Beryllium, Total	mg/L	0.0000189	0.00132	0.10	0.0830	0.0854	0.0977	0.085 to 0.115	83.0	70 to 130	2.86	20
AX11071	Cadmium, Total	mg/L	0.00000453	0.00044	0.10	0.100	0.104	0.101	0.085 to 0.115	100	70 to 130	4.26	20
AX11071	Lead, Total	mg/L	0.00000632	0.0022	0.10	0.0958	0.0976	0.100	0.085 to 0.115	95.8	70 to 130	1.90	20
AX11071	Thallium, Total	mg/L	0.0000178	0.00044	0.10	0.0971	0.0988	0.0997	0.085 to 0.115	97.1	70 to 130	1.75	20
AX11071	Arsenic, Total	mg/L	0.00000741	0.0022	0.10	0.139	0.144	0.104	0.085 to 0.115	103	70 to 130	3.82	20
AX11071	Cobalt, Total	mg/L	0.00000561	0.0044	0.10	0.106	0.109	0.105	0.085 to 0.115	101	70 to 130	3.12	20
AX11071	Lithium, Total	mg/L	0.000014	0.022	0.20	0.732	0.729	0.197	0.17 to 0.23	103	70 to 130	0.424	20
AX11071	Molybdenum, Total	mg/L	0.0000176	0.0044	0.10	0.102	0.107	0.0924	0.085 to 0.115	91.0	70 to 130	4.85	20
AX11071	Selenium, Total	mg/L	0.0000231	0.0044	0.10	0.101	0.104	0.105	0.085 to 0.115	101	70 to 130	2.73	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-1 Dup

Laboratory ID Number: AX11032

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11071	Solids, Dissolved	mg/L	-5.0	25			309	46.0	40 to 60			4.04	5

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CC:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX11033

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/17/2017	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00	U	<0.60	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10	U	<0.032	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	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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Reported: 7/24/2017
Version: 2.0

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX11033

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11071	Barium, Total	mg/L	0.00000869	0.0044	0.10	0.165	0.171	0.100	0.085 to 0.115	95.5	70 to 130	4.03	20
AX11071	Boron, Total	mg/L	-0.001192	0.044	1.00	1.59	1.58	0.963	0.85 to 1.15	96.7	70 to 130	0.547	20
AX11071	Chromium, Total	mg/L	0.0000182	0.0044	0.10	0.100	0.105	0.101	0.085 to 0.115	100	70 to 130	4.72	20
AX11071	Mercury, Total by CVAA	mg/L	0.0000236	0.0005	0.004	0.00358	0.00364	0.00373	0.0034 to 0.0046	89.5	70 to 130	1.58	20
AX11071	Beryllium, Total	mg/L	0.0000189	0.00132	0.10	0.0830	0.0854	0.0977	0.085 to 0.115	83.0	70 to 130	2.86	20
AX11071	Cadmium, Total	mg/L	0.00000453	0.00044	0.10	0.100	0.104	0.101	0.085 to 0.115	100	70 to 130	4.26	20
AX11071	Lead, Total	mg/L	0.00000632	0.0022	0.10	0.0958	0.0976	0.100	0.085 to 0.115	95.8	70 to 130	1.90	20
AX11071	Thallium, Total	mg/L	0.0000178	0.00044	0.10	0.0971	0.0988	0.0997	0.085 to 0.115	97.1	70 to 130	1.75	20
AX11071	Arsenic, Total	mg/L	0.00000741	0.0022	0.10	0.139	0.144	0.104	0.085 to 0.115	103	70 to 130	3.82	20
AX11071	Cobalt, Total	mg/L	0.00000561	0.0044	0.10	0.106	0.109	0.105	0.085 to 0.115	101	70 to 130	3.12	20
AX11071	Lithium, Total	mg/L	0.000014	0.022	0.20	0.732	0.729	0.197	0.17 to 0.23	103	70 to 130	0.424	20
AX11071	Molybdenum, Total	mg/L	0.0000176	0.0044	0.10	0.102	0.107	0.0924	0.085 to 0.115	91.0	70 to 130	4.85	20
AX11071	Selenium, Total	mg/L	0.0000231	0.0044	0.10	0.101	0.104	0.105	0.085 to 0.115	101	70 to 130	2.73	20
AX11071	Antimony, Total	mg/L	0.0000501	0.00132	0.10	0.0912	0.0945	0.0940	0.085 to 0.115	91.2	70 to 130	3.62	20
AX11071	Calcium, Total	mg/L	-0.016284	0.22	5.00	52.6	52.5	4.92	4.25 to 5.75	90.6	70 to 130	0.233	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

Reported: 7/24/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX11033

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11071	Solids, Dissolved	mg/L	-5.0	25			309	46.0	40 to 60			4.04	5

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

Reported: 7/24/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AX11066

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0930	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1	J	0.0953	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		8.56	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	J	0.00646	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/17/2017	SM 2540C		1		25		136	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		23	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10	U	<0.032	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		2	2.80	10		33	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AX11066

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11071	Barium, Total	mg/L	0.00000869	0.0044	0.10	0.165	0.171	0.100	0.085 to 0.115	95.5	70 to 130	4.03	20
AX11071	Boron, Total	mg/L	-0.001192	0.044	1.00	1.59	1.58	0.963	0.85 to 1.15	96.7	70 to 130	0.547	20
AX11071	Chromium, Total	mg/L	0.0000182	0.0044	0.10	0.100	0.105	0.101	0.085 to 0.115	100	70 to 130	4.72	20
AX11071	Mercury, Total by CVAA	mg/L	0.0000236	0.0005	0.004	0.00358	0.00364	0.00373	0.0034 to 0.0046	89.5	70 to 130	1.58	20
AX11071	Antimony, Total	mg/L	0.0000501	0.00132	0.10	0.0912	0.0945	0.0940	0.085 to 0.115	91.2	70 to 130	3.62	20
AX11071	Calcium, Total	mg/L	-0.016284	0.22	5.00	52.6	52.5	4.92	4.25 to 5.75	90.6	70 to 130	0.233	20
AX11071	Beryllium, Total	mg/L	0.0000189	0.00132	0.10	0.0830	0.0854	0.0977	0.085 to 0.115	83.0	70 to 130	2.86	20
AX11071	Cadmium, Total	mg/L	0.00000453	0.00044	0.10	0.100	0.104	0.101	0.085 to 0.115	100	70 to 130	4.26	20
AX11071	Lead, Total	mg/L	0.00000632	0.0022	0.10	0.0958	0.0976	0.100	0.085 to 0.115	95.8	70 to 130	1.90	20
AX11071	Thallium, Total	mg/L	0.0000178	0.00044	0.10	0.0971	0.0988	0.0997	0.085 to 0.115	97.1	70 to 130	1.75	20
AX11071	Arsenic, Total	mg/L	0.00000741	0.0022	0.10	0.139	0.144	0.104	0.085 to 0.115	103	70 to 130	3.82	20
AX11071	Cobalt, Total	mg/L	0.00000561	0.0044	0.10	0.106	0.109	0.105	0.085 to 0.115	101	70 to 130	3.12	20
AX11071	Lithium, Total	mg/L	0.000014	0.022	0.20	0.732	0.729	0.197	0.17 to 0.23	103	70 to 130	0.424	20
AX11071	Molybdenum, Total	mg/L	0.0000176	0.0044	0.10	0.102	0.107	0.0924	0.085 to 0.115	91.0	70 to 130	4.85	20
AX11071	Selenium, Total	mg/L	0.0000231	0.0044	0.10	0.101	0.104	0.105	0.085 to 0.115	101	70 to 130	2.73	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AX11066

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11071	Solids, Dissolved	mg/L	-5.0	25			309	46.0	40 to 60			4.04	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:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AX11067

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0454	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1		0.304	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		36.1	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05		0.113	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0467	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/17/2017	SM 2540C		1		25		255	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		17	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10		0.17	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		10	14.0	50		100	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AX11067

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11071	Barium, Total	mg/L	0.00000869	0.0044	0.10	0.165	0.171	0.100	0.085 to 0.115	95.5	70 to 130	4.03	20
AX11071	Boron, Total	mg/L	-0.001192	0.044	1.00	1.59	1.58	0.963	0.85 to 1.15	96.7	70 to 130	0.547	20
AX11071	Chromium, Total	mg/L	0.0000182	0.0044	0.10	0.100	0.105	0.101	0.085 to 0.115	100	70 to 130	4.72	20
AX11071	Mercury, Total by CVAA	mg/L	0.0000236	0.0005	0.004	0.00358	0.00364	0.00373	0.0034 to 0.0046	89.5	70 to 130	1.58	20
AX11071	Antimony, Total	mg/L	0.0000501	0.00132	0.10	0.0912	0.0945	0.0940	0.085 to 0.115	91.2	70 to 130	3.62	20
AX11071	Calcium, Total	mg/L	-0.016284	0.22	5.00	52.6	52.5	4.92	4.25 to 5.75	90.6	70 to 130	0.233	20
AX11071	Arsenic, Total	mg/L	0.00000741	0.0022	0.10	0.139	0.144	0.104	0.085 to 0.115	103	70 to 130	3.82	20
AX11071	Cobalt, Total	mg/L	0.00000561	0.0044	0.10	0.106	0.109	0.105	0.085 to 0.115	101	70 to 130	3.12	20
AX11071	Lithium, Total	mg/L	0.000014	0.022	0.20	0.732	0.729	0.197	0.17 to 0.23	103	70 to 130	0.424	20
AX11071	Molybdenum, Total	mg/L	0.0000176	0.0044	0.10	0.102	0.107	0.0924	0.085 to 0.115	91.0	70 to 130	4.85	20
AX11071	Selenium, Total	mg/L	0.0000231	0.0044	0.10	0.101	0.104	0.105	0.085 to 0.115	101	70 to 130	2.73	20
AX11071	Beryllium, Total	mg/L	0.0000189	0.00132	0.10	0.0830	0.0854	0.0977	0.085 to 0.115	83.0	70 to 130	2.86	20
AX11071	Cadmium, Total	mg/L	0.00000453	0.00044	0.10	0.100	0.104	0.101	0.085 to 0.115	100	70 to 130	4.26	20
AX11071	Lead, Total	mg/L	0.00000632	0.0022	0.10	0.0958	0.0976	0.100	0.085 to 0.115	95.8	70 to 130	1.90	20
AX11071	Thallium, Total	mg/L	0.0000178	0.00044	0.10	0.0971	0.0988	0.0997	0.085 to 0.115	97.1	70 to 130	1.75	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AX11067

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11071	Solids, Dissolved	mg/L	-5.0	25			309	46.0	40 to 60			4.04	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

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Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-21 Dup

Laboratory ID Number: AX11068

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0432	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1		0.297	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		36.4	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05		0.114	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0429	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/17/2017	SM 2540C		1		25		253	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		17	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10		0.16	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		10	14.0	50		100	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-21 Dup

Laboratory ID Number: AX11068

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11071	Barium, Total	mg/L	0.00000869	0.0044	0.10	0.165	0.171	0.100	0.085 to 0.115	95.5	70 to 130	4.03	20
AX11071	Boron, Total	mg/L	-0.001192	0.044	1.00	1.59	1.58	0.963	0.85 to 1.15	96.7	70 to 130	0.547	20
AX11071	Chromium, Total	mg/L	0.0000182	0.0044	0.10	0.100	0.105	0.101	0.085 to 0.115	100	70 to 130	4.72	20
AX11071	Mercury, Total by CVAA	mg/L	0.0000236	0.0005	0.004	0.00358	0.00364	0.00373	0.0034 to 0.0046	89.5	70 to 130	1.58	20
AX11071	Arsenic, Total	mg/L	0.00000741	0.0022	0.10	0.139	0.144	0.104	0.085 to 0.115	103	70 to 130	3.82	20
AX11071	Cobalt, Total	mg/L	0.00000561	0.0044	0.10	0.106	0.109	0.105	0.085 to 0.115	101	70 to 130	3.12	20
AX11071	Lithium, Total	mg/L	0.000014	0.022	0.20	0.732	0.729	0.197	0.17 to 0.23	103	70 to 130	0.424	20
AX11071	Molybdenum, Total	mg/L	0.0000176	0.0044	0.10	0.102	0.107	0.0924	0.085 to 0.115	91.0	70 to 130	4.85	20
AX11071	Selenium, Total	mg/L	0.0000231	0.0044	0.10	0.101	0.104	0.105	0.085 to 0.115	101	70 to 130	2.73	20
AX11071	Antimony, Total	mg/L	0.0000501	0.00132	0.10	0.0912	0.0945	0.0940	0.085 to 0.115	91.2	70 to 130	3.62	20
AX11071	Calcium, Total	mg/L	-0.016284	0.22	5.00	52.6	52.5	4.92	4.25 to 5.75	90.6	70 to 130	0.233	20
AX11071	Beryllium, Total	mg/L	0.0000189	0.00132	0.10	0.0830	0.0854	0.0977	0.085 to 0.115	83.0	70 to 130	2.86	20
AX11071	Cadmium, Total	mg/L	0.00000453	0.00044	0.10	0.100	0.104	0.101	0.085 to 0.115	100	70 to 130	4.26	20
AX11071	Lead, Total	mg/L	0.00000632	0.0022	0.10	0.0958	0.0976	0.100	0.085 to 0.115	95.8	70 to 130	1.90	20
AX11071	Thallium, Total	mg/L	0.0000178	0.00044	0.10	0.0971	0.0988	0.0997	0.085 to 0.115	97.1	70 to 130	1.75	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

Reported: 7/24/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-21 Dup

Laboratory ID Number: AX11068

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11071	Solids, Dissolved	mg/L	-5.0	25			309	46.0	40 to 60			4.04	5

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AX11069

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0232	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1		0.320	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		35.5	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05		0.132	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0883	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/17/2017	SM 2540C		1		25		236	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		15	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10		0.15	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		10	14.0	50		91	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AX11069

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11071	Barium, Total	mg/L	0.00000869	0.0044	0.10	0.165	0.171	0.100	0.085 to 0.115	95.5	70 to 130	4.03	20
AX11071	Boron, Total	mg/L	-0.001192	0.044	1.00	1.59	1.58	0.963	0.85 to 1.15	96.7	70 to 130	0.547	20
AX11071	Chromium, Total	mg/L	0.0000182	0.0044	0.10	0.100	0.105	0.101	0.085 to 0.115	100	70 to 130	4.72	20
AX11071	Mercury, Total by CVAA	mg/L	0.0000236	0.0005	0.004	0.00358	0.00364	0.00373	0.0034 to 0.0046	89.5	70 to 130	1.58	20
AX11071	Antimony, Total	mg/L	0.0000501	0.00132	0.10	0.0912	0.0945	0.0940	0.085 to 0.115	91.2	70 to 130	3.62	20
AX11071	Calcium, Total	mg/L	-0.016284	0.22	5.00	52.6	52.5	4.92	4.25 to 5.75	90.6	70 to 130	0.233	20
AX11071	Beryllium, Total	mg/L	0.0000189	0.00132	0.10	0.0830	0.0854	0.0977	0.085 to 0.115	83.0	70 to 130	2.86	20
AX11071	Cadmium, Total	mg/L	0.00000453	0.00044	0.10	0.100	0.104	0.101	0.085 to 0.115	100	70 to 130	4.26	20
AX11071	Lead, Total	mg/L	0.00000632	0.0022	0.10	0.0958	0.0976	0.100	0.085 to 0.115	95.8	70 to 130	1.90	20
AX11071	Thallium, Total	mg/L	0.0000178	0.00044	0.10	0.0971	0.0988	0.0997	0.085 to 0.115	97.1	70 to 130	1.75	20
AX11071	Arsenic, Total	mg/L	0.00000741	0.0022	0.10	0.139	0.144	0.104	0.085 to 0.115	103	70 to 130	3.82	20
AX11071	Cobalt, Total	mg/L	0.00000561	0.0044	0.10	0.106	0.109	0.105	0.085 to 0.115	101	70 to 130	3.12	20
AX11071	Lithium, Total	mg/L	0.000014	0.022	0.20	0.732	0.729	0.197	0.17 to 0.23	103	70 to 130	0.424	20
AX11071	Molybdenum, Total	mg/L	0.0000176	0.0044	0.10	0.102	0.107	0.0924	0.085 to 0.115	91.0	70 to 130	4.85	20
AX11071	Selenium, Total	mg/L	0.0000231	0.0044	0.10	0.101	0.104	0.105	0.085 to 0.115	101	70 to 130	2.73	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AX11069

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11071	Solids, Dissolved	mg/L	-5.0	25			309	46.0	40 to 60			4.04	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:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AX11070

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	J	0.00393	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.100	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1		0.281	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		30.4	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003		0.00323	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05		0.144	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0484	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	J	0.00905	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	J	0.000210	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/17/2017	SM 2540C		1		25		191	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		10	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10		0.18	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		10	14.0	50		74	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AX11070

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11071	Barium, Total	mg/L	0.00000869	0.0044	0.10	0.165	0.171	0.100	0.085 to 0.115	95.5	70 to 130	4.03	20
AX11071	Boron, Total	mg/L	-0.001192	0.044	1.00	1.59	1.58	0.963	0.85 to 1.15	96.7	70 to 130	0.547	20
AX11071	Antimony, Total	mg/L	0.0000501	0.00132	0.10	0.0912	0.0945	0.0940	0.085 to 0.115	91.2	70 to 130	3.62	20
AX11071	Calcium, Total	mg/L	-0.016284	0.22	5.00	52.6	52.5	4.92	4.25 to 5.75	90.6	70 to 130	0.233	20
AX11071	Chromium, Total	mg/L	0.0000182	0.0044	0.10	0.100	0.105	0.101	0.085 to 0.115	100	70 to 130	4.72	20
AX11071	Mercury, Total by CVAA	mg/L	0.0000236	0.0005	0.004	0.00358	0.00364	0.00373	0.0034 to 0.0046	89.5	70 to 130	1.58	20
AX11071	Arsenic, Total	mg/L	0.00000741	0.0022	0.10	0.139	0.144	0.104	0.085 to 0.115	103	70 to 130	3.82	20
AX11071	Cobalt, Total	mg/L	0.00000561	0.0044	0.10	0.106	0.109	0.105	0.085 to 0.115	101	70 to 130	3.12	20
AX11071	Lithium, Total	mg/L	0.000014	0.022	0.20	0.732	0.729	0.197	0.17 to 0.23	103	70 to 130	0.424	20
AX11071	Molybdenum, Total	mg/L	0.0000176	0.0044	0.10	0.102	0.107	0.0924	0.085 to 0.115	91.0	70 to 130	4.85	20
AX11071	Selenium, Total	mg/L	0.0000231	0.0044	0.10	0.101	0.104	0.105	0.085 to 0.115	101	70 to 130	2.73	20
AX11071	Beryllium, Total	mg/L	0.0000189	0.00132	0.10	0.0830	0.0854	0.0977	0.085 to 0.115	83.0	70 to 130	2.86	20
AX11071	Cadmium, Total	mg/L	0.00000453	0.00044	0.10	0.100	0.104	0.101	0.085 to 0.115	100	70 to 130	4.26	20
AX11071	Lead, Total	mg/L	0.00000632	0.0022	0.10	0.0958	0.0976	0.100	0.085 to 0.115	95.8	70 to 130	1.90	20
AX11071	Thallium, Total	mg/L	0.0000178	0.00044	0.10	0.0971	0.0988	0.0997	0.085 to 0.115	97.1	70 to 130	1.75	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AX11070

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11071	Solids, Dissolved	mg/L	-5.0	25			309	46.0	40 to 60			4.04	5

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AX11071

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005		0.0361	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0690	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1		0.622	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		48.1	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	J	0.00488	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/22/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05		0.526	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0108	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/17/2017	SM 2540C		1		25		285	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		19	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10		0.14	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		10	14.0	50		84	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AX11071

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11071	Barium, Total	mg/L	0.00000869	0.0044	0.10	0.165	0.171	0.100	0.085 to 0.115	95.5	70 to 130	4.03	20
AX11071	Boron, Total	mg/L	-0.001192	0.044	1.00	1.59	1.58	0.963	0.85 to 1.15	96.7	70 to 130	0.547	20
AX11071	Chromium, Total	mg/L	0.0000182	0.0044	0.10	0.100	0.105	0.101	0.085 to 0.115	100	70 to 130	4.72	20
AX11071	Mercury, Total by CVAA	mg/L	0.0000236	0.0005	0.004	0.00358	0.00364	0.00373	0.0034 to 0.0046	89.5	70 to 130	1.58	20
AX11071	Beryllium, Total	mg/L	0.0000189	0.00132	0.10	0.0830	0.0854	0.0977	0.085 to 0.115	83.0	70 to 130	2.86	20
AX11071	Cadmium, Total	mg/L	0.00000453	0.00044	0.10	0.100	0.104	0.101	0.085 to 0.115	100	70 to 130	4.26	20
AX11071	Lead, Total	mg/L	0.00000632	0.0022	0.10	0.0958	0.0976	0.100	0.085 to 0.115	95.8	70 to 130	1.90	20
AX11071	Thallium, Total	mg/L	0.0000178	0.00044	0.10	0.0971	0.0988	0.0997	0.085 to 0.115	97.1	70 to 130	1.75	20
AX11071	Arsenic, Total	mg/L	0.00000741	0.0022	0.10	0.139	0.144	0.104	0.085 to 0.115	103	70 to 130	3.82	20
AX11071	Cobalt, Total	mg/L	0.00000561	0.0044	0.10	0.106	0.109	0.105	0.085 to 0.115	101	70 to 130	3.12	20
AX11071	Lithium, Total	mg/L	0.000014	0.022	0.20	0.732	0.729	0.197	0.17 to 0.23	103	70 to 130	0.424	20
AX11071	Molybdenum, Total	mg/L	0.0000176	0.0044	0.10	0.102	0.107	0.0924	0.085 to 0.115	91.0	70 to 130	4.85	20
AX11071	Selenium, Total	mg/L	0.0000231	0.0044	0.10	0.101	0.104	0.105	0.085 to 0.115	101	70 to 130	2.73	20
AX11071	Antimony, Total	mg/L	0.0000501	0.00132	0.10	0.0912	0.0945	0.0940	0.085 to 0.115	91.2	70 to 130	3.62	20
AX11071	Calcium, Total	mg/L	-0.016284	0.22	5.00	52.6	52.5	4.92	4.25 to 5.75	90.6	70 to 130	0.233	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 09-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AX11071

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11071	Solids, Dissolved	mg/L	-5.0	25			309	46.0	40 to 60			4.04	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:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AX11072

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0281	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1		0.486	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		47.4	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0140	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/23/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05		0.603	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/17/2017	SM 2540C		1		25		332	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		14	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10		0.11	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		10	14.0	50		160	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AX11072

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11077	Antimony, Total	mg/L	0.0000501	0.00132	0.10	0.0911	0.0911	0.0940	0.085 to 0.115	91.1	70 to 130	0.00477	20
AX11077	Selenium, Total	mg/L	0.0000231	0.0044	0.10	0.102	0.101	0.105	0.085 to 0.115	102	70 to 130	1.07	20
AX11077	Chromium, Total	mg/L	0.0000182	0.0044	0.10	0.100	0.0996	0.101	0.085 to 0.115	100	70 to 130	0.531	20
AX11077	Cadmium, Total	mg/L	0.00000453	0.00044	0.10	0.1000	0.0982	0.101	0.085 to 0.115	100	70 to 130	1.76	20
AX11077	Cobalt, Total	mg/L	0.00000561	0.0044	0.10	0.0984	0.0976	0.105	0.085 to 0.115	98.4	70 to 130	0.856	20
AX11077	Boron, Total	mg/L	0.00132	0.044	1.00	0.960	0.978	0.989	0.85 to 1.15	96.0	70 to 130	1.78	20
AX11077	Molybdenum, Total	mg/L	0.0000176	0.0044	0.10	0.0902	0.0904	0.0924	0.085 to 0.115	90.2	70 to 130	0.256	20
AX11077	Calcium, Total	mg/L	-0.0106	0.22	5.00	4.92	4.99	5.07	4.25 to 5.75	98.4	70 to 130	1.41	20
AX11077	Lithium, Total	mg/L	-0.0000380	0.022	0.20	0.197	0.202	0.202	0.17 to 0.23	98.6	70 to 130	2.56	20
AX11077	Arsenic, Total	mg/L	0.00000741	0.0022	0.10	0.102	0.101	0.104	0.085 to 0.115	102	70 to 130	0.629	20
AX11077	Barium, Total	mg/L	0.00000869	0.0044	0.10	0.0975	0.0987	0.100	0.085 to 0.115	97.5	70 to 130	1.23	20
AX11077	Beryllium, Total	mg/L	0.0000189	0.00132	0.10	0.0850	0.0891	0.0977	0.085 to 0.115	85.0	70 to 130	4.67	20
AX11077	Mercury, Total by CVAA	mg/L	0.0000657	0.0005	0.004	0.00382	0.00380	0.00374	0.0034 to 0.0046	95.5	70 to 130	0.564	20
AX11077	Lead, Total	mg/L	0.00000632	0.0022	0.10	0.0965	0.101	0.100	0.085 to 0.115	96.5	70 to 130	4.44	20
AX11077	Thallium, Total	mg/L	0.0000178	0.00044	0.10	0.0972	0.100	0.0997	0.085 to 0.115	97.2	70 to 130	2.88	20

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
Version: 2.0

Alabama Power General Test Laboratory
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AX11072

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11076	Solids, Dissolved	mg/L	-5.0	25			334	46.0	40 to 60			3.47	5

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AX11073

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005		0.0814	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0449	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1		1.41	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		62.5	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0133	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/23/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05		0.552	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	J	0.000327	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/17/2017	SM 2540C		1		25		381	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		18	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10		0.23	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		10	14.0	50		74	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AX11073

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11077	Antimony, Total	mg/L	0.0000501	0.00132	0.10	0.0911	0.0911	0.0940	0.085 to 0.115	91.1	70 to 130	0.00477	20
AX11077	Selenium, Total	mg/L	0.0000231	0.0044	0.10	0.102	0.101	0.105	0.085 to 0.115	102	70 to 130	1.07	20
AX11077	Chromium, Total	mg/L	0.0000182	0.0044	0.10	0.100	0.0996	0.101	0.085 to 0.115	100	70 to 130	0.531	20
AX11077	Boron, Total	mg/L	0.00132	0.044	1.00	0.960	0.978	0.989	0.85 to 1.15	96.0	70 to 130	1.78	20
AX11077	Molybdenum, Total	mg/L	0.0000176	0.0044	0.10	0.0902	0.0904	0.0924	0.085 to 0.115	90.2	70 to 130	0.256	20
AX11077	Cadmium, Total	mg/L	0.00000453	0.00044	0.10	0.1000	0.0982	0.101	0.085 to 0.115	100	70 to 130	1.76	20
AX11077	Cobalt, Total	mg/L	0.00000561	0.0044	0.10	0.0984	0.0976	0.105	0.085 to 0.115	98.4	70 to 130	0.856	20
AX11077	Arsenic, Total	mg/L	0.00000741	0.0022	0.10	0.102	0.101	0.104	0.085 to 0.115	102	70 to 130	0.629	20
AX11077	Barium, Total	mg/L	0.00000869	0.0044	0.10	0.0975	0.0987	0.100	0.085 to 0.115	97.5	70 to 130	1.23	20
AX11077	Beryllium, Total	mg/L	0.0000189	0.00132	0.10	0.0850	0.0891	0.0977	0.085 to 0.115	85.0	70 to 130	4.67	20
AX11077	Mercury, Total by CVAA	mg/L	0.0000657	0.0005	0.004	0.00382	0.00380	0.00374	0.0034 to 0.0046	95.5	70 to 130	0.564	20
AX11077	Lead, Total	mg/L	0.00000632	0.0022	0.10	0.0965	0.101	0.100	0.085 to 0.115	96.5	70 to 130	4.44	20
AX11077	Thallium, Total	mg/L	0.0000178	0.00044	0.10	0.0972	0.100	0.0997	0.085 to 0.115	97.2	70 to 130	2.88	20
AX11077	Calcium, Total	mg/L	-0.0106	0.22	5.00	4.92	4.99	5.07	4.25 to 5.75	98.4	70 to 130	1.41	20
AX11077	Lithium, Total	mg/L	-0.0000380	0.022	0.20	0.197	0.202	0.202	0.17 to 0.23	98.6	70 to 130	2.56	20

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Reported: 7/24/2017
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AX11073

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11076	Solids, Dissolved	mg/L	-5.0	25			334	46.0	40 to 60			3.47	5

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Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AX11074

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005		0.499	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.158	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1		1.99	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		66.2	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0179	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/23/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05		0.622	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0566	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/17/2017	SM 2540C		1		50		492	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		24	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10		0.36	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		10	14.0	50		82	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AX11074

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11077	Selenium, Total	mg/L	0.0000231	0.0044	0.10	0.102	0.101	0.105	0.085 to 0.115	102	70 to 130	1.07	20
AX11077	Chromium, Total	mg/L	0.0000182	0.0044	0.10	0.100	0.0996	0.101	0.085 to 0.115	100	70 to 130	0.531	20
AX11077	Antimony, Total	mg/L	0.0000501	0.00132	0.10	0.0911	0.0911	0.0940	0.085 to 0.115	91.1	70 to 130	0.00477	20
AX11077	Calcium, Total	mg/L	-0.0106	0.22	5.00	4.92	4.99	5.07	4.25 to 5.75	98.4	70 to 130	1.41	20
AX11077	Lithium, Total	mg/L	-0.0000380	0.022	0.20	0.197	0.202	0.202	0.17 to 0.23	98.6	70 to 130	2.56	20
AX11077	Lead, Total	mg/L	0.00000632	0.0022	0.10	0.0965	0.101	0.100	0.085 to 0.115	96.5	70 to 130	4.44	20
AX11077	Thallium, Total	mg/L	0.0000178	0.00044	0.10	0.0972	0.100	0.0997	0.085 to 0.115	97.2	70 to 130	2.88	20
AX11077	Cadmium, Total	mg/L	0.00000453	0.00044	0.10	0.1000	0.0982	0.101	0.085 to 0.115	100	70 to 130	1.76	20
AX11077	Cobalt, Total	mg/L	0.00000561	0.0044	0.10	0.0984	0.0976	0.105	0.085 to 0.115	98.4	70 to 130	0.856	20
AX11077	Boron, Total	mg/L	0.00132	0.044	1.00	0.960	0.978	0.989	0.85 to 1.15	96.0	70 to 130	1.78	20
AX11077	Molybdenum, Total	mg/L	0.0000176	0.0044	0.10	0.0902	0.0904	0.0924	0.085 to 0.115	90.2	70 to 130	0.256	20
AX11077	Arsenic, Total	mg/L	0.00000741	0.0022	0.10	0.102	0.101	0.104	0.085 to 0.115	102	70 to 130	0.629	20
AX11077	Barium, Total	mg/L	0.00000869	0.0044	0.10	0.0975	0.0987	0.100	0.085 to 0.115	97.5	70 to 130	1.23	20
AX11077	Beryllium, Total	mg/L	0.0000189	0.00132	0.10	0.0850	0.0891	0.0977	0.085 to 0.115	85.0	70 to 130	4.67	20
AX11077	Mercury, Total by CVAA	mg/L	0.0000657	0.0005	0.004	0.00382	0.00380	0.00374	0.0034 to 0.0046	95.5	70 to 130	0.564	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AX11074

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11076	Solids, Dissolved	mg/L	-5.0	25			334	46.0	40 to 60			3.47	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:

Reported: 7/24/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX11075

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/23/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/17/2017	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00	U	<0.60	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10	U	<0.032	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX11075

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11077	Selenium, Total	mg/L	0.0000231	0.0044	0.10	0.102	0.101	0.105	0.085 to 0.115	102	70 to 130	1.07	20
AX11077	Antimony, Total	mg/L	0.0000501	0.00132	0.10	0.0911	0.0911	0.0940	0.085 to 0.115	91.1	70 to 130	0.00472	20
AX11077	Chromium, Total	mg/L	0.0000182	0.0044	0.10	0.100	0.0996	0.101	0.085 to 0.115	100	70 to 130	0.531	20
AX11077	Lead, Total	mg/L	0.00000632	0.0022	0.10	0.0965	0.101	0.100	0.085 to 0.115	96.5	70 to 130	4.44	20
AX11077	Thallium, Total	mg/L	0.0000178	0.00044	0.10	0.0972	0.100	0.0997	0.085 to 0.115	97.2	70 to 130	2.88	20
AX11077	Arsenic, Total	mg/L	0.00000741	0.0022	0.10	0.102	0.101	0.104	0.085 to 0.115	102	70 to 130	0.629	20
AX11077	Barium, Total	mg/L	0.00000869	0.0044	0.10	0.0975	0.0987	0.100	0.085 to 0.115	97.5	70 to 130	1.23	20
AX11077	Beryllium, Total	mg/L	0.0000189	0.00132	0.10	0.0850	0.0891	0.0977	0.085 to 0.115	85.0	70 to 130	4.67	20
AX11077	Mercury, Total by CVAA	mg/L	0.0000657	0.0005	0.004	0.00382	0.00380	0.00374	0.0034 to 0.0046	95.5	70 to 130	0.564	20
AX11077	Boron, Total	mg/L	0.00132	0.044	1.00	0.960	0.978	0.989	0.85 to 1.15	96.0	70 to 130	1.78	20
AX11077	Molybdenum, Total	mg/L	0.0000176	0.0044	0.10	0.0902	0.0904	0.0924	0.085 to 0.115	90.2	70 to 130	0.256	20
AX11077	Cadmium, Total	mg/L	0.00000453	0.00044	0.10	0.1000	0.0982	0.101	0.085 to 0.115	100	70 to 130	1.76	20
AX11077	Cobalt, Total	mg/L	0.00000561	0.0044	0.10	0.0984	0.0976	0.105	0.085 to 0.115	98.4	70 to 130	0.856	20
AX11077	Calcium, Total	mg/L	-0.0106	0.22	5.00	4.92	4.99	5.07	4.25 to 5.75	98.4	70 to 130	1.41	20
AX11077	Lithium, Total	mg/L	-0.0000380	0.022	0.20	0.197	0.202	0.202	0.17 to 0.23	98.6	70 to 130	2.56	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX11075

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11076	Solids, Dissolved	mg/L	-5.0	25			334	46.0	40 to 60			3.47	5

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Issued By: State of Florida, Department of Health
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Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AX11076

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005		0.0776	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.138	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1		1.65	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5		77.4	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01		0.0141	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/23/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05		0.443	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/17/2017	SM 2540C		1		50		358	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00		26	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10		0.17	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		1	1.40	5.00		10	mg/L

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AX11076

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11077	Antimony, Total	mg/L	0.0000501	0.00132	0.10	0.0911	0.0911	0.0940	0.085 to 0.115	91.1	70 to 130	0.00477	20
AX11077	Selenium, Total	mg/L	0.0000231	0.0044	0.10	0.102	0.101	0.105	0.085 to 0.115	102	70 to 130	1.07	20
AX11077	Chromium, Total	mg/L	0.0000182	0.0044	0.10	0.100	0.0996	0.101	0.085 to 0.115	100	70 to 130	0.531	20
AX11077	Boron, Total	mg/L	0.00132	0.044	1.00	0.960	0.978	0.989	0.85 to 1.15	96.0	70 to 130	1.78	20
AX11077	Molybdenum, Total	mg/L	0.0000176	0.0044	0.10	0.0902	0.0904	0.0924	0.085 to 0.115	90.2	70 to 130	0.256	20
AX11077	Calcium, Total	mg/L	-0.0106	0.22	5.00	4.92	4.99	5.07	4.25 to 5.75	98.4	70 to 130	1.41	20
AX11077	Lithium, Total	mg/L	-0.0000380	0.022	0.20	0.197	0.202	0.202	0.17 to 0.23	98.6	70 to 130	2.56	20
AX11077	Arsenic, Total	mg/L	0.00000741	0.0022	0.10	0.102	0.101	0.104	0.085 to 0.115	102	70 to 130	0.629	20
AX11077	Barium, Total	mg/L	0.00000869	0.0044	0.10	0.0975	0.0987	0.100	0.085 to 0.115	97.5	70 to 130	1.23	20
AX11077	Beryllium, Total	mg/L	0.0000189	0.00132	0.10	0.0850	0.0891	0.0977	0.085 to 0.115	85.0	70 to 130	4.67	20
AX11077	Mercury, Total by CVAA	mg/L	0.0000657	0.0005	0.004	0.00382	0.00380	0.00374	0.0034 to 0.0046	95.5	70 to 130	0.564	20
AX11077	Cadmium, Total	mg/L	0.00000453	0.00044	0.10	0.1000	0.0982	0.101	0.085 to 0.115	100	70 to 130	1.76	20
AX11077	Cobalt, Total	mg/L	0.00000561	0.0044	0.10	0.0984	0.0976	0.105	0.085 to 0.115	98.4	70 to 130	0.856	20
AX11077	Lead, Total	mg/L	0.00000632	0.0022	0.10	0.0965	0.101	0.100	0.085 to 0.115	96.5	70 to 130	4.44	20
AX11077	Thallium, Total	mg/L	0.0000178	0.00044	0.10	0.0972	0.100	0.0997	0.085 to 0.115	97.2	70 to 130	2.88	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AX11076

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11076	Solids, Dissolved	mg/L	-5.0	25			334	46.0	40 to 60			3.47	5

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPEB
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AX11077

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Beryllium, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	5/19/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	5/19/2017	EPA 200.7		2	0.1	0.5	U	Not Detected	mg/L
* Cadmium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	5/19/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	5/23/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	5/19/2017	EPA 200.7		2	0.01	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	5/19/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	5/19/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	5/19/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	5/17/2017	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total, by Test America	SGC	6/2/2017	SM 4500 Cl_E		1	0.60	2.00	U	<0.60	mg/L
* Fluoride, Total, by Test America	SGC	6/2/2017	SM 4500 F_C		1	0.032	0.10	U	<0.032	mg/L
* Sulfate, Total, by Test America	SGC	6/2/2017	SM 4500 SO4_E		1	1.40	5.00	U	<1.4	mg/L

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Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPEB
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AX11077

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11077	Antimony, Total	mg/L	0.0000501	0.00132	0.10	0.0911	0.0911	0.0940	0.085 to 0.115	91.1	70 to 130	0.00477	20
AX11077	Chromium, Total	mg/L	0.0000182	0.0044	0.10	0.100	0.0996	0.101	0.085 to 0.115	100	70 to 130	0.531	20
AX11077	Selenium, Total	mg/L	0.0000231	0.0044	0.10	0.102	0.101	0.105	0.085 to 0.115	102	70 to 130	1.07	20
AX11077	Cadmium, Total	mg/L	0.00000453	0.00044	0.10	0.1000	0.0982	0.101	0.085 to 0.115	100	70 to 130	1.76	20
AX11077	Cobalt, Total	mg/L	0.00000561	0.0044	0.10	0.0984	0.0976	0.105	0.085 to 0.115	98.4	70 to 130	0.856	20
AX11077	Boron, Total	mg/L	0.00132	0.044	1.00	0.960	0.978	0.989	0.85 to 1.15	96.0	70 to 130	1.78	20
AX11077	Molybdenum, Total	mg/L	0.0000176	0.0044	0.10	0.0902	0.0904	0.0924	0.085 to 0.115	90.2	70 to 130	0.256	20
AX11077	Arsenic, Total	mg/L	0.00000741	0.0022	0.10	0.102	0.101	0.104	0.085 to 0.115	102	70 to 130	0.629	20
AX11077	Barium, Total	mg/L	0.00000869	0.0044	0.10	0.0975	0.0987	0.100	0.085 to 0.115	97.5	70 to 130	1.23	20
AX11077	Beryllium, Total	mg/L	0.0000189	0.00132	0.10	0.0850	0.0891	0.0977	0.085 to 0.115	85.0	70 to 130	4.67	20
AX11077	Mercury, Total by CVAA	mg/L	0.0000657	0.0005	0.004	0.00382	0.00380	0.00374	0.0034 to 0.0046	95.5	70 to 130	0.564	20
AX11077	Calcium, Total	mg/L	-0.0106	0.22	5.00	4.92	4.99	5.07	4.25 to 5.75	98.4	70 to 130	1.41	20
AX11077	Lithium, Total	mg/L	-0.0000380	0.022	0.20	0.197	0.202	0.202	0.17 to 0.23	98.6	70 to 130	2.56	20
AX11077	Lead, Total	mg/L	0.00000632	0.0022	0.10	0.0965	0.101	0.100	0.085 to 0.115	96.5	70 to 130	4.44	20
AX11077	Thallium, Total	mg/L	0.0000178	0.00044	0.10	0.0972	0.100	0.0997	0.085 to 0.115	97.2	70 to 130	2.88	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPEB
Sample Date: 10-May-17
Customer ID:
Delivery Date: 12-May-17

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AX11077

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX11076	Solids, Dissolved	mg/L	-5.0	25			334	46.0	40 to 60			3.47	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:

Reported: 7/24/2017
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

Definitions

Alabama Power

Lab & Field SERVICES

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

Alabama Power Lab & Field SERVICES

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

☑ Field Complete
☑ Lab Complete

Lab ETA 05/11/2017 11:30

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Ben Rothschadl	Location	Greene Ash Pond

Analysis Requested	Bottle 1 (500mL): Metals, Bottle 2 (250mL): Hg, Bottle 3 (500mL): TDS, Bottle 4 (250mL): Anions
Comments	Samples were received 5/11/17 @ 1000, electronic signature will not match due to training purposes. SGC All anions outsourced to Test America, Pensacola. incorrect date listed for MW-23 upon receipt.

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-26	05/09/2017	09:53	4	Groundwater		AX11010
MW-29	05/09/2017	11:03	4	Groundwater		AX11011
MW-30	05/09/2017	12:08	4	Groundwater		AX11012
MW-30 DUP	05/09/2017	12:08	4	Sample Duplicate		AX11013
MW-27	05/09/2017	13:25	4	Groundwater		AX11014
MW-28	05/09/2017	14:20	4	Groundwater		AX11015
MW-23	05/09/2017	15:26	4	Groundwater		AX11016
FB-1	05/09/2017	15:50	4	Field Blank		AX11017
MW-24	05/10/2017	09:25	4	Groundwater		AX11018
MW-32	05/10/2017	10:28	4	Groundwater		AX11019
MW-33	05/10/2017	14:30	4	Groundwater		AX11020
MW-31	05/10/2017	15:58	4	Groundwater		AX11021

Relinquished By	Received By	Date/Time
Ben Rothschadl	Sarah Copeland Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US Date: 2017.05.12 08:29:24 -05'00'	05/11/2017 09:57

SmarTroll ID	4696-23441-1-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	0.3 degrees C
		Thermometer ID	5408-27568-2-2
		pH Strip ID	5521-28268-20-12

5.0

Alabama Power Lab & Field SERVICES

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

☑ Field Complete
☑ Lab Complete

Lab ETA

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Jason Rouss	Location	Greene 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. Samples received 5/11/17 @ 1000, electronic signature will not match due to training purposes. SGC

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-25	05/09/2017	09:56	4	Groundwater		AX11066
MW-21	05/09/2017	11:16	4	Groundwater		AX11067
MW-21 Dup	05/09/2017	11:16	4	Sample Duplicate		AX11068
MW-12	05/09/2017	13:22	4	Groundwater		AX11069
MW-13	05/09/2017	14:30	4	Groundwater		AX11070
MW-14	05/09/2017	15:38	4	Groundwater		AX11071
MW-15	05/10/2017	09:34	4	Groundwater		AX11072
MW-16	05/10/2017	11:13	4	Groundwater		AX11073
MW-17	05/10/2017	14:44	4	Groundwater		AX11074
FB-2	05/10/2017	15:00	4	Field Blank		AX11075
MW-18	05/10/2017	16:15	4	Groundwater		AX11076
EB-1	05/10/2017	16:40	4	Equipment Blank		AX11077

Relinquished By	Received By	Date/Time
	Sarah Copeland Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US Date: 2017.05.12 09:08:42 -05'00'	05/11/2017 10:00

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	5521-28268-20-12

Chain of Custody
Groundwater

Alabama Power Lab & Field SERVICES

APC General Testing Laboratory
General Service Complex Building 8

☑ Field Complete
☑ Lab Complete

Lab ETA: 05/11/2017 09:30

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Greene Ash Pond

Analysis Requested	Bottle 1 (500mL): Metals, Bottle 2 (250mL): Hg, Bottle 3 (500mL): TDS, Bottle 4 (250mL): Anions
Comments	Samples were received 5/11/2017 @ 1000, electronic signature will not match due to training purposes. SGC All anions outsourced to Test America, Pensacola.

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-1	05/09/2017	09:36	4	Groundwater		AX11022
MW-2	05/09/2017	11:11	4	Groundwater		AX11023
MW-3	05/09/2017	12:12	4	Groundwater		AX11024
MW-5	05/09/2017	13:30	4	Groundwater		AX11025
MW-11	05/09/2017	14:54	4	Groundwater		AX11026
MW-6	05/10/2017	09:34	4	Groundwater		AX11027
MW-7	05/10/2017	10:34	4	Groundwater		AX11028
MW-10	05/10/2017	14:30	4	Groundwater		AX11029
MW-9	05/10/2017	15:29	4	Groundwater		AX11030
MW-8	05/10/2017	16:53	4	Groundwater		AX11031
MW-1DUP	05/09/2017	09:36	4	Sample Duplicate		AX11032
FB-3	05/09/2017	10:50	4	Field Blank		AX11033

Relinquished By	Received By	Date/Time
Anthony Goggins	Sarah Copeland Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US Date: 2017.05.12 08:33:59 -05'00'	05/11/2017 10:00

SmarTroll ID	5141-26150-1-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20009-2-1	Cooler Temp	1.3 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: 400-137928-1
TestAmerica SDG: Greene County Ash Pond (7)
Client Project/Site: CCR Plant Greene

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

Attn: Sarah Copeland

Cheyenne Whitmire

Authorized for release by:
5/31/2017 4:00:10 PM

Cheyenne Whitmire, Project Manager II
(850)471-6222
cheyenne.whitmire@testamericainc.com

LINKS

Review your project results through TotalAccess

Have a Question? Ask The Expert

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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Job ID: 400-137928-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-137928-1

General Chemistry

Method(s) SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 354000 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/) recoveries for analytical batch 353919 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) SM 4500 SO4 E: The following samples were diluted to bring the concentration of target analytes within the calibration range: AX11010 MW-26 (400-137928-1), AX11018 MW-24 (400-137928-9), AX11022 MW-1 (400-137928-13), AX11023 MW-2 (400-137928-14), AX11026 MW-11 (400-137928-17), AX11027 MW-6 (400-137928-18), AX11028 MW-7 (400-137928-19), AX11030 MW-9 (400-137928-21), AX11032 MW-1 DUP (400-137928-23), AX11066 MW-25 (400-137928-25), AX11067 MW-21 (400-137928-26), AX11068 MW-21 DUP (400-137928-27), AX11069 MW-12 (400-137928-28), AX11070 MW-13 (400-137928-29), AX11071 MW-14 (400-137928-30), AX11072 MW-15 (400-137928-31), AX11073 MW-16 (400-137928-32) and AX11074 MW-17 (400-137928-33). Elevated reporting limits (RLs) are provided.

Method(s) SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 354001 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 Greene

TestAmerica Job ID: 400-137928-1
SDG: Greene County Ash Pond (7)

Client Sample ID: AX11010 MW-26 — Lab Sample ID: 400-137928-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.5		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.25		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	55		25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11011 MW-29 — Lab Sample ID: 400-137928-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.3		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: AX11012 MW-30 — Lab Sample ID: 400-137928-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.8		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: AX11013 MW-30 DUP — Lab Sample ID: 400-137928-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.8		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: AX11014 MW-27 — Lab Sample ID: 400-137928-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.2		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: AX11015 MW-28 — Lab Sample ID: 400-137928-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.1		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	5.6		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11016 MW-23 — Lab Sample ID: 400-137928-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.4		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.080	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	14		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11017 FB-1 — Lab Sample ID: 400-137928-8

No Detections.

Client Sample ID: AX11018 MW-24 — Lab Sample ID: 400-137928-9

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	33		10	2.8	mg/L	2		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11019 MW-32 — Lab Sample ID: 400-137928-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4.4		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: AX11019 MW-32 (Continued) — Lab Sample ID: 400-137928-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Fluoride	0.050	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	2.1	J F1	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11020 MW-33 — Lab Sample ID: 400-137928-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	8.0		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	12		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11021 MW-31 — Lab Sample ID: 400-137928-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.8		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.050	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	2.9	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11022 MW-1 — Lab Sample ID: 400-137928-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	30		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	810		150	42	mg/L	30		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11023 MW-2 — Lab Sample ID: 400-137928-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	16		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.070	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	250		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11024 MW-3 — Lab Sample ID: 400-137928-15

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	0.090	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: AX11025 MW-5 — Lab Sample ID: 400-137928-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	17		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.21		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	25		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11026 MW-11 — Lab Sample ID: 400-137928-17

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	0.11		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 400-137928-1
SDG: Greene County Ash Pond (7)

Client Sample ID: AX11026 MW-11 (Continued) — Lab Sample ID: 400-137928-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	44		25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11027 MW-6 — Lab Sample ID: 400-137928-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	41		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.19		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	120		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11028 MW-7 — Lab Sample ID: 400-137928-19

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	0.090	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	210		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11029 MW-10 — Lab Sample ID: 400-137928-20

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	0.25		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	11	F1	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11030 MW-9 — Lab Sample ID: 400-137928-21

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	0.17		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	32		25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11031 MW-8 — Lab Sample ID: 400-137928-22

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	0.10		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	30		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11032 MW-1 DUP — Lab Sample ID: 400-137928-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	30		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	860		150	42	mg/L	30		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11033 FB-3 — Lab Sample ID: 400-137928-24

No Detections.

Client Sample ID: AX11066 MW-25 — Lab Sample ID: 400-137928-25

This Detection Summary does not include radiochemical test results.

Client Sample ID: AX11066 MW-25 (Continued) — Lab Sample ID: 400-137928-25

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
Sulfate	33		10	2.8	mg/L	2		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11067 MW-21 — Lab Sample ID: 400-137928-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	17		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.17		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	100		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11068 MW-21 DUP — Lab Sample ID: 400-137928-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	17		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.16		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	100		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11069 MW-12 — Lab Sample ID: 400-137928-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	15		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.15		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	91		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11070 MW-13 — Lab Sample ID: 400-137928-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	10		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
Sulfate	74		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11071 MW-14 — Lab Sample ID: 400-137928-30

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	0.14		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	84	F1	50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11072 MW-15 — Lab Sample ID: 400-137928-31

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	0.11		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	160		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11073 MW-16 — Lab Sample ID: 400-137928-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	18		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.23		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 400-137928-1
SDG: Greene County Ash Pond (7)

Client Sample ID: AX11073 MW-16 (Continued) — Lab Sample ID: 400-137928-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	74		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11074 MW-17 — Lab Sample ID: 400-137928-33

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	0.36		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	82		50	14	mg/L	10		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11075 FB-2 — Lab Sample ID: 400-137928-34

No Detections.

Client Sample ID: AX11076 MW-18 — Lab Sample ID: 400-137928-35

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	0.17		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	10		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX11077 EB-1 — Lab Sample ID: 400-137928-36

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

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

TestAmerica Job ID: 400-137928-1
SDG: Greene County Ash Pond (7)

Method	Method Description	Protocol	Laboratory
SM 4500 Cl- E	Chloride, Total	SM	TAL PEN
SM 4500 F C	Fluoride	SM	TAL PEN
SM 4500 SO4 E	Sulfate, Total	SM	TAL PEN

Protocol References:

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

Laboratory References:

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

Sample Summary

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

TestAmerica Job ID: 400-137928-1
SDG: Greene County Ash Pond (7)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-137928-1	AX11010 MW-26	Water	05/09/17 09:53	05/15/17 08:14
400-137928-2	AX11011 MW-29	Water	05/09/17 11:03	05/15/17 08:14
400-137928-3	AX11012 MW-30	Water	05/09/17 12:08	05/15/17 08:14
400-137928-4	AX11013 MW-30 DUP	Water	05/09/17 12:08	05/15/17 08:14
400-137928-5	AX11014 MW-27	Water	05/09/17 13:25	05/15/17 08:14
400-137928-6	AX11015 MW-28	Water	05/09/17 14:20	05/15/17 08:14
400-137928-7	AX11016 MW-23	Water	05/09/17 15:26	05/15/17 08:14
400-137928-8	AX11017 FB-1	Water	05/09/17 15:50	05/15/17 08:14
400-137928-9	AX11018 MW-24	Water	05/10/17 09:25	05/15/17 08:14
400-137928-10	AX11019 MW-32	Water	05/10/17 10:28	05/15/17 08:14
400-137928-11	AX11020 MW-33	Water	05/10/17 14:30	05/15/17 08:14
400-137928-12	AX11021 MW-31	Water	05/10/17 15:58	05/15/17 08:14
400-137928-13	AX11022 MW-1	Water	05/09/17 09:36	05/15/17 08:14
400-137928-14	AX11023 MW-2	Water	05/09/17 11:11	05/15/17 08:14
400-137928-15	AX11024 MW-3	Water	05/09/17 12:12	05/15/17 08:14
400-137928-16	AX11025 MW-5	Water	05/09/17 13:30	05/15/17 08:14
400-137928-17	AX11026 MW-11	Water	05/09/17 14:54	05/15/17 08:14
400-137928-18	AX11027 MW-6	Water	05/10/17 09:34	05/15/17 08:14
400-137928-19	AX11028 MW-7	Water	05/10/17 10:34	05/15/17 08:14
400-137928-20	AX11029 MW-10	Water	05/10/17 14:30	05/15/17 08:14
400-137928-21	AX11030 MW-9	Water	05/10/17 15:29	05/15/17 08:14
400-137928-22	AX11031 MW-8	Water	05/10/17 16:53	05/15/17 08:14
400-137928-23	AX11032 MW-1 DUP	Water	05/09/17 09:36	05/15/17 08:14
400-137928-24	AX11033 FB-3	Water	05/09/17 10:50	05/15/17 08:14
400-137928-25	AX11066 MW-25	Water	05/09/17 09:56	05/15/17 08:14
400-137928-26	AX11067 MW-21	Water	05/09/17 11:16	05/15/17 08:14
400-137928-27	AX11068 MW-21 DUP	Water	05/09/17 11:16	05/15/17 08:14
400-137928-28	AX11069 MW-12	Water	05/09/17 13:22	05/15/17 08:14
400-137928-29	AX11070 MW-13	Water	05/09/17 14:30	05/15/17 08:14
400-137928-30	AX11071 MW-14	Water	05/09/17 15:38	05/15/17 08:14
400-137928-31	AX11072 MW-15	Water	05/10/17 09:34	05/15/17 08:14
400-137928-32	AX11073 MW-16	Water	05/10/17 11:13	05/15/17 08:14
400-137928-33	AX11074 MW-17	Water	05/10/17 14:44	05/15/17 08:14
400-137928-34	AX11075 FB-2	Water	05/10/17 15:00	05/15/17 08:14
400-137928-35	AX11076 MW-18	Water	05/10/17 16:15	05/15/17 08:14
400-137928-36	AX11077 EB-1	Water	05/10/17 16:40	05/15/17 08:14

Client Sample ID: AX11010 MW-26

Lab Sample ID: 400-137928-1
Date Collected: 05/09/17 09:53
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.5		2.0	0.60	mg/L			05/17/17 14:51	1
Fluoride	0.25		0.10	0.032	mg/L			05/25/17 13:06	1
Sulfate	55		25	7.0	mg/L			05/17/17 15:29	5

Client Sample ID: AX11011 MW-29

Lab Sample ID: 400-137928-2
Date Collected: 05/09/17 11:03
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.3		2.0	0.60	mg/L			05/17/17 14:51	1
Fluoride	<0.032		0.10	0.032	mg/L			05/30/17 14:54	1
Sulfate	<1.4		5.0	1.4	mg/L			05/17/17 14:58	1

Client Sample ID: AX11012 MW-30

Lab Sample ID: 400-137928-3
Date Collected: 05/09/17 12:08
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.8		2.0	0.60	mg/L			05/17/17 14:51	1
Fluoride	<0.032		0.10	0.032	mg/L			05/30/17 14:57	1
Sulfate	<1.4		5.0	1.4	mg/L			05/17/17 14:58	1

Client Sample ID: AX11013 MW-30 DUP

Lab Sample ID: 400-137928-4
Date Collected: 05/09/17 12:08
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.8		2.0	0.60	mg/L			05/17/17 14:51	1
Fluoride	<0.032		0.10	0.032	mg/L			05/30/17 15:00	1
Sulfate	<1.4		5.0	1.4	mg/L			05/17/17 14:58	1

Client Sample ID: AX11014 MW-27

Lab Sample ID: 400-137928-5
Date Collected: 05/09/17 13:25
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.2		2.0	0.60	mg/L			05/17/17 14:51	1
Fluoride	<0.032		0.10	0.032	mg/L			05/30/17 15:03	1
Sulfate	<1.4		5.0	1.4	mg/L			05/17/17 14:58	1

Client Sample ID: AX11015 MW-28

Lab Sample ID: 400-137928-6
Date Collected: 05/09/17 14:20
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.1		2.0	0.60	mg/L			05/17/17 14:51	1
Fluoride	<0.032		0.10	0.032	mg/L			05/30/17 15:06	1
Sulfate	5.6		5.0	1.4	mg/L			05/17/17 14:58	1

Client Sample ID: AX11016 MW-23

Lab Sample ID: 400-137928-7
Date Collected: 05/09/17 15:26
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.4		2.0	0.60	mg/L			05/17/17 14:51	1
Fluoride	0.080	J	0.10	0.032	mg/L			05/30/17 15:08	1
Sulfate	14		5.0	1.4	mg/L			05/17/17 14:58	1

Client Sample ID: AX11017 FB-1

Lab Sample ID: 400-137928-8
Date Collected: 05/09/17 15:50
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			05/17/17 14:51	1
Fluoride	<0.032		0.10	0.032	mg/L			05/30/17 15:10	1
Sulfate	<1.4		5.0	1.4	mg/L			05/17/17 14:58	1

Client Sample ID: AX11018 MW-24

Lab Sample ID: 400-137928-9
Date Collected: 05/10/17 09:25
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.9		2.0	0.60	mg/L			05/17/17 14:51	1
Fluoride	<0.032		0.10	0.032	mg/L			05/30/17 15:17	1
Sulfate	33		10	2.8	mg/L			05/17/17 15:29	2

Client Sample ID: AX11019 MW-32

Lab Sample ID: 400-137928-10
Date Collected: 05/10/17 10:28
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.4		2.0	0.60	mg/L			05/17/17 14:51	1
Fluoride	0.050	J	0.10	0.032	mg/L			05/30/17 14:48	1
Sulfate	2.1	J F1	5.0	1.4	mg/L			05/17/17 14:58	1

Client Sample ID: AX11020 MW-33

Lab Sample ID: 400-137928-11
Date Collected: 05/10/17 14:30
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.0		2.0	0.60	mg/L			05/17/17 15:00	1

Client Sample ID: AX11020 MW-33

Lab Sample ID: 400-137928-11
Date Collected: 05/10/17 14:30
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.060	J	0.10	0.032	mg/L			05/30/17 15:40	1
Sulfate	12		5.0	1.4	mg/L			05/17/17 15:04	1

Client Sample ID: AX11021 MW-31

Lab Sample ID: 400-137928-12
Date Collected: 05/10/17 15:58
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.8		2.0	0.60	mg/L			05/17/17 15:00	1
Fluoride	0.050	J	0.10	0.032	mg/L			05/30/17 15:42	1
Sulfate	2.9	J	5.0	1.4	mg/L			05/17/17 15:04	1

Client Sample ID: AX11022 MW-1

Lab Sample ID: 400-137928-13
Date Collected: 05/09/17 09:36
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30		2.0	0.60	mg/L			05/17/17 15:00	1
Fluoride	0.050	J	0.10	0.032	mg/L			05/30/17 15:44	1
Sulfate	810		150	42	mg/L			05/17/17 15:29	30

Client Sample ID: AX11023 MW-2

Lab Sample ID: 400-137928-14
Date Collected: 05/09/17 11:11
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	16		2.0	0.60	mg/L			05/17/17 15:00	1
Fluoride	0.070	J	0.10	0.032	mg/L			05/30/17 15:46	1
Sulfate	250		50	14	mg/L			05/17/17 15:29	10

Client Sample ID: AX11024 MW-3

Lab Sample ID: 400-137928-15
Date Collected: 05/09/17 12:12
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	27		2.0	0.60	mg/L			05/17/17 15:33	1
Fluoride	0.090	J	0.10	0.032	mg/L			05/30/17 15:48	1
Sulfate	2.1	J	5.0	1.4	mg/L			05/17/17 15:23	1

Client Sample ID: AX11025 MW-5

Lab Sample ID: 400-137928-16
Date Collected: 05/09/17 13:30
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		2.0	0.60	mg/L			05/17/17 15:33	1
Fluoride	0.21		0.10	0.032	mg/L			05/30/17 15:50	1

Client Sample ID: AX11025 MW-5

Lab Sample ID: 400-137928-16
Date Collected: 05/09/17 13:30
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	25		5.0	1.4	mg/L			05/17/17 15:23	1

Client Sample ID: AX11026 MW-11

Lab Sample ID: 400-137928-17
Date Collected: 05/09/17 14:54
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23		2.0	0.60	mg/L			05/17/17 15:33	1
Fluoride	0.11		0.10	0.032	mg/L			05/30/17 15:52	1
Sulfate	44		25	7.0	mg/L			05/17/17 15:49	5

Client Sample ID: AX11027 MW-6

Lab Sample ID: 400-137928-18
Date Collected: 05/10/17 09:34
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	41		2.0	0.60	mg/L			05/17/17 15:33	1
Fluoride	0.19		0.10	0.032	mg/L			05/30/17 17:15	1
Sulfate	120		50	14	mg/L			05/17/17 15:49	10

Client Sample ID: AX11028 MW-7

Lab Sample ID: 400-137928-19
Date Collected: 05/10/17 10:34
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	44		2.0	0.60	mg/L			05/17/17 15:33	1
Fluoride	0.090	J	0.10	0.032	mg/L			05/30/17 17:18	1
Sulfate	210		50	14	mg/L			05/17/17 15:49	10

Client Sample ID: AX11029 MW-10

Lab Sample ID: 400-137928-20
Date Collected: 05/10/17 14:30
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22		2.0	0.60	mg/L			05/17/17 15:33	1
Fluoride	0.25		0.10	0.032	mg/L			05/30/17 17:10	1
Sulfate	11	F1	5.0	1.4	mg/L			05/17/17 15:23	1

Client Sample ID: AX11030 MW-9

Lab Sample ID: 400-137928-21
Date Collected: 05/10/17 15:29
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24		2.0	0.60	mg/L			05/18/17 08:43	1
Fluoride	0.17		0.10	0.032	mg/L			05/30/17 17:20	1
Sulfate	32		25	7.0	mg/L			05/18/17 09:23	5

Client Sample ID: AX11031 MW-8

Lab Sample ID: 400-137928-22
Date Collected: 05/10/17 16:53
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	48		2.0	0.60	mg/L			05/18/17 08:43	1
Fluoride	0.10		0.10	0.032	mg/L			05/30/17 17:22	1
Sulfate	30		5.0	1.4	mg/L			05/18/17 08:36	1

Client Sample ID: AX11032 MW-1 DUP

Lab Sample ID: 400-137928-23
Date Collected: 05/09/17 09:36
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	30		2.0	0.60	mg/L			05/18/17 08:43	1
Fluoride	0.050	J	0.10	0.032	mg/L			05/30/17 17:24	1
Sulfate	860		150	42	mg/L			05/18/17 09:18	30

Client Sample ID: AX11033 FB-3

Lab Sample ID: 400-137928-24
Date Collected: 05/09/17 10:50
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			05/18/17 08:43	1
Fluoride	<0.032		0.10	0.032	mg/L			05/30/17 17:26	1
Sulfate	<1.4		5.0	1.4	mg/L			05/18/17 08:36	1

Client Sample ID: AX11066 MW-25

Lab Sample ID: 400-137928-25
Date Collected: 05/09/17 09:56
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	23		2.0	0.60	mg/L			05/18/17 08:43	1
Fluoride	<0.032		0.10	0.032	mg/L			05/30/17 17:29	1
Sulfate	33		10	2.8	mg/L			05/18/17 09:18	2

Client Sample ID: AX11067 MW-21

Lab Sample ID: 400-137928-26
Date Collected: 05/09/17 11:16
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		2.0	0.60	mg/L			05/18/17 08:43	1
Fluoride	0.17		0.10	0.032	mg/L			05/30/17 17:41	1
Sulfate	100		50	14	mg/L			05/18/17 09:18	10

Client Sample ID: AX11068 MW-21 DUP

Lab Sample ID: 400-137928-27
Date Collected: 05/09/17 11:16
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		2.0	0.60	mg/L			05/18/17 08:43	1
Fluoride	0.16		0.10	0.032	mg/L			05/30/17 18:01	1
Sulfate	100		50	14	mg/L			05/18/17 09:18	10

Client Sample ID: AX11069 MW-12

Lab Sample ID: 400-137928-28
Date Collected: 05/09/17 13:22
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15		2.0	0.60	mg/L			05/18/17 08:43	1
Fluoride	0.15		0.10	0.032	mg/L			05/30/17 18:03	1
Sulfate	91		50	14	mg/L			05/18/17 09:23	10

Client Sample ID: AX11070 MW-13

Lab Sample ID: 400-137928-29
Date Collected: 05/09/17 14:30
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	10		2.0	0.60	mg/L			05/18/17 08:43	1
Fluoride	0.18		0.10	0.032	mg/L			05/30/17 18:05	1
Sulfate	74		50	14	mg/L			05/18/17 09:23	10

Client Sample ID: AX11071 MW-14

Lab Sample ID: 400-137928-30
Date Collected: 05/09/17 15:38
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	19		2.0	0.60	mg/L			05/18/17 08:43	1
Fluoride	0.14		0.10	0.032	mg/L			05/30/17 17:35	1
Sulfate	84	F1	50	14	mg/L			05/18/17 09:23	10

Client Sample ID: AX11072 MW-15

Lab Sample ID: 400-137928-31
Date Collected: 05/10/17 09:34
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14		2.0	0.60	mg/L			05/18/17 08:44	1
Fluoride	0.11		0.10	0.032	mg/L			05/30/17 18:07	1
Sulfate	160		50	14	mg/L			05/18/17 09:26	10

Client Sample ID: AX11073 MW-16

Lab Sample ID: 400-137928-32
Date Collected: 05/10/17 11:13
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	18		2.0	0.60	mg/L			05/18/17 08:44	1

Client Sample ID: AX11073 MW-16

Lab Sample ID: 400-137928-32
Date Collected: 05/10/17 11:13
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.23		0.10	0.032	mg/L			05/31/17 11:30	1
Sulfate	74		50	14	mg/L			05/18/17 09:26	10

Client Sample ID: AX11074 MW-17

Lab Sample ID: 400-137928-33
Date Collected: 05/10/17 14:44
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24		2.0	0.60	mg/L			05/18/17 08:44	1
Fluoride	0.36		0.10	0.032	mg/L			05/31/17 11:32	1
Sulfate	82		50	14	mg/L			05/18/17 09:26	10

Client Sample ID: AX11075 FB-2

Lab Sample ID: 400-137928-34
Date Collected: 05/10/17 15:00
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			05/18/17 08:44	1
Fluoride	<0.032		0.10	0.032	mg/L			05/31/17 11:35	1
Sulfate	<1.4		5.0	1.4	mg/L			05/18/17 08:50	1

Client Sample ID: AX11076 MW-18

Lab Sample ID: 400-137928-35
Date Collected: 05/10/17 16:15
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26		2.0	0.60	mg/L			05/18/17 09:32	1
Fluoride	0.17		0.10	0.032	mg/L			05/31/17 11:37	1
Sulfate	10		5.0	1.4	mg/L			05/18/17 09:14	1

Client Sample ID: AX11077 EB-1

Lab Sample ID: 400-137928-36
Date Collected: 05/10/17 16:40
Matrix: Water
Date Received: 05/15/17 08:14

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60	F1	2.0	0.60	mg/L			05/18/17 09:32	1
Fluoride	<0.032		0.10	0.032	mg/L			05/31/17 11:25	1
Sulfate	<1.4	F1	5.0	1.4	mg/L			05/18/17 09:14	1

Qualifiers

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

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

Lab Chronicle

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

TestAmerica Job ID: 400-137928-1
SDG: Greene County Ash Pond (7)

Client Sample ID: AX11010 MW-26
Date Collected: 05/09/17 09:53
Date Received: 05/15/17 08:14

Lab Sample ID: 400-137928-1
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	353918	05/17/17 14:51	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	354944	05/25/17 13:06	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	353919	05/17/17 15:29	BJB	TAL PEN

Client Sample ID: AX11011 MW-29
Date Collected: 05/09/17 11:03
Date Received: 05/15/17 08:14

Lab Sample ID: 400-137928-2
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	353918	05/17/17 14:51	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355338	05/30/17 14:54	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353919	05/17/17 14:58	BJB	TAL PEN

Client Sample ID: AX11012 MW-30
Date Collected: 05/09/17 12:08
Date Received: 05/15/17 08:14

Lab Sample ID: 400-137928-3
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	353918	05/17/17 14:51	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355338	05/30/17 14:57	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353919	05/17/17 14:58	BJB	TAL PEN

Client Sample ID: AX11013 MW-30 DUP
Date Collected: 05/09/17 12:08
Date Received: 05/15/17 08:14

Lab Sample ID: 400-137928-4
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	353918	05/17/17 14:51	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355338	05/30/17 15:00	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353919	05/17/17 14:58	BJB	TAL PEN

Client Sample ID: AX11014 MW-27
Date Collected: 05/09/17 13:25
Date Received: 05/15/17 08:14

Lab Sample ID: 400-137928-5
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	353918	05/17/17 14:51	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355338	05/30/17 15:03	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353919	05/17/17 14:58	BJB	TAL PEN

Client Sample ID: AX11015 MW-28
Date Collected: 05/09/17 14:20
Date Received: 05/15/17 08:14

Lab Sample ID: 400-137928-6
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	353918	05/17/17 14:51	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355338	05/30/17 15:06	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353919	05/17/17 14:58	BJB	TAL PEN

Client Sample ID: AX11016 MW-23
Date Collected: 05/09/17 15:26
Date Received: 05/15/17 08:14

Lab Sample ID: 400-137928-7
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	353918	05/17/17 14:51	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355338	05/30/17 15:08	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353919	05/17/17 14:58	BJB	TAL PEN

Client Sample ID: AX11017 FB-1
Date Collected: 05/09/17 15:50
Date Received: 05/15/17 08:14

Lab Sample ID: 400-137928-8
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	353918	05/17/17 14:51	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355338	05/30/17 15:10	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353919	05/17/17 14:58	BJB	TAL PEN

Client Sample ID: AX11018 MW-24
Date Collected: 05/10/17 09:25
Date Received: 05/15/17 08:14

Lab Sample ID: 400-137928-9
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	353918	05/17/17 14:51	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355338	05/30/17 15:17	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		2	353919	05/17/17 15:29	BJB	TAL PEN

Client Sample ID: AX11019 MW-32
Date Collected: 05/10/17 10:28
Date Received: 05/15/17 08:14

Lab Sample ID: 400-137928-10
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	353918	05/17/17 14:51	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355338	05/30/17 14:48	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353919	05/17/17 14:58	BJB	TAL PEN

Client Sample ID: AX11020 MW-33

Lab Sample ID: 400-137928-11
Date Collected: 05/10/17 14:30
Matrix: Water
Date Received: 05/15/17 08:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	353918	05/17/17 15:00	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355338	05/30/17 15:40	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353919	05/17/17 15:04	BJB	TAL PEN

Client Sample ID: AX11021 MW-31

Lab Sample ID: 400-137928-12
Date Collected: 05/10/17 15:58
Matrix: Water
Date Received: 05/15/17 08:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	353918	05/17/17 15:00	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355338	05/30/17 15:42	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353919	05/17/17 15:04	BJB	TAL PEN

Client Sample ID: AX11022 MW-1

Lab Sample ID: 400-137928-13
Date Collected: 05/09/17 09:36
Matrix: Water
Date Received: 05/15/17 08:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	353918	05/17/17 15:00	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355338	05/30/17 15:44	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		30	353919	05/17/17 15:29	BJB	TAL PEN

Client Sample ID: AX11023 MW-2

Lab Sample ID: 400-137928-14
Date Collected: 05/09/17 11:11
Matrix: Water
Date Received: 05/15/17 08:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	353918	05/17/17 15:00	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355338	05/30/17 15:46	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	353919	05/17/17 15:29	BJB	TAL PEN

Client Sample ID: AX11024 MW-3

Lab Sample ID: 400-137928-15
Date Collected: 05/09/17 12:12
Matrix: Water
Date Received: 05/15/17 08:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	353918	05/17/17 15:33	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355338	05/30/17 15:48	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353919	05/17/17 15:23	BJB	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-137928-1
SDG: Greene County Ash Pond (7)

Client Sample ID: AX11025 MW-5
Date Collected: 05/09/17 13:30
Date Received: 05/15/17 08:14

Lab Sample ID: 400-137928-16
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	353918	05/17/17 15:33	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355338	05/30/17 15:50	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353919	05/17/17 15:23	BJB	TAL PEN

Client Sample ID: AX11026 MW-11
Date Collected: 05/09/17 14:54
Date Received: 05/15/17 08:14

Lab Sample ID: 400-137928-17
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	353918	05/17/17 15:33	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355338	05/30/17 15:52	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	353919	05/17/17 15:49	BJB	TAL PEN

Client Sample ID: AX11027 MW-6
Date Collected: 05/10/17 09:34
Date Received: 05/15/17 08:14

Lab Sample ID: 400-137928-18
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	353918	05/17/17 15:33	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355355	05/30/17 17:15	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	353919	05/17/17 15:49	BJB	TAL PEN

Client Sample ID: AX11028 MW-7
Date Collected: 05/10/17 10:34
Date Received: 05/15/17 08:14

Lab Sample ID: 400-137928-19
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	353918	05/17/17 15:33	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355355	05/30/17 17:18	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	353919	05/17/17 15:49	BJB	TAL PEN

Client Sample ID: AX11029 MW-10
Date Collected: 05/10/17 14:30
Date Received: 05/15/17 08:14

Lab Sample ID: 400-137928-20
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	353918	05/17/17 15:33	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355355	05/30/17 17:10	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	353919	05/17/17 15:23	BJB	TAL PEN

Client Sample ID: AX11030 MW-9

Lab Sample ID: 400-137928-21
Date Collected: 05/10/17 15:29
Matrix: Water
Date Received: 05/15/17 08:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	354000	05/18/17 08:43	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355355	05/30/17 17:20	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	354001	05/18/17 09:23	BJB	TAL PEN

Client Sample ID: AX11031 MW-8

Lab Sample ID: 400-137928-22
Date Collected: 05/10/17 16:53
Matrix: Water
Date Received: 05/15/17 08:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	354000	05/18/17 08:43	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355355	05/30/17 17:22	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	354001	05/18/17 08:36	BJB	TAL PEN

Client Sample ID: AX11032 MW-1 DUP

Lab Sample ID: 400-137928-23
Date Collected: 05/09/17 09:36
Matrix: Water
Date Received: 05/15/17 08:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	354000	05/18/17 08:43	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355355	05/30/17 17:24	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		30	354001	05/18/17 09:18	BJB	TAL PEN

Client Sample ID: AX11033 FB-3

Lab Sample ID: 400-137928-24
Date Collected: 05/09/17 10:50
Matrix: Water
Date Received: 05/15/17 08:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	354000	05/18/17 08:43	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355355	05/30/17 17:26	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	354001	05/18/17 08:36	BJB	TAL PEN

Client Sample ID: AX11066 MW-25

Lab Sample ID: 400-137928-25
Date Collected: 05/09/17 09:56
Matrix: Water
Date Received: 05/15/17 08:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	354000	05/18/17 08:43	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355355	05/30/17 17:29	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		2	354001	05/18/17 09:18	BJB	TAL PEN

Client Sample ID: AX11067 MW-21

Lab Sample ID: 400-137928-26
Date Collected: 05/09/17 11:16
Matrix: Water
Date Received: 05/15/17 08:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	354000	05/18/17 08:43	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355355	05/30/17 17:41	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	354001	05/18/17 09:18	BJB	TAL PEN

Client Sample ID: AX11068 MW-21 DUP

Lab Sample ID: 400-137928-27
Date Collected: 05/09/17 11:16
Matrix: Water
Date Received: 05/15/17 08:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	354000	05/18/17 08:43	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355355	05/30/17 18:01	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	354001	05/18/17 09:18	BJB	TAL PEN

Client Sample ID: AX11069 MW-12

Lab Sample ID: 400-137928-28
Date Collected: 05/09/17 13:22
Matrix: Water
Date Received: 05/15/17 08:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	354000	05/18/17 08:43	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355355	05/30/17 18:03	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	354001	05/18/17 09:23	BJB	TAL PEN

Client Sample ID: AX11070 MW-13

Lab Sample ID: 400-137928-29
Date Collected: 05/09/17 14:30
Matrix: Water
Date Received: 05/15/17 08:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	354000	05/18/17 08:43	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355355	05/30/17 18:05	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	354001	05/18/17 09:23	BJB	TAL PEN

Client Sample ID: AX11071 MW-14

Lab Sample ID: 400-137928-30
Date Collected: 05/09/17 15:38
Matrix: Water
Date Received: 05/15/17 08:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	354000	05/18/17 08:43	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355355	05/30/17 17:35	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	354001	05/18/17 09:23	BJB	TAL PEN

Client Sample ID: AX11072 MW-15

Lab Sample ID: 400-137928-31
Date Collected: 05/10/17 09:34
Matrix: Water
Date Received: 05/15/17 08:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	354000	05/18/17 08:44	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355355	05/30/17 18:07	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	354001	05/18/17 09:26	BJB	TAL PEN

Client Sample ID: AX11073 MW-16

Lab Sample ID: 400-137928-32
Date Collected: 05/10/17 11:13
Matrix: Water
Date Received: 05/15/17 08:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	354000	05/18/17 08:44	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355443	05/31/17 11:30	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	354001	05/18/17 09:26	BJB	TAL PEN

Client Sample ID: AX11074 MW-17

Lab Sample ID: 400-137928-33
Date Collected: 05/10/17 14:44
Matrix: Water
Date Received: 05/15/17 08:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	354000	05/18/17 08:44	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355443	05/31/17 11:32	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		10	354001	05/18/17 09:26	BJB	TAL PEN

Client Sample ID: AX11075 FB-2

Lab Sample ID: 400-137928-34
Date Collected: 05/10/17 15:00
Matrix: Water
Date Received: 05/15/17 08:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	354000	05/18/17 08:44	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355443	05/31/17 11:35	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	354001	05/18/17 08:50	BJB	TAL PEN

Client Sample ID: AX11076 MW-18

Lab Sample ID: 400-137928-35
Date Collected: 05/10/17 16:15
Matrix: Water
Date Received: 05/15/17 08:14

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	354000	05/18/17 09:32	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355443	05/31/17 11:37	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	354001	05/18/17 09:14	BJB	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-137928-1
SDG: Greene County Ash Pond (7)

Client Sample ID: AX11077 EB-1

Date Collected: 05/10/17 16:40
Date Received: 05/15/17 08:14

Lab Sample ID: 400-137928-36

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	354000	05/18/17 09:32	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	355443	05/31/17 11:25	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	354001	05/18/17 09:14	BJB	TAL PEN

Laboratory References:

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

General Chemistry

Analysis Batch: 353918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137928-1	AX11010 MW-26	Total/NA	Water	SM 4500 Cl- E	
400-137928-2	AX11011 MW-29	Total/NA	Water	SM 4500 Cl- E	
400-137928-3	AX11012 MW-30	Total/NA	Water	SM 4500 Cl- E	
400-137928-4	AX11013 MW-30 DUP	Total/NA	Water	SM 4500 Cl- E	
400-137928-5	AX11014 MW-27	Total/NA	Water	SM 4500 Cl- E	
400-137928-6	AX11015 MW-28	Total/NA	Water	SM 4500 Cl- E	
400-137928-7	AX11016 MW-23	Total/NA	Water	SM 4500 Cl- E	
400-137928-8	AX11017 FB-1	Total/NA	Water	SM 4500 Cl- E	
400-137928-9	AX11018 MW-24	Total/NA	Water	SM 4500 Cl- E	
400-137928-10	AX11019 MW-32	Total/NA	Water	SM 4500 Cl- E	
400-137928-11	AX11020 MW-33	Total/NA	Water	SM 4500 Cl- E	
400-137928-12	AX11021 MW-31	Total/NA	Water	SM 4500 Cl- E	
400-137928-13	AX11022 MW-1	Total/NA	Water	SM 4500 Cl- E	
400-137928-14	AX11023 MW-2	Total/NA	Water	SM 4500 Cl- E	
400-137928-15	AX11024 MW-3	Total/NA	Water	SM 4500 Cl- E	
400-137928-16	AX11025 MW-5	Total/NA	Water	SM 4500 Cl- E	
400-137928-17	AX11026 MW-11	Total/NA	Water	SM 4500 Cl- E	
400-137928-18	AX11027 MW-6	Total/NA	Water	SM 4500 Cl- E	
400-137928-19	AX11028 MW-7	Total/NA	Water	SM 4500 Cl- E	
400-137928-20	AX11029 MW-10	Total/NA	Water	SM 4500 Cl- E	
MB 400-353918/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-353918/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-353918/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-137928-10 MS	AX11019 MW-32	Total/NA	Water	SM 4500 Cl- E	
400-137928-10 MSD	AX11019 MW-32	Total/NA	Water	SM 4500 Cl- E	
400-137928-20 MS	AX11029 MW-10	Total/NA	Water	SM 4500 Cl- E	
400-137928-20 MSD	AX11029 MW-10	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 353919

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137928-1	AX11010 MW-26	Total/NA	Water	SM 4500 SO4 E	
400-137928-2	AX11011 MW-29	Total/NA	Water	SM 4500 SO4 E	
400-137928-3	AX11012 MW-30	Total/NA	Water	SM 4500 SO4 E	
400-137928-4	AX11013 MW-30 DUP	Total/NA	Water	SM 4500 SO4 E	
400-137928-5	AX11014 MW-27	Total/NA	Water	SM 4500 SO4 E	
400-137928-6	AX11015 MW-28	Total/NA	Water	SM 4500 SO4 E	
400-137928-7	AX11016 MW-23	Total/NA	Water	SM 4500 SO4 E	
400-137928-8	AX11017 FB-1	Total/NA	Water	SM 4500 SO4 E	
400-137928-9	AX11018 MW-24	Total/NA	Water	SM 4500 SO4 E	
400-137928-10	AX11019 MW-32	Total/NA	Water	SM 4500 SO4 E	
400-137928-11	AX11020 MW-33	Total/NA	Water	SM 4500 SO4 E	
400-137928-12	AX11021 MW-31	Total/NA	Water	SM 4500 SO4 E	
400-137928-13	AX11022 MW-1	Total/NA	Water	SM 4500 SO4 E	
400-137928-14	AX11023 MW-2	Total/NA	Water	SM 4500 SO4 E	
400-137928-15	AX11024 MW-3	Total/NA	Water	SM 4500 SO4 E	
400-137928-16	AX11025 MW-5	Total/NA	Water	SM 4500 SO4 E	
400-137928-17	AX11026 MW-11	Total/NA	Water	SM 4500 SO4 E	
400-137928-18	AX11027 MW-6	Total/NA	Water	SM 4500 SO4 E	
400-137928-19	AX11028 MW-7	Total/NA	Water	SM 4500 SO4 E	
400-137928-20	AX11029 MW-10	Total/NA	Water	SM 4500 SO4 E	
MB 400-353919/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	

General Chemistry (Continued)

Analysis Batch: 353919 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-353919/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-353919/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-137928-10 MS	AX11019 MW-32	Total/NA	Water	SM 4500 SO4 E	
400-137928-10 MSD	AX11019 MW-32	Total/NA	Water	SM 4500 SO4 E	
400-137928-20 MS	AX11029 MW-10	Total/NA	Water	SM 4500 SO4 E	
400-137928-20 MSD	AX11029 MW-10	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 354000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137928-21	AX11030 MW-9	Total/NA	Water	SM 4500 Cl- E	
400-137928-22	AX11031 MW-8	Total/NA	Water	SM 4500 Cl- E	
400-137928-23	AX11032 MW-1 DUP	Total/NA	Water	SM 4500 Cl- E	
400-137928-24	AX11033 FB-3	Total/NA	Water	SM 4500 Cl- E	
400-137928-25	AX11066 MW-25	Total/NA	Water	SM 4500 Cl- E	
400-137928-26	AX11067 MW-21	Total/NA	Water	SM 4500 Cl- E	
400-137928-27	AX11068 MW-21 DUP	Total/NA	Water	SM 4500 Cl- E	
400-137928-28	AX11069 MW-12	Total/NA	Water	SM 4500 Cl- E	
400-137928-29	AX11070 MW-13	Total/NA	Water	SM 4500 Cl- E	
400-137928-30	AX11071 MW-14	Total/NA	Water	SM 4500 Cl- E	
400-137928-31	AX11072 MW-15	Total/NA	Water	SM 4500 Cl- E	
400-137928-32	AX11073 MW-16	Total/NA	Water	SM 4500 Cl- E	
400-137928-33	AX11074 MW-17	Total/NA	Water	SM 4500 Cl- E	
400-137928-34	AX11075 FB-2	Total/NA	Water	SM 4500 Cl- E	
400-137928-35	AX11076 MW-18	Total/NA	Water	SM 4500 Cl- E	
400-137928-36	AX11077 EB-1	Total/NA	Water	SM 4500 Cl- E	
MB 400-354000/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-354000/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-354000/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-137928-30 MS	AX11071 MW-14	Total/NA	Water	SM 4500 Cl- E	
400-137928-30 MSD	AX11071 MW-14	Total/NA	Water	SM 4500 Cl- E	
400-137928-36 MS	AX11077 EB-1	Total/NA	Water	SM 4500 Cl- E	
400-137928-36 MSD	AX11077 EB-1	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 354001

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137928-21	AX11030 MW-9	Total/NA	Water	SM 4500 SO4 E	
400-137928-22	AX11031 MW-8	Total/NA	Water	SM 4500 SO4 E	
400-137928-23	AX11032 MW-1 DUP	Total/NA	Water	SM 4500 SO4 E	
400-137928-24	AX11033 FB-3	Total/NA	Water	SM 4500 SO4 E	
400-137928-25	AX11066 MW-25	Total/NA	Water	SM 4500 SO4 E	
400-137928-26	AX11067 MW-21	Total/NA	Water	SM 4500 SO4 E	
400-137928-27	AX11068 MW-21 DUP	Total/NA	Water	SM 4500 SO4 E	
400-137928-28	AX11069 MW-12	Total/NA	Water	SM 4500 SO4 E	
400-137928-29	AX11070 MW-13	Total/NA	Water	SM 4500 SO4 E	
400-137928-30	AX11071 MW-14	Total/NA	Water	SM 4500 SO4 E	
400-137928-31	AX11072 MW-15	Total/NA	Water	SM 4500 SO4 E	
400-137928-32	AX11073 MW-16	Total/NA	Water	SM 4500 SO4 E	
400-137928-33	AX11074 MW-17	Total/NA	Water	SM 4500 SO4 E	
400-137928-34	AX11075 FB-2	Total/NA	Water	SM 4500 SO4 E	
400-137928-35	AX11076 MW-18	Total/NA	Water	SM 4500 SO4 E	
400-137928-36	AX11077 EB-1	Total/NA	Water	SM 4500 SO4 E	

General Chemistry (Continued)

Analysis Batch: 354001 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-354001/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-354001/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-354001/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-137928-30 MS	AX11071 MW-14	Total/NA	Water	SM 4500 SO4 E	
400-137928-30 MSD	AX11071 MW-14	Total/NA	Water	SM 4500 SO4 E	
400-137928-36 MS	AX11077 EB-1	Total/NA	Water	SM 4500 SO4 E	
400-137928-36 MSD	AX11077 EB-1	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 354944

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137928-1	AX11010 MW-26	Total/NA	Water	SM 4500 F C	
MB 400-354944/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-354944/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-137886-A-3 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-137886-A-3 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-137886-A-11 DU	Duplicate	Total/NA	Water	SM 4500 F C	

Analysis Batch: 355338

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137928-2	AX11011 MW-29	Total/NA	Water	SM 4500 F C	
400-137928-3	AX11012 MW-30	Total/NA	Water	SM 4500 F C	
400-137928-4	AX11013 MW-30 DUP	Total/NA	Water	SM 4500 F C	
400-137928-5	AX11014 MW-27	Total/NA	Water	SM 4500 F C	
400-137928-6	AX11015 MW-28	Total/NA	Water	SM 4500 F C	
400-137928-7	AX11016 MW-23	Total/NA	Water	SM 4500 F C	
400-137928-8	AX11017 FB-1	Total/NA	Water	SM 4500 F C	
400-137928-9	AX11018 MW-24	Total/NA	Water	SM 4500 F C	
400-137928-10	AX11019 MW-32	Total/NA	Water	SM 4500 F C	
400-137928-11	AX11020 MW-33	Total/NA	Water	SM 4500 F C	
400-137928-12	AX11021 MW-31	Total/NA	Water	SM 4500 F C	
400-137928-13	AX11022 MW-1	Total/NA	Water	SM 4500 F C	
400-137928-14	AX11023 MW-2	Total/NA	Water	SM 4500 F C	
400-137928-15	AX11024 MW-3	Total/NA	Water	SM 4500 F C	
400-137928-16	AX11025 MW-5	Total/NA	Water	SM 4500 F C	
400-137928-17	AX11026 MW-11	Total/NA	Water	SM 4500 F C	
MB 400-355338/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-355338/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-137928-10 MS	AX11019 MW-32	Total/NA	Water	SM 4500 F C	
400-137928-10 MSD	AX11019 MW-32	Total/NA	Water	SM 4500 F C	
400-137928-9 DU	AX11018 MW-24	Total/NA	Water	SM 4500 F C	

Analysis Batch: 355355

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137928-18	AX11027 MW-6	Total/NA	Water	SM 4500 F C	
400-137928-19	AX11028 MW-7	Total/NA	Water	SM 4500 F C	
400-137928-20	AX11029 MW-10	Total/NA	Water	SM 4500 F C	
400-137928-21	AX11030 MW-9	Total/NA	Water	SM 4500 F C	
400-137928-22	AX11031 MW-8	Total/NA	Water	SM 4500 F C	
400-137928-23	AX11032 MW-1 DUP	Total/NA	Water	SM 4500 F C	
400-137928-24	AX11033 FB-3	Total/NA	Water	SM 4500 F C	
400-137928-25	AX11066 MW-25	Total/NA	Water	SM 4500 F C	

General Chemistry (Continued)

Analysis Batch: 355355 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137928-26	AX11067 MW-21	Total/NA	Water	SM 4500 F C	
400-137928-27	AX11068 MW-21 DUP	Total/NA	Water	SM 4500 F C	
400-137928-28	AX11069 MW-12	Total/NA	Water	SM 4500 F C	
400-137928-29	AX11070 MW-13	Total/NA	Water	SM 4500 F C	
400-137928-30	AX11071 MW-14	Total/NA	Water	SM 4500 F C	
400-137928-31	AX11072 MW-15	Total/NA	Water	SM 4500 F C	
MB 400-355355/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-355355/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-137928-20 MS	AX11029 MW-10	Total/NA	Water	SM 4500 F C	
400-137928-20 MSD	AX11029 MW-10	Total/NA	Water	SM 4500 F C	
400-137928-30 MS	AX11071 MW-14	Total/NA	Water	SM 4500 F C	
400-137928-30 MSD	AX11071 MW-14	Total/NA	Water	SM 4500 F C	
400-137928-26 DU	AX11067 MW-21	Total/NA	Water	SM 4500 F C	

Analysis Batch: 355443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-137928-32	AX11073 MW-16	Total/NA	Water	SM 4500 F C	
400-137928-33	AX11074 MW-17	Total/NA	Water	SM 4500 F C	
400-137928-34	AX11075 FB-2	Total/NA	Water	SM 4500 F C	
400-137928-35	AX11076 MW-18	Total/NA	Water	SM 4500 F C	
400-137928-36	AX11077 EB-1	Total/NA	Water	SM 4500 F C	
MB 400-355443/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-355443/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-137928-36 MS	AX11077 EB-1	Total/NA	Water	SM 4500 F C	
400-137928-36 MSD	AX11077 EB-1	Total/NA	Water	SM 4500 F C	
400-137980-B-4 DU	Duplicate	Total/NA	Water	SM 4500 F C	

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-353918/6
Matrix: Water
Analysis Batch: 353918

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			05/17/17 14:27	1

Lab Sample ID: LCS 400-353918/7
Matrix: Water
Analysis Batch: 353918

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 400-353918/3
Matrix: Water
Analysis Batch: 353918

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	2.13		mg/L		106	50 - 150

Lab Sample ID: 400-137928-10 MS
Matrix: Water
Analysis Batch: 353918

Client Sample ID: AX11019 MW-32
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	4.4		10.0	14.8		mg/L		104	73 - 120

Lab Sample ID: 400-137928-10 MSD
Matrix: Water
Analysis Batch: 353918

Client Sample ID: AX11019 MW-32
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	4.4		10.0	14.9		mg/L		105	73 - 120	1	8

Lab Sample ID: 400-137928-20 MS
Matrix: Water
Analysis Batch: 353918

Client Sample ID: AX11029 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	29.9		mg/L		79	73 - 120

Lab Sample ID: 400-137928-20 MSD
Matrix: Water
Analysis Batch: 353918

Client Sample ID: AX11029 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	29.6		mg/L		76	73 - 120	1	8

Lab Sample ID: MB 400-354000/6
Matrix: Water
Analysis Batch: 354000

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			05/18/17 08:11	1

Lab Sample ID: LCS 400-354000/7
Matrix: Water
Analysis Batch: 354000

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	31.0		mg/L		103	90 - 110

Lab Sample ID: MRL 400-354000/3
Matrix: Water
Analysis Batch: 354000

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	2.28		mg/L		114	50 - 150

Lab Sample ID: 400-137928-30 MS
Matrix: Water
Analysis Batch: 354000

Client Sample ID: AX11071 MW-14
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	19		10.0	27.9		mg/L		86	73 - 120

Lab Sample ID: 400-137928-30 MSD
Matrix: Water
Analysis Batch: 354000

Client Sample ID: AX11071 MW-14
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	19		10.0	28.0		mg/L		88	73 - 120	1	8

Lab Sample ID: 400-137928-36 MS
Matrix: Water
Analysis Batch: 354000

Client Sample ID: AX11077 EB-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	EB Result	EB Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<0.60	F1	10.0	32.9	F1	mg/L		329	73 - 120

Lab Sample ID: 400-137928-36 MSD
Matrix: Water
Analysis Batch: 354000

Client Sample ID: AX11077 EB-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	EB Result	EB Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<0.60	F1	10.0	32.7	F1	mg/L		327	73 - 120	0	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-354944/3
Matrix: Water
Analysis Batch: 354944

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			05/25/17 11:50	1

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: LCS 400-354944/4
Matrix: Water
Analysis Batch: 354944

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: 400-137886-A-3 MS
Matrix: Water
Analysis Batch: 354944

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	0.040	J	1.00	0.860		mg/L		82	75 - 125		

Lab Sample ID: 400-137886-A-3 MSD
Matrix: Water
Analysis Batch: 354944

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	0.040	J	1.00	0.840		mg/L		80	75 - 125	2	4

Lab Sample ID: 400-137886-A-11 DU
Matrix: Water
Analysis Batch: 354944

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Fluoride	0.050	J		0.0500	J	mg/L				0	4

Lab Sample ID: MB 400-355338/3
Matrix: Water
Analysis Batch: 355338

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			05/30/17 14:39	1

Lab Sample ID: LCS 400-355338/4
Matrix: Water
Analysis Batch: 355338

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride			4.00	3.79		mg/L		95	90 - 110		

Lab Sample ID: 400-137928-10 MS
Matrix: Water
Analysis Batch: 355338

Client Sample ID: AX11019 MW-32
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	1.00		mg/L		95	75 - 125		

Lab Sample ID: 400-137928-10 MSD
Matrix: Water
Analysis Batch: 355338

Client Sample ID: AX11019 MW-32
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	0	4

Lab Sample ID: 400-137928-9 DU
Matrix: Water
Analysis Batch: 355338

Client Sample ID: AX11018 MW-24
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 400-355355/3
Matrix: Water
Analysis Batch: 355355

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			05/30/17 17:01	1

Lab Sample ID: LCS 400-355355/4
Matrix: Water
Analysis Batch: 355355

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride			4.00	3.79		mg/L		95	90 - 110		

Lab Sample ID: 400-137928-20 MS
Matrix: Water
Analysis Batch: 355355

Client Sample ID: AX11029 MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride	0.25		1.00	1.24		mg/L		99	75 - 125		

Lab Sample ID: 400-137928-20 MSD
Matrix: Water
Analysis Batch: 355355

Client Sample ID: AX11029 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	0.25		1.00	1.24		mg/L		99	75 - 125	0	4

Lab Sample ID: 400-137928-30 MS
Matrix: Water
Analysis Batch: 355355

Client Sample ID: AX11071 MW-14
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride	0.14		1.00	1.10		mg/L		96	75 - 125		

Lab Sample ID: 400-137928-30 MSD
Matrix: Water
Analysis Batch: 355355

Client Sample ID: AX11071 MW-14
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.14		1.00	1.13		mg/L		99	75 - 125	3	4

Lab Sample ID: 400-137928-26 DU
Matrix: Water
Analysis Batch: 355355

Client Sample ID: AX11067 MW-21
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Fluoride	0.17			0.170		mg/L				0	4

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: MB 400-355443/3
Matrix: Water
Analysis Batch: 355443

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			05/31/17 11:17	1

Lab Sample ID: LCS 400-355443/4
Matrix: Water
Analysis Batch: 355443

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	3.65		mg/L		91	90 - 110

Lab Sample ID: 400-137928-36 MS
Matrix: Water
Analysis Batch: 355443

Client Sample ID: AX11077 EB-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	EB Result	EB Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	<0.032		1.00	0.930		mg/L		93	75 - 125

Lab Sample ID: 400-137928-36 MSD
Matrix: Water
Analysis Batch: 355443

Client Sample ID: AX11077 EB-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	EB Result	EB Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	<0.032		1.00	0.930		mg/L		93	75 - 125	0	4

Lab Sample ID: 400-137980-B-4 DU
Matrix: Water
Analysis Batch: 355443

Client Sample ID: Duplicate
Prep Type: Total/NA

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

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-353919/6
Matrix: Water
Analysis Batch: 353919

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			05/17/17 14:29	1

Lab Sample ID: LCS 400-353919/7
Matrix: Water
Analysis Batch: 353919

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		99	90 - 110

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: MRL 400-353919/3
Matrix: Water
Analysis Batch: 353919

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	4.57	J	mg/L		91	50 - 150		

Lab Sample ID: 400-137928-10 MS
Matrix: Water
Analysis Batch: 353919

Client Sample ID: AX11019 MW-32
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	2.1	J F1	10.0	9.37	F1	mg/L		72	77 - 128		

Lab Sample ID: 400-137928-10 MSD
Matrix: Water
Analysis Batch: 353919

Client Sample ID: AX11019 MW-32
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	2.1	J F1	10.0	9.59	F1	mg/L		75	77 - 128	2	5

Lab Sample ID: 400-137928-20 MS
Matrix: Water
Analysis Batch: 353919

Client Sample ID: AX11029 MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	11	F1	10.0	18.4	F1	mg/L		72	77 - 128		

Lab Sample ID: 400-137928-20 MSD
Matrix: Water
Analysis Batch: 353919

Client Sample ID: AX11029 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	11	F1	10.0	18.9		mg/L		77	77 - 128	3	5

Lab Sample ID: MB 400-354001/6
Matrix: Water
Analysis Batch: 354001

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			05/18/17 08:13	1

Lab Sample ID: LCS 400-354001/7
Matrix: Water
Analysis Batch: 354001

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	13.8		mg/L		92	90 - 110		

Lab Sample ID: MRL 400-354001/3
Matrix: Water
Analysis Batch: 354001

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	4.15	J	mg/L		83	50 - 150		

Lab Sample ID: 400-137928-30 MS
Matrix: Water
Analysis Batch: 354001

Client Sample ID: AX11071 MW-14
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	84	F1	100	90.5	F1	mg/L		6	77 - 128		

Lab Sample ID: 400-137928-30 MSD
Matrix: Water
Analysis Batch: 354001

Client Sample ID: AX11071 MW-14
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	84	F1	100	90.1	F1	mg/L		6	77 - 128	0	5

Lab Sample ID: 400-137928-36 MS
Matrix: Water
Analysis Batch: 354001

Client Sample ID: AX11077 EB-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	EB Result	EB Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	<1.4	F1	10.0	17.6	F1	mg/L		176	77 - 128		

Lab Sample ID: 400-137928-36 MSD
Matrix: Water
Analysis Batch: 354001

Client Sample ID: AX11077 EB-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	EB Result	EB Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	<1.4	F1	10.0	18.0	F1	mg/L		180	77 - 128	2	5

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

Chain of Custody Record

400-137928 COC

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Ben Rothschadl	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 3
Company: Alabama Power General Test Laboratory				Job #: 400-137928
Address: 744 County Rd 87 GSC #8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6121(Tel)	PO #:			
Email: sgcopela@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Greene County Ash Pond (7)	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
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)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 Cl_E	SM 4500 SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N				
AX11010	5/9/17	0953	G	Water			X	X	X	1	MW-26
AX11011	5/9/17	1103	G	Water			X	X	X	1	MW-29
AX11012	5/9/17	1208	G	Water			X	X	X	1	MW-30
AX11013	5/9/17	1208	G	Water			X	X	X	1	MW-30 Dup (Sample Duplicate)
AX11014	5/9/17	1325	G	Water			X	X	X	1	MW-27
AX11015	5/9/17	1420	G	Water			X	X	X	1	MW-28
AX11016	5/9/17	1526	G	Water			X	X	X	1	MW-23
AX11017	5/9/17	1550	G	Water			X	X	X	1	FB-1 (Field Blank)
AX11018	5/10/17	0925	G	Water			X	X	X	1	MW-24
AX11019	5/10/17	1028	G	Water		Y	X	X	X	1	MW-32
AX11020	5/10/17	1430	G	Water			X	X	X	1	MW-33
AX11021	5/10/17	1558	G	Water			X	X	X	1	MW-31

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Sarah Copeland	Date/Time: 05/13/2017; 0645	Company APC	Received by:	Date/Time: 5/15/17 814	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No

Custody Seal No.:

Cooler Temperature(s) °C and Other Remarks: 4.3°C JKZ

5/31/2017

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Anthony Goggins	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 2 of 3
Company: Alabama Power General Test Laboratory				Job #: 400-137928
Address: 744 County Rd 87 GSC #8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6121(Tel)	PO #:			
Email: sgcopela@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Greene County Ash Pond (7)	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
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)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 Cl_E	SM 4500 SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N				
AX11022	5/9/17	0936	G	Water			X	X	X	1	MW-1
AX11023	5/9/17	1111	G	Water			X	X	X	1	MW-2
AX11024	5/9/17	1212	G	Water			X	X	X	1	MW-3
AX11025	5/9/17	1330	G	Water			X	X	X	1	MW-5
AX11026	5/9/17	1454	G	Water			X	X	X	1	MW-11
AX11027	5/10/17	0934	G	Water			X	X	X	1	MW-6
AX11028	5/10/17	1034	G	Water			X	X	X	1	MW-7
AX11029	5/10/17	1430	G	Water		Y	X	X	X	1	MW-10
AX11030	5/10/17	1529	G	Water			X	X	X	1	MW-9
AX11031	5/10/17	1653	G	Water			X	X	X	1	MW-8
AX11032	5/9/17	0936	G	Water			X	X	X	1	MW-1 Dup (Sample Duplicate)
AX11033	5/9/17	1050	G	Water			X	X	X	1	FB-3 (Field Blank)

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Sarah Copeland	Date/Time: 05/13/2017; 0645	Company APC	Received by:	Date/Time: 5/15/17 814	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 4.3°C IR 2

5/31/2017

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Jason Rouss	Lab PM: Whitmire, 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 3 of 3
Company: Alabama Power General Test Laboratory				Job #: 400-137928

Address: 744 County Rd 87 GSC #8	Due Date Requested:
City: Calera	TAT Requested (days): Routine
State, Zip: AL, 35040	
Phone: 205-664-6121(Tel)	PO #:
Email: sgcopela@southernco.com	WO #:
Project Name: CCR	Project #: 40007143
Site: Greene County Ash Pond (7)	SSOW#:

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
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)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 Cl_E	SM 4500 SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N				
AX11066	5/9/17	0956	G	Water			X	X	X	1	MW-25
AX11067	5/9/17	1116	G	Water			X	X	X	1	MW-21
AX11068	5/9/17	1116	G	Water			X	X	X	1	MW-21 Dup (Sample Duplicate)
AX11069	5/9/17	1322	G	Water			X	X	X	1	MW-12
AX11070	5/9/17	1430	G	Water			X	X	X	1	MW-13
AX11071	5/9/17	1538	G	Water		Y	X	X	X	1	MW-14
AX11072	5/10/17	0934	G	Water			X	X	X	1	MW-15
AX11073	5/10/17	1113	G	Water			X	X	X	1	MW-16
AX11074	5/10/17	1444	G	Water			X	X	X	1	MW-17
AX11075	5/10/17	1500	G	Water			X	X	X	1	FB-2 (Field Blank)
AX11076	5/10/17	1615	G	Water			X	X	X	1	MW-18
AX11077	5/10/17	1640	G	Water		Y	X	X	X	1	EB-1 (Equipment Blank)

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Sarah Copeland	Date/Time: 05/13/2017; 0645	Company: APC	Received by:	Date/Time: 5/15/17 814	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks: 4.3°C IR2

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-137928-1
SDG Number: Greene County Ash Pond (7)

Login Number: 137928
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	4.3°C IR-2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

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

TestAmerica Job ID: 400-137928-1
SDG: Greene County 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.

Alabama Power General Test Laboratory
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Analytical Report

Alabama Power

Lab & Field SERVICES

Sample Group : WMWGREAP_1107

Project/Site : Greene County Ash Pond
Demopolis, AL 36732

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:**

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Case Narrative

Alabama Power

Lab & Field SERVICES

Anions

Greene County Ash Pond

WMWGREAP_1107

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
400-140127-1
General Chemistry

Method(s) SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 360173 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 360174 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) SM 4500 SO4 E: The following samples were diluted to bring the concentration of target analytes within the calibration range: AX15096 MW-1 (400-140127-5), AX15097 MW-2 (400-140127-6), AX15100 MW-5 (400-140127-9), AX15101 MW-6 (400-140127-10), AX15101 MW-6 (400-140127-10[MS]), AX15101 MW-6 (400-140127-10[MSD]),AX15103 MW-7 (400-140127-12), AX15104 MW-12 (400-140127-13), AX15106 MW-17 (400-140127-15), AX15107 MW-16 (400-140127-16), AX15108 MW-15 (400-140127-17), AX15109 MW-15 DUP (400-140127-18),AX15110 MW-24 (400-140127-19), AX15111 MW-25 (400-140127-20), AX15111 MW-25 (400-140127-20[MS]), AX15111 MW-25 (400-140127-20[MSD]), AX15112 MW-14 (400-140127-21), AX15114 MW-13 (400-140127-23), AX15115 MW-26 (400-140127-24), AX15123 MW-8 (400-140127-32), AX15124 MW-9 (400-140127-33), AX15126 MW-11 (400-140127-35), AX15127 MW-21 (400-140127-36), AX15127 MW-21 (400-140127-36[MS]) and AX15127 MW-21 (400-140127-36[MSD]). Elevated reporting limits (RLs) are provided.

Method(s) SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 360225 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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Case Narrative

Alabama Power

Lab & Field SERVICES

Metals ICP

Greene County Ash Pond

WMWGREAP_1107

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

Sample ID	Batch ID	Project ID
AX15092	20170630A	WMWGREAP_1107
AX15093	20170630A	WMWGREAP_1107
AX15094	20170630A	WMWGREAP_1107
AX15095	20170630A	WMWGREAP_1107
AX15096	20170630A_20170706	WMWGREAP_1107
AX15097	20170630A	WMWGREAP_1107
AX15098	20170630A	WMWGREAP_1107
AX15099	20170630A_20170706	WMWGREAP_1107
AX15100	20170630A	WMWGREAP_1107
AX15101	20170630A_20170706	WMWGREAP_1107
AX15102	20170630B	WMWGREAP_1107
AX15103	20170630B_20170706A	WMWGREAP_1107
AX15104	20170630B	WMWGREAP_1107
AX15105	20170630B	WMWGREAP_1107
AX15106	20170630B	WMWGREAP_1107
AX15107	20170630B	WMWGREAP_1107
AX15108	20170630B	WMWGREAP_1107
AX15109	20170630B	WMWGREAP_1107
AX15110	20170630B	WMWGREAP_1107
AX15111	20170630B	WMWGREAP_1107
AX15112	20170630C	WMWGREAP_1107
AX15113	20170630C	WMWGREAP_1107
AX15114	20170630C	WMWGREAP_1107
AX15115	20170630C	WMWGREAP_1107
AX15116	20170630C	WMWGREAP_1107
AX15117	20170630C	WMWGREAP_1107
AX15118	20170630C	WMWGREAP_1107
AX15119	20170630C	WMWGREAP_1107
AX15120	20170630C	WMWGREAP_1107
AX15121	20170630C	WMWGREAP_1107
AX15122	20170630B	WMWGREAP_1107
AX15123	20170630B_20170706B	WMWGREAP_1107
AX15124	20170630B	WMWGREAP_1107

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Case Narrative

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AX15125	20170630B	WMWGREAP_1107
AX15126	20170630B	WMWGREAP_1107
AX15127	20170630B	WMWGREAP_1107

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

General Quality Control Procedures:

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

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each ICP batch. All acceptance criteria for precision were met.

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7. All samples were analyzed at a x2 dilution to compensate for any matrix effects. The following samples were diluted due to analyzed sample concentration over the high standard of the calibration curve.

Sample ID	Analyte	Dilution Factor
AX15096	Calcium	x10
AX15099	Calcium	x10
AX15101	Calcium	x10
AX15101MS	Calcium	x10
AX15101MSD	Calcium	x10
AX15103	Calcium	x10
AX15123	Calcium	x10

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

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Metals ICPMS

Greene County Ash Pond

WMWGREAP_1107

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

Sample ID	Batch ID	Project ID
AX15092	598513	WMWGREAP_1107
AX15093	598513	WMWGREAP_1107
AX15094	598513	WMWGREAP_1107
AX15095	598513	WMWGREAP_1107
AX15096	598513	WMWGREAP_1107
AX15097	598513	WMWGREAP_1107
AX15098	598513	WMWGREAP_1107
AX15099	598513	WMWGREAP_1107
AX15100	598513	WMWGREAP_1107
AX15101	598513	WMWGREAP_1107
AX15102	598514	WMWGREAP_1107
AX15103	598514	WMWGREAP_1107
AX15104	598514	WMWGREAP_1107
AX15105	598514	WMWGREAP_1107
AX15106	598514	WMWGREAP_1107
AX15107	598514	WMWGREAP_1107
AX15108	598514	WMWGREAP_1107
AX15109	598514	WMWGREAP_1107
AX15110	598514	WMWGREAP_1107
AX15111	598514	WMWGREAP_1107
AX15112	598515	WMWGREAP_1107
AX15113	598515	WMWGREAP_1107
AX15114	598515	WMWGREAP_1107
AX15115	598515	WMWGREAP_1107
AX15116	598515	WMWGREAP_1107
AX15117	598515	WMWGREAP_1107
AX15118	598515	WMWGREAP_1107
AX15119	598515	WMWGREAP_1107
AX15120	598515	WMWGREAP_1107
AX15121	598515	WMWGREAP_1107
AX15122	598516	WMWGREAP_1107
AX15123	598516	WMWGREAP_1107
AX15124	598516	WMWGREAP_1107

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Case Narrative

Alabama Power

Lab & Field SERVICES

AX15125	598516	WMWGREAP_1107
AX15126	598516	WMWGREAP_1107
AX15127	598516	WMWGREAP_1107

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.

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Case Narrative

Alabama Power

Lab & Field SERVICES

Mercury

Greene County Ash Pond

WMWGREAP_1107

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

Sample ID	Batch ID	Project ID
AX15092	598912	WMWGREAP_1107
AX15093	598912	WMWGREAP_1107
AX15094	598912	WMWGREAP_1107
AX15095	598912	WMWGREAP_1107
AX15096	598912	WMWGREAP_1107
AX15097	598912	WMWGREAP_1107
AX15098	598912	WMWGREAP_1107
AX15099	598912	WMWGREAP_1107
AX15100	598912	WMWGREAP_1107
AX15101	598912	WMWGREAP_1107
AX15102	598913	WMWGREAP_1107
AX15103	598913	WMWGREAP_1107
AX15104	598913	WMWGREAP_1107
AX15105	598913	WMWGREAP_1107
AX15106	598913	WMWGREAP_1107
AX15107	598913	WMWGREAP_1107
AX15108	598913	WMWGREAP_1107
AX15109	598913	WMWGREAP_1107
AX15110	598913	WMWGREAP_1107
AX15111	598913	WMWGREAP_1107
AX15112	598914	WMWGREAP_1107
AX15113	598914	WMWGREAP_1107
AX15114	598914	WMWGREAP_1107
AX15115	598914	WMWGREAP_1107
AX15116	598914	WMWGREAP_1107
AX15117	598914	WMWGREAP_1107
AX15118	598914	WMWGREAP_1107
AX15119	598914	WMWGREAP_1107
AX15120	598914	WMWGREAP_1107
AX15121	598914	WMWGREAP_1107
AX15122	598915	WMWGREAP_1107
AX15123	598915	WMWGREAP_1107
AX15124	598915	WMWGREAP_1107

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AX15125	598915	WMWGREAP_1107
AX15126	598915	WMWGREAP_1107
AX15127	598915	WMWGREAP_1107

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 for the LCS for samples AX15092-101. There was a drop in the response signal during read time. The LCS was rerun a second time and the response signal was satisfactory. The second run's results were reported in LabWorks.

Matrix Specific Quality Control Procedures:

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

- A matrix spike and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for accuracy were met.
- A matrix spike and matrix spike duplicate were digested and analyzed with each batch. All acceptance criteria for precision were met.

7. All samples were analyzed without a dilution.
8. The raw data results are shown with dilution factors included.

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Case Narrative

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Case Narrative

Alabama Power

Lab & Field SERVICES

TDS

Greene County Ash Pond

WMWGREAP_1107

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

Sample ID	Batch ID	Project ID
AX15092	598564	WMWGREAP_1107
AX15093	598564	WMWGREAP_1107
AX15094	598564	WMWGREAP_1107
AX15095	598564	WMWGREAP_1107
AX15096	598564	WMWGREAP_1107
AX15097	598564	WMWGREAP_1107
AX15098	598631	WMWGREAP_1107
AX15099	598629	WMWGREAP_1107
AX15100	598629	WMWGREAP_1107
AX15101	598629	WMWGREAP_1107
AX15102	598629	WMWGREAP_1107
AX15103	598629	WMWGREAP_1107
AX15104	598629	WMWGREAP_1107
AX15105	598565	WMWGREAP_1107
AX15106	598565	WMWGREAP_1107
AX15107	598565	WMWGREAP_1107
AX15108	598565	WMWGREAP_1107
AX15109	598565	WMWGREAP_1107
AX15110	598629	WMWGREAP_1107
AX15111	598629	WMWGREAP_1107
AX15112	598629	WMWGREAP_1107
AX15113	598630	WMWGREAP_1107
AX15114	598630	WMWGREAP_1107
AX15115	598564	WMWGREAP_1107
AX15116	598564	WMWGREAP_1107
AX15117	598564	WMWGREAP_1107
AX15118	598565	WMWGREAP_1107
AX15119	598565	WMWGREAP_1107
AX15120	598565	WMWGREAP_1107
AX15121	598565	WMWGREAP_1107
AX15122	598565	WMWGREAP_1107
AX15123	598630	WMWGREAP_1107
AX15124	598630	WMWGREAP_1107

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Case Narrative

Alabama Power

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AX15125	598630	WMWGREAP_1107
AX15126	598630	WMWGREAP_1107
AX15127	598630	WMWGREAP_1107

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 AX15098, AX15102, AX15113 and AX15121 which did not meet the 2.5mg requirement.

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AX15092

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0238	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		13.8	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	CES	7/6/2017	SM 2540C		1		25		67.3	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		5.4	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10	J	0.050	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		1	1.40	5.00	J	3.4	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AX15092

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15101	Cobalt, Total	mg/L	-0.00000968	0.0044	0.10	0.114	0.112	0.104	0.085 to 0.115	114	70 to 130	1.93	20
AX15101	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0953	0.0927	0.0909	0.085 to 0.115	95.3	70 to 130	2.75	20
AX15101	Beryllium, Total	mg/L	0.00000890	0.00132	0.10	0.0939	0.0900	0.0939	0.085 to 0.115	93.9	70 to 130	4.31	20
AX15101	Molybdenum, Total	mg/L	0.00000786	0.0044	0.10	0.106	0.103	0.0963	0.085 to 0.115	106	70 to 130	3.06	20
AX15101	Calcium, Total	mg/L	-0.000385	0.22	5.	102	104	5.04	4.25 to 5.75	80.0	70 to 130	1.94	20
AX15101	Lithium, Total	mg/L	-0.0000557	0.022	0.20	0.258	0.258	0.202	0.17 to 0.23	109	70 to 130	0.157	20
AX15101	Cadmium, Total	mg/L	0.00000143	0.00044	0.10	0.0953	0.0925	0.0962	0.085 to 0.115	95.3	70 to 130	3.02	20
AX15101	Selenium, Total	mg/L	0.0000329	0.0044	0.10	0.0903	0.0880	0.0901	0.085 to 0.115	90.3	70 to 130	2.54	20
AX15101	Barium, Total	mg/L	0.0000101	0.0044	0.10	0.134	0.130	0.0924	0.085 to 0.115	94.2	70 to 130	3.24	20
AX15101	Boron, Total	mg/L	-0.00362	0.044	1.00	2.68	2.70	1.00	0.85 to 1.15	97.2	70 to 130	0.631	20
AX15101	Lead, Total	mg/L	0.00000493	0.0022	0.10	0.0999	0.0948	0.0979	0.085 to 0.115	99.9	70 to 130	5.31	20
AX15101	Mercury, Total by CVAA	mg/L	0.00000593	0.0005	0.004	0.00372	0.00368	0.00377	0.0034 to 0.0046	93.0	70 to 130	1.18	20
AX15101	Antimony, Total	mg/L	0.0000205	0.00132	0.10	0.100	0.0985	0.0935	0.085 to 0.115	100	70 to 130	1.51	20
AX15101	Chromium, Total	mg/L	0.0000225	0.0044	0.10	0.0998	0.0970	0.0937	0.085 to 0.115	99.8	70 to 130	2.82	20
AX15101	Thallium, Total	mg/L	0.00000614	0.00044	0.10	0.104	0.0987	0.0968	0.085 to 0.115	104	70 to 130	5.63	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
Version: 2.0

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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-31

Laboratory ID Number: AX15092

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15117	Solids, Dissolved	mg/L	7.00	25			25.3	47.0	40 to 60			0.00	5

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

Reported: 7/24/2017
Version: 2.0

Alabama Power General Test Laboratory
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-31 Dup

Laboratory ID Number: AX15093

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0241	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		13.1	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	CES	7/6/2017	SM 2540C		1		25		66.7	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		5.8	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10	J	0.050	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		1	1.40	5.00	J	3.5	mg/L

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-31 Dup

Laboratory ID Number: AX15093

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15101	Cobalt, Total	mg/L	-0.00000968	0.0044	0.10	0.114	0.112	0.104	0.085 to 0.115	114	70 to 130	1.93	20
AX15101	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0953	0.0927	0.0909	0.085 to 0.115	95.3	70 to 130	2.75	20
AX15101	Beryllium, Total	mg/L	0.00000890	0.00132	0.10	0.0939	0.0900	0.0939	0.085 to 0.115	93.9	70 to 130	4.31	20
AX15101	Molybdenum, Total	mg/L	0.00000786	0.0044	0.10	0.106	0.103	0.0963	0.085 to 0.115	106	70 to 130	3.06	20
AX15101	Calcium, Total	mg/L	-0.000385	0.22	5.	102	104	5.04	4.25 to 5.75	80.0	70 to 130	1.94	20
AX15101	Lithium, Total	mg/L	-0.0000557	0.022	0.20	0.258	0.258	0.202	0.17 to 0.23	109	70 to 130	0.157	20
AX15101	Barium, Total	mg/L	0.0000101	0.0044	0.10	0.134	0.130	0.0924	0.085 to 0.115	94.2	70 to 130	3.24	20
AX15101	Boron, Total	mg/L	-0.00362	0.044	1.00	2.68	2.70	1.00	0.85 to 1.15	97.2	70 to 130	0.631	20
AX15101	Lead, Total	mg/L	0.00000493	0.0022	0.10	0.0999	0.0948	0.0979	0.085 to 0.115	99.9	70 to 130	5.31	20
AX15101	Mercury, Total by CVAA	mg/L	0.00000593	0.0005	0.004	0.00372	0.00368	0.00377	0.0034 to 0.0046	93.0	70 to 130	1.18	20
AX15101	Cadmium, Total	mg/L	0.00000143	0.00044	0.10	0.0953	0.0925	0.0962	0.085 to 0.115	95.3	70 to 130	3.02	20
AX15101	Selenium, Total	mg/L	0.0000329	0.0044	0.10	0.0903	0.0880	0.0901	0.085 to 0.115	90.3	70 to 130	2.54	20
AX15101	Antimony, Total	mg/L	0.0000205	0.00132	0.10	0.100	0.0985	0.0935	0.085 to 0.115	100	70 to 130	1.51	20
AX15101	Chromium, Total	mg/L	0.0000225	0.0044	0.10	0.0998	0.0970	0.0937	0.085 to 0.115	99.8	70 to 130	2.82	20
AX15101	Thallium, Total	mg/L	0.00000614	0.00044	0.10	0.104	0.0987	0.0968	0.085 to 0.115	104	70 to 130	5.63	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-31 Dup

Laboratory ID Number: AX15093

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15117	Solids, Dissolved	mg/L	7.00	25			25.3	47.0	40 to 60			0.00	5

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Reported: 7/24/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AX15094

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0679	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		2.20	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	J	0.00247	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	CES	7/6/2017	SM 2540C		1		25		58.0	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		7.2	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10	J	0.070	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		1	1.40	5.00		13	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AX15094

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15101	Cobalt, Total	mg/L	-0.00000968	0.0044	0.10	0.114	0.112	0.104	0.085 to 0.115	114	70 to 130	1.93	20
AX15101	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0953	0.0927	0.0909	0.085 to 0.115	95.3	70 to 130	2.75	20
AX15101	Beryllium, Total	mg/L	0.00000890	0.00132	0.10	0.0939	0.0900	0.0939	0.085 to 0.115	93.9	70 to 130	4.31	20
AX15101	Molybdenum, Total	mg/L	0.00000786	0.0044	0.10	0.106	0.103	0.0963	0.085 to 0.115	106	70 to 130	3.06	20
AX15101	Calcium, Total	mg/L	-0.000385	0.22	5.	102	104	5.04	4.25 to 5.75	80.0	70 to 130	1.94	20
AX15101	Lithium, Total	mg/L	-0.0000557	0.022	0.20	0.258	0.258	0.202	0.17 to 0.23	109	70 to 130	0.157	20
AX15101	Barium, Total	mg/L	0.0000101	0.0044	0.10	0.134	0.130	0.0924	0.085 to 0.115	94.2	70 to 130	3.24	20
AX15101	Boron, Total	mg/L	-0.00362	0.044	1.00	2.68	2.70	1.00	0.85 to 1.15	97.2	70 to 130	0.631	20
AX15101	Lead, Total	mg/L	0.00000493	0.0022	0.10	0.0999	0.0948	0.0979	0.085 to 0.115	99.9	70 to 130	5.31	20
AX15101	Mercury, Total by CVAA	mg/L	0.00000593	0.0005	0.004	0.00372	0.00368	0.00377	0.0034 to 0.0046	93.0	70 to 130	1.18	20
AX15101	Cadmium, Total	mg/L	0.00000143	0.00044	0.10	0.0953	0.0925	0.0962	0.085 to 0.115	95.3	70 to 130	3.02	20
AX15101	Selenium, Total	mg/L	0.0000329	0.0044	0.10	0.0903	0.0880	0.0901	0.085 to 0.115	90.3	70 to 130	2.54	20
AX15101	Antimony, Total	mg/L	0.0000205	0.00132	0.10	0.100	0.0985	0.0935	0.085 to 0.115	100	70 to 130	1.51	20
AX15101	Chromium, Total	mg/L	0.0000225	0.0044	0.10	0.0998	0.0970	0.0937	0.085 to 0.115	99.8	70 to 130	2.82	20
AX15101	Thallium, Total	mg/L	0.00000614	0.00044	0.10	0.104	0.0987	0.0968	0.085 to 0.115	104	70 to 130	5.63	20

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Expiration: June 30, 2018

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Reported: 7/24/2017
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-33

Laboratory ID Number: AX15094

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15117	Solids, Dissolved	mg/L	7.00	25			25.3	47.0	40 to 60			0.00	5

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AX15095

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0127	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		9.88	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	CES	7/6/2017	SM 2540C		1		25		55.3	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		4.0	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10	J	0.040	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		1	1.40	5.00	J	2.7	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AX15095

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15101	Cobalt, Total	mg/L	-0.00000968	0.0044	0.10	0.114	0.112	0.104	0.085 to 0.115	114	70 to 130	1.93	20
AX15101	Calcium, Total	mg/L	-0.000385	0.22	5.	102	104	5.04	4.25 to 5.75	80.0	70 to 130	1.94	20
AX15101	Lithium, Total	mg/L	-0.0000557	0.022	0.20	0.258	0.258	0.202	0.17 to 0.23	109	70 to 130	0.157	20
AX15101	Cadmium, Total	mg/L	0.00000143	0.00044	0.10	0.0953	0.0925	0.0962	0.085 to 0.115	95.3	70 to 130	3.02	20
AX15101	Selenium, Total	mg/L	0.0000329	0.0044	0.10	0.0903	0.0880	0.0901	0.085 to 0.115	90.3	70 to 130	2.54	20
AX15101	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0953	0.0927	0.0909	0.085 to 0.115	95.3	70 to 130	2.75	20
AX15101	Beryllium, Total	mg/L	0.00000890	0.00132	0.10	0.0939	0.0900	0.0939	0.085 to 0.115	93.9	70 to 130	4.31	20
AX15101	Molybdenum, Total	mg/L	0.00000786	0.0044	0.10	0.106	0.103	0.0963	0.085 to 0.115	106	70 to 130	3.06	20
AX15101	Barium, Total	mg/L	0.0000101	0.0044	0.10	0.134	0.130	0.0924	0.085 to 0.115	94.2	70 to 130	3.24	20
AX15101	Boron, Total	mg/L	-0.00362	0.044	1.00	2.68	2.70	1.00	0.85 to 1.15	97.2	70 to 130	0.631	20
AX15101	Lead, Total	mg/L	0.00000493	0.0022	0.10	0.0999	0.0948	0.0979	0.085 to 0.115	99.9	70 to 130	5.31	20
AX15101	Mercury, Total by CVAA	mg/L	0.00000593	0.0005	0.004	0.00372	0.00368	0.00377	0.0034 to 0.0046	93.0	70 to 130	1.18	20
AX15101	Antimony, Total	mg/L	0.0000205	0.00132	0.10	0.100	0.0985	0.0935	0.085 to 0.115	100	70 to 130	1.51	20
AX15101	Chromium, Total	mg/L	0.0000225	0.0044	0.10	0.0998	0.0970	0.0937	0.085 to 0.115	99.8	70 to 130	2.82	20
AX15101	Thallium, Total	mg/L	0.00000614	0.00044	0.10	0.104	0.0987	0.0968	0.085 to 0.115	104	70 to 130	5.63	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-32

Laboratory ID Number: AX15095

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15117	Solids, Dissolved	mg/L	7.00	25			25.3	47.0	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:

Reported: 7/24/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AX15096

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005		0.0165	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0348	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1		0.206	mg/L
* Calcium, Total	HRG	7/6/2017	EPA 200.7		10	1	5		184	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0664	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	J	0.00206	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	CES	7/6/2017	SM 2540C		1		100		1470	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		29	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10	J	0.040	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		40	56.0	200		830	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AX15096

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15101	Cobalt, Total	mg/L	-0.00000968	0.0044	0.10	0.114	0.112	0.104	0.085 to 0.115	114	70 to 130	1.93	20
AX15101	Calcium, Total	mg/L	-0.000385	0.22	5.	102	104	5.04	4.25 to 5.75	80.0	70 to 130	1.94	20
AX15101	Lithium, Total	mg/L	-0.0000557	0.022	0.20	0.258	0.258	0.202	0.17 to 0.23	109	70 to 130	0.157	20
AX15101	Antimony, Total	mg/L	0.0000205	0.00132	0.10	0.100	0.0985	0.0935	0.085 to 0.115	100	70 to 130	1.51	20
AX15101	Chromium, Total	mg/L	0.0000225	0.0044	0.10	0.0998	0.0970	0.0937	0.085 to 0.115	99.8	70 to 130	2.82	20
AX15101	Thallium, Total	mg/L	0.00000614	0.00044	0.10	0.104	0.0987	0.0968	0.085 to 0.115	104	70 to 130	5.63	20
AX15101	Barium, Total	mg/L	0.0000101	0.0044	0.10	0.134	0.130	0.0924	0.085 to 0.115	94.2	70 to 130	3.24	20
AX15101	Boron, Total	mg/L	-0.00362	0.044	1.00	2.68	2.70	1.00	0.85 to 1.15	97.2	70 to 130	0.631	20
AX15101	Lead, Total	mg/L	0.00000493	0.0022	0.10	0.0999	0.0948	0.0979	0.085 to 0.115	99.9	70 to 130	5.31	20
AX15101	Mercury, Total by CVAA	mg/L	0.00000593	0.0005	0.004	0.00372	0.00368	0.00377	0.0034 to 0.0046	93.0	70 to 130	1.18	20
AX15101	Cadmium, Total	mg/L	0.00000143	0.00044	0.10	0.0953	0.0925	0.0962	0.085 to 0.115	95.3	70 to 130	3.02	20
AX15101	Selenium, Total	mg/L	0.0000329	0.0044	0.10	0.0903	0.0880	0.0901	0.085 to 0.115	90.3	70 to 130	2.54	20
AX15101	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0953	0.0927	0.0909	0.085 to 0.115	95.3	70 to 130	2.75	20
AX15101	Beryllium, Total	mg/L	0.00000890	0.00132	0.10	0.0939	0.0900	0.0939	0.085 to 0.115	93.9	70 to 130	4.31	20
AX15101	Molybdenum, Total	mg/L	0.00000786	0.0044	0.10	0.106	0.103	0.0963	0.085 to 0.115	106	70 to 130	3.06	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-1

Laboratory ID Number: AX15096

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15117	Solids, Dissolved	mg/L	7.00	25			25.3	47.0	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:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AX15097

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005		0.00848	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0273	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1		0.111	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		65.4	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0102	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	CES	7/6/2017	SM 2540C		1		50		480	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		15	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10	J	0.090	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		20	28.0	100		230	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AX15097

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15101	Cobalt, Total	mg/L	-0.00000968	0.0044	0.10	0.114	0.112	0.104	0.085 to 0.115	114	70 to 130	1.93	20
AX15101	Antimony, Total	mg/L	0.0000205	0.00132	0.10	0.100	0.0985	0.0935	0.085 to 0.115	100	70 to 130	1.51	20
AX15101	Chromium, Total	mg/L	0.0000225	0.0044	0.10	0.0998	0.0970	0.0937	0.085 to 0.115	99.8	70 to 130	2.82	20
AX15101	Thallium, Total	mg/L	0.00000614	0.00044	0.10	0.104	0.0987	0.0968	0.085 to 0.115	104	70 to 130	5.63	20
AX15101	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0953	0.0927	0.0909	0.085 to 0.115	95.3	70 to 130	2.75	20
AX15101	Beryllium, Total	mg/L	0.00000890	0.00132	0.10	0.0939	0.0900	0.0939	0.085 to 0.115	93.9	70 to 130	4.31	20
AX15101	Molybdenum, Total	mg/L	0.00000786	0.0044	0.10	0.106	0.103	0.0963	0.085 to 0.115	106	70 to 130	3.06	20
AX15101	Calcium, Total	mg/L	-0.000385	0.22	5.	102	104	5.04	4.25 to 5.75	80.0	70 to 130	1.94	20
AX15101	Lithium, Total	mg/L	-0.0000557	0.022	0.20	0.258	0.258	0.202	0.17 to 0.23	109	70 to 130	0.157	20
AX15101	Barium, Total	mg/L	0.0000101	0.0044	0.10	0.134	0.130	0.0924	0.085 to 0.115	94.2	70 to 130	3.24	20
AX15101	Boron, Total	mg/L	-0.00362	0.044	1.00	2.68	2.70	1.00	0.85 to 1.15	97.2	70 to 130	0.631	20
AX15101	Lead, Total	mg/L	0.00000493	0.0022	0.10	0.0999	0.0948	0.0979	0.085 to 0.115	99.9	70 to 130	5.31	20
AX15101	Mercury, Total by CVAA	mg/L	0.00000593	0.0005	0.004	0.00372	0.00368	0.00377	0.0034 to 0.0046	93.0	70 to 130	1.18	20
AX15101	Cadmium, Total	mg/L	0.00000143	0.00044	0.10	0.0953	0.0925	0.0962	0.085 to 0.115	95.3	70 to 130	3.02	20
AX15101	Selenium, Total	mg/L	0.0000329	0.0044	0.10	0.0903	0.0880	0.0901	0.085 to 0.115	90.3	70 to 130	2.54	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-2

Laboratory ID Number: AX15097

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15117	Solids, Dissolved	mg/L	7.00	25			25.3	47.0	40 to 60			0.00	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:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX15098

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5	U	Not Detected	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	7/6/2017	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00	U	<0.60	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10	U	<0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX15098

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15101	Cobalt, Total	mg/L	-0.00000968	0.0044	0.10	0.114	0.112	0.104	0.085 to 0.115	114	70 to 130	1.93	20
AX15101	Antimony, Total	mg/L	0.0000205	0.00132	0.10	0.100	0.0985	0.0935	0.085 to 0.115	100	70 to 130	1.51	20
AX15101	Chromium, Total	mg/L	0.0000225	0.0044	0.10	0.0998	0.0970	0.0937	0.085 to 0.115	99.8	70 to 130	2.82	20
AX15101	Thallium, Total	mg/L	0.00000614	0.00044	0.10	0.104	0.0987	0.0968	0.085 to 0.115	104	70 to 130	5.63	20
AX15101	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0953	0.0927	0.0909	0.085 to 0.115	95.3	70 to 130	2.75	20
AX15101	Beryllium, Total	mg/L	0.00000890	0.00132	0.10	0.0939	0.0900	0.0939	0.085 to 0.115	93.9	70 to 130	4.31	20
AX15101	Molybdenum, Total	mg/L	0.00000786	0.0044	0.10	0.106	0.103	0.0963	0.085 to 0.115	106	70 to 130	3.06	20
AX15101	Barium, Total	mg/L	0.0000101	0.0044	0.10	0.134	0.130	0.0924	0.085 to 0.115	94.2	70 to 130	3.24	20
AX15101	Boron, Total	mg/L	-0.00362	0.044	1.00	2.68	2.70	1.00	0.85 to 1.15	97.2	70 to 130	0.631	20
AX15101	Lead, Total	mg/L	0.00000493	0.0022	0.10	0.0999	0.0948	0.0979	0.085 to 0.115	99.9	70 to 130	5.31	20
AX15101	Mercury, Total by CVAA	mg/L	0.00000593	0.0005	0.004	0.00372	0.00368	0.00377	0.0034 to 0.0046	93.0	70 to 130	1.18	20
AX15101	Calcium, Total	mg/L	-0.000385	0.22	5.	102	104	5.04	4.25 to 5.75	80.0	70 to 130	1.94	20
AX15101	Lithium, Total	mg/L	-0.0000557	0.022	0.20	0.258	0.258	0.202	0.17 to 0.23	109	70 to 130	0.157	20
AX15101	Cadmium, Total	mg/L	0.00000143	0.00044	0.10	0.0953	0.0925	0.0962	0.085 to 0.115	95.3	70 to 130	3.02	20
AX15101	Selenium, Total	mg/L	0.0000329	0.0044	0.10	0.0903	0.0880	0.0901	0.085 to 0.115	90.3	70 to 130	2.54	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX15098

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15098	Solids, Dissolved	mg/L	8.00	25			2.7	50.0	40 to 60			0.00	5

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AX15099

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005		0.00745	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.104	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	J	0.0226	mg/L
* Calcium, Total	HRG	7/6/2017	EPA 200.7		10	1	5		80.7	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	J	0.00336	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	7/6/2017	SM 2540C		1		25		368	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		26	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10		0.10	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AX15099

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15101	Cobalt, Total	mg/L	-0.00000968	0.0044	0.10	0.114	0.112	0.104	0.085 to 0.115	114	70 to 130	1.93	20
AX15101	Antimony, Total	mg/L	0.0000205	0.00132	0.10	0.100	0.0985	0.0935	0.085 to 0.115	100	70 to 130	1.51	20
AX15101	Chromium, Total	mg/L	0.0000225	0.0044	0.10	0.0998	0.0970	0.0937	0.085 to 0.115	99.8	70 to 130	2.82	20
AX15101	Thallium, Total	mg/L	0.00000614	0.00044	0.10	0.104	0.0987	0.0968	0.085 to 0.115	104	70 to 130	5.63	20
AX15101	Calcium, Total	mg/L	-0.000385	0.22	5.	102	104	5.04	4.25 to 5.75	80.0	70 to 130	1.94	20
AX15101	Lithium, Total	mg/L	-0.0000557	0.022	0.20	0.258	0.258	0.202	0.17 to 0.23	109	70 to 130	0.157	20
AX15101	Cadmium, Total	mg/L	0.00000143	0.00044	0.10	0.0953	0.0925	0.0962	0.085 to 0.115	95.3	70 to 130	3.02	20
AX15101	Selenium, Total	mg/L	0.0000329	0.0044	0.10	0.0903	0.0880	0.0901	0.085 to 0.115	90.3	70 to 130	2.54	20
AX15101	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0953	0.0927	0.0909	0.085 to 0.115	95.3	70 to 130	2.75	20
AX15101	Beryllium, Total	mg/L	0.00000890	0.00132	0.10	0.0939	0.0900	0.0939	0.085 to 0.115	93.9	70 to 130	4.31	20
AX15101	Molybdenum, Total	mg/L	0.00000786	0.0044	0.10	0.106	0.103	0.0963	0.085 to 0.115	106	70 to 130	3.06	20
AX15101	Barium, Total	mg/L	0.0000101	0.0044	0.10	0.134	0.130	0.0924	0.085 to 0.115	94.2	70 to 130	3.24	20
AX15101	Boron, Total	mg/L	-0.00362	0.044	1.00	2.68	2.70	1.00	0.85 to 1.15	97.2	70 to 130	0.631	20
AX15101	Lead, Total	mg/L	0.00000493	0.0022	0.10	0.0999	0.0948	0.0979	0.085 to 0.115	99.9	70 to 130	5.31	20
AX15101	Mercury, Total by CVAA	mg/L	0.00000593	0.0005	0.004	0.00372	0.00368	0.00377	0.0034 to 0.0046	93.0	70 to 130	1.18	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-3

Laboratory ID Number: AX15099

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15112	Solids, Dissolved	mg/L	5.00	25			349	49.0	40 to 60			0.143	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:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AX15100

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005		0.353	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.480	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1		0.448	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		66.1	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	J	0.00690	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05		0.0879	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	J	0.00356	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	7/6/2017	SM 2540C		1		25		373	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		17	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10		0.21	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		2	2.80	10		45	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AX15100

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15101	Cobalt, Total	mg/L	-0.00000968	0.0044	0.10	0.114	0.112	0.104	0.085 to 0.115	114	70 to 130	1.93	20
AX15101	Antimony, Total	mg/L	0.0000205	0.00132	0.10	0.100	0.0985	0.0935	0.085 to 0.115	100	70 to 130	1.51	20
AX15101	Chromium, Total	mg/L	0.0000225	0.0044	0.10	0.0998	0.0970	0.0937	0.085 to 0.115	99.8	70 to 130	2.82	20
AX15101	Thallium, Total	mg/L	0.00000614	0.00044	0.10	0.104	0.0987	0.0968	0.085 to 0.115	104	70 to 130	5.63	20
AX15101	Barium, Total	mg/L	0.0000101	0.0044	0.10	0.134	0.130	0.0924	0.085 to 0.115	94.2	70 to 130	3.24	20
AX15101	Boron, Total	mg/L	-0.00362	0.044	1.00	2.68	2.70	1.00	0.85 to 1.15	97.2	70 to 130	0.631	20
AX15101	Lead, Total	mg/L	0.00000493	0.0022	0.10	0.0999	0.0948	0.0979	0.085 to 0.115	99.9	70 to 130	5.31	20
AX15101	Mercury, Total by CVAA	mg/L	0.00000593	0.0005	0.004	0.00372	0.00368	0.00377	0.0034 to 0.0046	93.0	70 to 130	1.18	20
AX15101	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0953	0.0927	0.0909	0.085 to 0.115	95.3	70 to 130	2.75	20
AX15101	Beryllium, Total	mg/L	0.00000890	0.00132	0.10	0.0939	0.0900	0.0939	0.085 to 0.115	93.9	70 to 130	4.31	20
AX15101	Molybdenum, Total	mg/L	0.00000786	0.0044	0.10	0.106	0.103	0.0963	0.085 to 0.115	106	70 to 130	3.06	20
AX15101	Calcium, Total	mg/L	-0.000385	0.22	5.	102	104	5.04	4.25 to 5.75	80.0	70 to 130	1.94	20
AX15101	Lithium, Total	mg/L	-0.0000557	0.022	0.20	0.258	0.258	0.202	0.17 to 0.23	109	70 to 130	0.157	20
AX15101	Cadmium, Total	mg/L	0.00000143	0.00044	0.10	0.0953	0.0925	0.0962	0.085 to 0.115	95.3	70 to 130	3.02	20
AX15101	Selenium, Total	mg/L	0.0000329	0.0044	0.10	0.0903	0.0880	0.0901	0.085 to 0.115	90.3	70 to 130	2.54	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

Reported: 7/24/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-5

Laboratory ID Number: AX15100

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15112	Solids, Dissolved	mg/L	5.00	25			349	49.0	40 to 60			0.143	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:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AX15101

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0402	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1		1.71	mg/L
* Calcium, Total	HRG	7/6/2017	EPA 200.7		10	1	5		98.0	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	J	0.0403	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	7/6/2017	SM 2540C		1		50		622	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		36	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10		0.18	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		5	7.00	25		100	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AX15101

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15101	Cobalt, Total	mg/L	-0.00000968	0.0044	0.10	0.114	0.112	0.104	0.085 to 0.115	114	70 to 130	1.93	20
AX15101	Antimony, Total	mg/L	0.0000205	0.00132	0.10	0.100	0.0985	0.0935	0.085 to 0.115	100	70 to 130	1.51	20
AX15101	Chromium, Total	mg/L	0.0000225	0.0044	0.10	0.0998	0.0970	0.0937	0.085 to 0.115	99.8	70 to 130	2.82	20
AX15101	Thallium, Total	mg/L	0.00000614	0.00044	0.10	0.104	0.0987	0.0968	0.085 to 0.115	104	70 to 130	5.63	20
AX15101	Calcium, Total	mg/L	-0.000385	0.22	5.	102	104	5.04	4.25 to 5.75	80.0	70 to 130	1.94	20
AX15101	Lithium, Total	mg/L	-0.0000557	0.022	0.20	0.258	0.258	0.202	0.17 to 0.23	109	70 to 130	0.157	20
AX15101	Cadmium, Total	mg/L	0.00000143	0.00044	0.10	0.0953	0.0925	0.0962	0.085 to 0.115	95.3	70 to 130	3.02	20
AX15101	Selenium, Total	mg/L	0.0000329	0.0044	0.10	0.0903	0.0880	0.0901	0.085 to 0.115	90.3	70 to 130	2.54	20
AX15101	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0953	0.0927	0.0909	0.085 to 0.115	95.3	70 to 130	2.75	20
AX15101	Beryllium, Total	mg/L	0.00000890	0.00132	0.10	0.0939	0.0900	0.0939	0.085 to 0.115	93.9	70 to 130	4.31	20
AX15101	Molybdenum, Total	mg/L	0.00000786	0.0044	0.10	0.106	0.103	0.0963	0.085 to 0.115	106	70 to 130	3.06	20
AX15101	Barium, Total	mg/L	0.0000101	0.0044	0.10	0.134	0.130	0.0924	0.085 to 0.115	94.2	70 to 130	3.24	20
AX15101	Boron, Total	mg/L	-0.00362	0.044	1.00	2.68	2.70	1.00	0.85 to 1.15	97.2	70 to 130	0.631	20
AX15101	Lead, Total	mg/L	0.00000493	0.0022	0.10	0.0999	0.0948	0.0979	0.085 to 0.115	99.9	70 to 130	5.31	20
AX15101	Mercury, Total by CVAA	mg/L	0.00000593	0.0005	0.004	0.00372	0.00368	0.00377	0.0034 to 0.0046	93.0	70 to 130	1.18	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-6

Laboratory ID Number: AX15101

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15112	Solids, Dissolved	mg/L	5.00	25			349	49.0	40 to 60			0.143	5

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPEB
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AX15102

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5	U	Not Detected	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	7/6/2017	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00	U	<0.60	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10	U	<0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		1	1.40	5.00	U	<1.4	mg/L

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Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPEB
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AX15102

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15111	Thallium, Total	mg/L	0.00000614	0.00044	0.10	0.0906	0.0950	0.0968	0.085 to 0.115	90.6	70 to 130	4.75	20
AX15111	Calcium, Total	mg/L	0.00194	0.22	5.00	11.6	11.5	4.76	4.25 to 5.75	88.7	70 to 130	0.882	20
AX15111	Barium, Total	mg/L	0.0000101	0.0044	0.10	0.159	0.159	0.0924	0.085 to 0.115	76.2	70 to 130	0.370	20
AX15111	Lithium, Total	mg/L	-0.0000399	0.022	0.20	0.190	0.184	0.200	0.17 to 0.23	94.8	70 to 130	3.23	20
AX15111	Mercury, Total by CVAA	mg/L	0.00000671	0.0005	0.004	0.00379	0.00369	0.00375	0.0034 to 0.0046	94.6	70 to 130	2.58	20
AX15111	Cadmium, Total	mg/L	0.00000143	0.00044	0.10	0.0895	0.0870	0.0962	0.085 to 0.115	89.5	70 to 130	2.73	20
AX15111	Molybdenum, Total	mg/L	0.00000786	0.0044	0.10	0.0988	0.0979	0.0963	0.085 to 0.115	98.8	70 to 130	0.946	20
AX15111	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0867	0.0861	0.0909	0.085 to 0.115	86.7	70 to 130	0.703	20
AX15111	Lead, Total	mg/L	0.00000493	0.0022	0.10	0.0869	0.0900	0.0979	0.085 to 0.115	86.9	70 to 130	3.45	20
AX15111	Boron, Total	mg/L	-0.00328	0.044	1.00	1.02	1.03	0.985	0.85 to 1.15	93.7	70 to 130	0.673	20
AX15111	Chromium, Total	mg/L	0.0000225	0.0044	0.10	0.0920	0.0906	0.0937	0.085 to 0.115	92.0	70 to 130	1.54	20
AX15111	Cobalt, Total	mg/L	-0.00000968	0.0044	0.10	0.110	0.110	0.104	0.085 to 0.115	103	70 to 130	0.638	20
AX15111	Antimony, Total	mg/L	0.0000205	0.00132	0.10	0.0933	0.0935	0.0935	0.085 to 0.115	93.3	70 to 130	0.144	20
AX15111	Beryllium, Total	mg/L	0.00000890	0.00132	0.10	0.0822	0.0847	0.0939	0.085 to 0.115	82.2	70 to 130	2.95	20
AX15111	Selenium, Total	mg/L	0.0000329	0.0044	0.10	0.0834	0.0827	0.0901	0.085 to 0.115	83.4	70 to 130	0.826	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
Version: 2.0

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Calera, AL 35040
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPEB
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond Equipment Blank

Laboratory ID Number: AX15102

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15112	Solids, Dissolved	mg/L	5.00	25			349	49.0	40 to 60			0.143	5

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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AX15103

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0582	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1		0.501	mg/L
* Calcium, Total	HRG	7/6/2017	EPA 200.7		10	1	5		108	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	7/6/2017	SM 2540C		1		50		914	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		45	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10	J	0.080	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		15	21.0	75		210	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

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Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AX15103

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15111	Thallium, Total	mg/L	0.00000614	0.00044	0.10	0.0906	0.0950	0.0968	0.085 to 0.115	90.6	70 to 130	4.75	20
AX15111	Calcium, Total	mg/L	0.00194	0.22	5.00	11.6	11.5	4.76	4.25 to 5.75	88.7	70 to 130	0.882	20
AX15111	Antimony, Total	mg/L	0.0000205	0.00132	0.10	0.0933	0.0935	0.0935	0.085 to 0.115	93.3	70 to 130	0.144	20
AX15111	Beryllium, Total	mg/L	0.00000890	0.00132	0.10	0.0822	0.0847	0.0939	0.085 to 0.115	82.2	70 to 130	2.95	20
AX15111	Selenium, Total	mg/L	0.0000329	0.0044	0.10	0.0834	0.0827	0.0901	0.085 to 0.115	83.4	70 to 130	0.826	20
AX15111	Boron, Total	mg/L	-0.00328	0.044	1.00	1.02	1.03	0.985	0.85 to 1.15	93.7	70 to 130	0.673	20
AX15111	Chromium, Total	mg/L	0.0000225	0.0044	0.10	0.0920	0.0906	0.0937	0.085 to 0.115	92.0	70 to 130	1.54	20
AX15111	Cobalt, Total	mg/L	-0.00000968	0.0044	0.10	0.110	0.110	0.104	0.085 to 0.115	103	70 to 130	0.638	20
AX15111	Barium, Total	mg/L	0.0000101	0.0044	0.10	0.159	0.159	0.0924	0.085 to 0.115	76.2	70 to 130	0.370	20
AX15111	Lithium, Total	mg/L	-0.0000399	0.022	0.20	0.190	0.184	0.200	0.17 to 0.23	94.8	70 to 130	3.23	20
AX15111	Mercury, Total by CVAA	mg/L	0.00000671	0.0005	0.004	0.00379	0.00369	0.00375	0.0034 to 0.0046	94.6	70 to 130	2.58	20
AX15111	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0867	0.0861	0.0909	0.085 to 0.115	86.7	70 to 130	0.703	20
AX15111	Lead, Total	mg/L	0.00000493	0.0022	0.10	0.0869	0.0900	0.0979	0.085 to 0.115	86.9	70 to 130	3.45	20
AX15111	Cadmium, Total	mg/L	0.00000143	0.00044	0.10	0.0895	0.0870	0.0962	0.085 to 0.115	89.5	70 to 130	2.73	20
AX15111	Molybdenum, Total	mg/L	0.00000786	0.0044	0.10	0.0988	0.0979	0.0963	0.085 to 0.115	98.8	70 to 130	0.946	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-7

Laboratory ID Number: AX15103

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15112	Solids, Dissolved	mg/L	5.00	25			349	49.0	40 to 60			0.143	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:

Reported: 7/24/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AX15104

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0178	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1		0.231	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		28.0	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	J	0.000683	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05		0.126	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.109	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	7/6/2017	SM 2540C		1		25		198	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		12	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10		0.17	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		5	7.00	25		71	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AX15104

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15111	Thallium, Total	mg/L	0.00000614	0.00044	0.10	0.0906	0.0950	0.0968	0.085 to 0.115	90.6	70 to 130	4.75	20
AX15111	Calcium, Total	mg/L	0.00194	0.22	5.00	11.6	11.5	4.76	4.25 to 5.75	88.7	70 to 130	0.882	20
AX15111	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0867	0.0861	0.0909	0.085 to 0.115	86.7	70 to 130	0.703	20
AX15111	Lead, Total	mg/L	0.00000493	0.0022	0.10	0.0869	0.0900	0.0979	0.085 to 0.115	86.9	70 to 130	3.45	20
AX15111	Cadmium, Total	mg/L	0.00000143	0.00044	0.10	0.0895	0.0870	0.0962	0.085 to 0.115	89.5	70 to 130	2.73	20
AX15111	Molybdenum, Total	mg/L	0.00000786	0.0044	0.10	0.0988	0.0979	0.0963	0.085 to 0.115	98.8	70 to 130	0.946	20
AX15111	Barium, Total	mg/L	0.0000101	0.0044	0.10	0.159	0.159	0.0924	0.085 to 0.115	76.2	70 to 130	0.370	20
AX15111	Lithium, Total	mg/L	-0.0000399	0.022	0.20	0.190	0.184	0.200	0.17 to 0.23	94.8	70 to 130	3.23	20
AX15111	Mercury, Total by CVAA	mg/L	0.00000671	0.0005	0.004	0.00379	0.00369	0.00375	0.0034 to 0.0046	94.6	70 to 130	2.58	20
AX15111	Antimony, Total	mg/L	0.0000205	0.00132	0.10	0.0933	0.0935	0.0935	0.085 to 0.115	93.3	70 to 130	0.144	20
AX15111	Beryllium, Total	mg/L	0.00000890	0.00132	0.10	0.0822	0.0847	0.0939	0.085 to 0.115	82.2	70 to 130	2.95	20
AX15111	Selenium, Total	mg/L	0.0000329	0.0044	0.10	0.0834	0.0827	0.0901	0.085 to 0.115	83.4	70 to 130	0.826	20
AX15111	Boron, Total	mg/L	-0.00328	0.044	1.00	1.02	1.03	0.985	0.85 to 1.15	93.7	70 to 130	0.673	20
AX15111	Chromium, Total	mg/L	0.0000225	0.0044	0.10	0.0920	0.0906	0.0937	0.085 to 0.115	92.0	70 to 130	1.54	20
AX15111	Cobalt, Total	mg/L	-0.00000968	0.0044	0.10	0.110	0.110	0.104	0.085 to 0.115	103	70 to 130	0.638	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-12

Laboratory ID Number: AX15104

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15112	Solids, Dissolved	mg/L	5.00	25			349	49.0	40 to 60			0.143	5

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AX15105

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005		0.0672	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.120	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1		1.66	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		75.4	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0144	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05		0.451	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	CES	7/6/2017	SM 2540C		1		50		382	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		25	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10		0.18	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		1	1.40	5.00		9.7	mg/L

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AX15105

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15111	Thallium, Total	mg/L	0.00000614	0.00044	0.10	0.0906	0.0950	0.0968	0.085 to 0.115	90.6	70 to 130	4.75	20
AX15111	Calcium, Total	mg/L	0.00194	0.22	5.00	11.6	11.5	4.76	4.25 to 5.75	88.7	70 to 130	0.882	20
AX15111	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0867	0.0861	0.0909	0.085 to 0.115	86.7	70 to 130	0.703	20
AX15111	Lead, Total	mg/L	0.00000493	0.0022	0.10	0.0869	0.0900	0.0979	0.085 to 0.115	86.9	70 to 130	3.45	20
AX15111	Cadmium, Total	mg/L	0.00000143	0.00044	0.10	0.0895	0.0870	0.0962	0.085 to 0.115	89.5	70 to 130	2.73	20
AX15111	Molybdenum, Total	mg/L	0.00000786	0.0044	0.10	0.0988	0.0979	0.0963	0.085 to 0.115	98.8	70 to 130	0.946	20
AX15111	Barium, Total	mg/L	0.0000101	0.0044	0.10	0.159	0.159	0.0924	0.085 to 0.115	76.2	70 to 130	0.370	20
AX15111	Lithium, Total	mg/L	-0.0000399	0.022	0.20	0.190	0.184	0.200	0.17 to 0.23	94.8	70 to 130	3.23	20
AX15111	Mercury, Total by CVAA	mg/L	0.00000671	0.0005	0.004	0.00379	0.00369	0.00375	0.0034 to 0.0046	94.6	70 to 130	2.58	20
AX15111	Antimony, Total	mg/L	0.0000205	0.00132	0.10	0.0933	0.0935	0.0935	0.085 to 0.115	93.3	70 to 130	0.144	20
AX15111	Beryllium, Total	mg/L	0.00000890	0.00132	0.10	0.0822	0.0847	0.0939	0.085 to 0.115	82.2	70 to 130	2.95	20
AX15111	Selenium, Total	mg/L	0.0000329	0.0044	0.10	0.0834	0.0827	0.0901	0.085 to 0.115	83.4	70 to 130	0.826	20
AX15111	Boron, Total	mg/L	-0.00328	0.044	1.00	1.02	1.03	0.985	0.85 to 1.15	93.7	70 to 130	0.673	20
AX15111	Chromium, Total	mg/L	0.0000225	0.0044	0.10	0.0920	0.0906	0.0937	0.085 to 0.115	92.0	70 to 130	1.54	20
AX15111	Cobalt, Total	mg/L	-0.00000968	0.0044	0.10	0.110	0.110	0.104	0.085 to 0.115	103	70 to 130	0.638	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-18

Laboratory ID Number: AX15105

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15109	Solids, Dissolved	mg/L	7.00	25			319	47.0	40 to 60			0.468	5

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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Reported: 7/24/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AX15106

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005		0.489	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.139	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1		2.18	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		63.8	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0166	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05		0.597	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0702	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	CES	7/6/2017	SM 2540C		1		50		516	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		24	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10		0.38	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		2	2.80	10		44	mg/L

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
Version: 2.0

Alabama Power General Test Laboratory
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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AX15106

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15111	Thallium, Total	mg/L	0.00000614	0.00044	0.10	0.0906	0.0950	0.0968	0.085 to 0.115	90.6	70 to 130	4.75	20
AX15111	Calcium, Total	mg/L	0.00194	0.22	5.00	11.6	11.5	4.76	4.25 to 5.75	88.7	70 to 130	0.882	20
AX15111	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0867	0.0861	0.0909	0.085 to 0.115	86.7	70 to 130	0.703	20
AX15111	Lead, Total	mg/L	0.00000493	0.0022	0.10	0.0869	0.0900	0.0979	0.085 to 0.115	86.9	70 to 130	3.45	20
AX15111	Antimony, Total	mg/L	0.0000205	0.00132	0.10	0.0933	0.0935	0.0935	0.085 to 0.115	93.3	70 to 130	0.144	20
AX15111	Beryllium, Total	mg/L	0.00000890	0.00132	0.10	0.0822	0.0847	0.0939	0.085 to 0.115	82.2	70 to 130	2.95	20
AX15111	Selenium, Total	mg/L	0.0000329	0.0044	0.10	0.0834	0.0827	0.0901	0.085 to 0.115	83.4	70 to 130	0.826	20
AX15111	Boron, Total	mg/L	-0.00328	0.044	1.00	1.02	1.03	0.985	0.85 to 1.15	93.7	70 to 130	0.673	20
AX15111	Chromium, Total	mg/L	0.0000225	0.0044	0.10	0.0920	0.0906	0.0937	0.085 to 0.115	92.0	70 to 130	1.54	20
AX15111	Cobalt, Total	mg/L	-0.00000968	0.0044	0.10	0.110	0.110	0.104	0.085 to 0.115	103	70 to 130	0.638	20
AX15111	Barium, Total	mg/L	0.0000101	0.0044	0.10	0.159	0.159	0.0924	0.085 to 0.115	76.2	70 to 130	0.370	20
AX15111	Lithium, Total	mg/L	-0.0000399	0.022	0.20	0.190	0.184	0.200	0.17 to 0.23	94.8	70 to 130	3.23	20
AX15111	Mercury, Total by CVAA	mg/L	0.00000671	0.0005	0.004	0.00379	0.00369	0.00375	0.0034 to 0.0046	94.6	70 to 130	2.58	20
AX15111	Cadmium, Total	mg/L	0.00000143	0.00044	0.10	0.0895	0.0870	0.0962	0.085 to 0.115	89.5	70 to 130	2.73	20
AX15111	Molybdenum, Total	mg/L	0.00000786	0.0044	0.10	0.0988	0.0979	0.0963	0.085 to 0.115	98.8	70 to 130	0.946	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-17

Laboratory ID Number: AX15106

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15109	Solids, Dissolved	mg/L	7.00	25			319	47.0	40 to 60			0.468	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:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AX15107

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005		0.0693	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0420	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1		1.43	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		63.6	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0141	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05		0.523	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	J	0.000301	mg/L
General Characteristics										
* Solids, Dissolved	CES	7/6/2017	SM 2540C		1		50		404	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		17	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10		0.22	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		5	7.00	25		75	mg/L

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Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AX15107

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15111	Thallium, Total	mg/L	0.00000614	0.00044	0.10	0.0906	0.0950	0.0968	0.085 to 0.115	90.6	70 to 130	4.75	20
AX15111	Calcium, Total	mg/L	0.00194	0.22	5.00	11.6	11.5	4.76	4.25 to 5.75	88.7	70 to 130	0.882	20
AX15111	Cadmium, Total	mg/L	0.00000143	0.00044	0.10	0.0895	0.0870	0.0962	0.085 to 0.115	89.5	70 to 130	2.73	20
AX15111	Molybdenum, Total	mg/L	0.00000786	0.0044	0.10	0.0988	0.0979	0.0963	0.085 to 0.115	98.8	70 to 130	0.946	20
AX15111	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0867	0.0861	0.0909	0.085 to 0.115	86.7	70 to 130	0.703	20
AX15111	Lead, Total	mg/L	0.00000493	0.0022	0.10	0.0869	0.0900	0.0979	0.085 to 0.115	86.9	70 to 130	3.45	20
AX15111	Barium, Total	mg/L	0.0000101	0.0044	0.10	0.159	0.159	0.0924	0.085 to 0.115	76.2	70 to 130	0.370	20
AX15111	Lithium, Total	mg/L	-0.0000399	0.022	0.20	0.190	0.184	0.200	0.17 to 0.23	94.8	70 to 130	3.23	20
AX15111	Mercury, Total by CVAA	mg/L	0.00000671	0.0005	0.004	0.00379	0.00369	0.00375	0.0034 to 0.0046	94.6	70 to 130	2.58	20
AX15111	Antimony, Total	mg/L	0.0000205	0.00132	0.10	0.0933	0.0935	0.0935	0.085 to 0.115	93.3	70 to 130	0.144	20
AX15111	Beryllium, Total	mg/L	0.00000890	0.00132	0.10	0.0822	0.0847	0.0939	0.085 to 0.115	82.2	70 to 130	2.95	20
AX15111	Selenium, Total	mg/L	0.0000329	0.0044	0.10	0.0834	0.0827	0.0901	0.085 to 0.115	83.4	70 to 130	0.826	20
AX15111	Boron, Total	mg/L	-0.00328	0.044	1.00	1.02	1.03	0.985	0.85 to 1.15	93.7	70 to 130	0.673	20
AX15111	Chromium, Total	mg/L	0.0000225	0.0044	0.10	0.0920	0.0906	0.0937	0.085 to 0.115	92.0	70 to 130	1.54	20
AX15111	Cobalt, Total	mg/L	-0.00000968	0.0044	0.10	0.110	0.110	0.104	0.085 to 0.115	103	70 to 130	0.638	20

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Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-16

Laboratory ID Number: AX15107

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15109	Solids, Dissolved	mg/L	7.00	25			319	47.0	40 to 60			0.468	5

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Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AX15108

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0223	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1		0.454	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		44.9	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0163	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05		0.558	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	CES	7/6/2017	SM 2540C		1		25		331	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		14	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10		0.10	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		15	21.0	75		150	mg/L

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AX15108

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15111	Thallium, Total	mg/L	0.00000614	0.00044	0.10	0.0906	0.0950	0.0968	0.085 to 0.115	90.6	70 to 130	4.75	20
AX15111	Calcium, Total	mg/L	0.00194	0.22	5.00	11.6	11.5	4.76	4.25 to 5.75	88.7	70 to 130	0.882	20
AX15111	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0867	0.0861	0.0909	0.085 to 0.115	86.7	70 to 130	0.703	20
AX15111	Lead, Total	mg/L	0.00000493	0.0022	0.10	0.0869	0.0900	0.0979	0.085 to 0.115	86.9	70 to 130	3.45	20
AX15111	Cadmium, Total	mg/L	0.00000143	0.00044	0.10	0.0895	0.0870	0.0962	0.085 to 0.115	89.5	70 to 130	2.73	20
AX15111	Molybdenum, Total	mg/L	0.00000786	0.0044	0.10	0.0988	0.0979	0.0963	0.085 to 0.115	98.8	70 to 130	0.946	20
AX15111	Boron, Total	mg/L	-0.00328	0.044	1.00	1.02	1.03	0.985	0.85 to 1.15	93.7	70 to 130	0.673	20
AX15111	Chromium, Total	mg/L	0.0000225	0.0044	0.10	0.0920	0.0906	0.0937	0.085 to 0.115	92.0	70 to 130	1.54	20
AX15111	Cobalt, Total	mg/L	-0.00000968	0.0044	0.10	0.110	0.110	0.104	0.085 to 0.115	103	70 to 130	0.638	20
AX15111	Antimony, Total	mg/L	0.0000205	0.00132	0.10	0.0933	0.0935	0.0935	0.085 to 0.115	93.3	70 to 130	0.144	20
AX15111	Beryllium, Total	mg/L	0.00000890	0.00132	0.10	0.0822	0.0847	0.0939	0.085 to 0.115	82.2	70 to 130	2.95	20
AX15111	Selenium, Total	mg/L	0.0000329	0.0044	0.10	0.0834	0.0827	0.0901	0.085 to 0.115	83.4	70 to 130	0.826	20
AX15111	Barium, Total	mg/L	0.0000101	0.0044	0.10	0.159	0.159	0.0924	0.085 to 0.115	76.2	70 to 130	0.370	20
AX15111	Lithium, Total	mg/L	-0.0000399	0.022	0.20	0.190	0.184	0.200	0.17 to 0.23	94.8	70 to 130	3.23	20
AX15111	Mercury, Total by CVAA	mg/L	0.00000671	0.0005	0.004	0.00379	0.00369	0.00375	0.0034 to 0.0046	94.6	70 to 130	2.58	20

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-15

Laboratory ID Number: AX15108

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15109	Solids, Dissolved	mg/L	7.00	25			319	47.0	40 to 60			0.468	5

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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-15 Dup

Laboratory ID Number: AX15109

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0213	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1		0.450	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		44.6	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0158	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05		0.567	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	CES	7/6/2017	SM 2540C		1		25		322	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		14	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10		0.10	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		15	21.0	75		150	mg/L

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Batch QC Summary

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Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-15 Dup

Laboratory ID Number: AX15109

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15111	Thallium, Total	mg/L	0.00000614	0.00044	0.10	0.0906	0.0950	0.0968	0.085 to 0.115	90.6	70 to 130	4.75	20
AX15111	Calcium, Total	mg/L	0.00194	0.22	5.00	11.6	11.5	4.76	4.25 to 5.75	88.7	70 to 130	0.882	20
AX15111	Cadmium, Total	mg/L	0.00000143	0.00044	0.10	0.0895	0.0870	0.0962	0.085 to 0.115	89.5	70 to 130	2.73	20
AX15111	Molybdenum, Total	mg/L	0.00000786	0.0044	0.10	0.0988	0.0979	0.0963	0.085 to 0.115	98.8	70 to 130	0.946	20
AX15111	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0867	0.0861	0.0909	0.085 to 0.115	86.7	70 to 130	0.703	20
AX15111	Lead, Total	mg/L	0.00000493	0.0022	0.10	0.0869	0.0900	0.0979	0.085 to 0.115	86.9	70 to 130	3.45	20
AX15111	Boron, Total	mg/L	-0.00328	0.044	1.00	1.02	1.03	0.985	0.85 to 1.15	93.7	70 to 130	0.673	20
AX15111	Chromium, Total	mg/L	0.0000225	0.0044	0.10	0.0920	0.0906	0.0937	0.085 to 0.115	92.0	70 to 130	1.54	20
AX15111	Cobalt, Total	mg/L	-0.00000968	0.0044	0.10	0.110	0.110	0.104	0.085 to 0.115	103	70 to 130	0.638	20
AX15111	Barium, Total	mg/L	0.0000101	0.0044	0.10	0.159	0.159	0.0924	0.085 to 0.115	76.2	70 to 130	0.370	20
AX15111	Lithium, Total	mg/L	-0.0000399	0.022	0.20	0.190	0.184	0.200	0.17 to 0.23	94.8	70 to 130	3.23	20
AX15111	Mercury, Total by CVAA	mg/L	0.00000671	0.0005	0.004	0.00379	0.00369	0.00375	0.0034 to 0.0046	94.6	70 to 130	2.58	20
AX15111	Antimony, Total	mg/L	0.0000205	0.00132	0.10	0.0933	0.0935	0.0935	0.085 to 0.115	93.3	70 to 130	0.144	20
AX15111	Beryllium, Total	mg/L	0.00000890	0.00132	0.10	0.0822	0.0847	0.0939	0.085 to 0.115	82.2	70 to 130	2.95	20
AX15111	Selenium, Total	mg/L	0.0000329	0.0044	0.10	0.0834	0.0827	0.0901	0.085 to 0.115	83.4	70 to 130	0.826	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-15 Dup

Laboratory ID Number: AX15109

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15109	Solids, Dissolved	mg/L	7.00	25			319	47.0	40 to 60			0.468	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:

Reported: 7/24/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AX15110

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0663	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		17.9	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	J	0.00268	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	7/6/2017	SM 2540C		1		25		118	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		5.7	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10	U	<0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		2	2.80	10		56	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AX15110

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15111	Thallium, Total	mg/L	0.00000614	0.00044	0.10	0.0906	0.0950	0.0968	0.085 to 0.115	90.6	70 to 130	4.75	20
AX15111	Calcium, Total	mg/L	0.00194	0.22	5.00	11.6	11.5	4.76	4.25 to 5.75	88.7	70 to 130	0.882	20
AX15111	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0867	0.0861	0.0909	0.085 to 0.115	86.7	70 to 130	0.703	20
AX15111	Lead, Total	mg/L	0.00000493	0.0022	0.10	0.0869	0.0900	0.0979	0.085 to 0.115	86.9	70 to 130	3.45	20
AX15111	Antimony, Total	mg/L	0.0000205	0.00132	0.10	0.0933	0.0935	0.0935	0.085 to 0.115	93.3	70 to 130	0.144	20
AX15111	Beryllium, Total	mg/L	0.00000890	0.00132	0.10	0.0822	0.0847	0.0939	0.085 to 0.115	82.2	70 to 130	2.95	20
AX15111	Selenium, Total	mg/L	0.0000329	0.0044	0.10	0.0834	0.0827	0.0901	0.085 to 0.115	83.4	70 to 130	0.826	20
AX15111	Boron, Total	mg/L	-0.00328	0.044	1.00	1.02	1.03	0.985	0.85 to 1.15	93.7	70 to 130	0.673	20
AX15111	Chromium, Total	mg/L	0.0000225	0.0044	0.10	0.0920	0.0906	0.0937	0.085 to 0.115	92.0	70 to 130	1.54	20
AX15111	Cobalt, Total	mg/L	-0.00000968	0.0044	0.10	0.110	0.110	0.104	0.085 to 0.115	103	70 to 130	0.638	20
AX15111	Barium, Total	mg/L	0.0000101	0.0044	0.10	0.159	0.159	0.0924	0.085 to 0.115	76.2	70 to 130	0.370	20
AX15111	Lithium, Total	mg/L	-0.0000399	0.022	0.20	0.190	0.184	0.200	0.17 to 0.23	94.8	70 to 130	3.23	20
AX15111	Mercury, Total by CVAA	mg/L	0.00000671	0.0005	0.004	0.00379	0.00369	0.00375	0.0034 to 0.0046	94.6	70 to 130	2.58	20
AX15111	Cadmium, Total	mg/L	0.00000143	0.00044	0.10	0.0895	0.0870	0.0962	0.085 to 0.115	89.5	70 to 130	2.73	20
AX15111	Molybdenum, Total	mg/L	0.00000786	0.0044	0.10	0.0988	0.0979	0.0963	0.085 to 0.115	98.8	70 to 130	0.946	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-24

Laboratory ID Number: AX15110

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15112	Solids, Dissolved	mg/L	5.00	25			349	49.0	40 to 60			0.143	5

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Laboratory certification ID: E571114
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Calera, AL 35040
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AX15111

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0829	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	J	0.0835	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		7.16	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	J	0.00721	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	7/6/2017	SM 2540C		1		25		145	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		22	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10	J	0.040	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		2	2.80	10		35	mg/L

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AX15111

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15111	Thallium, Total	mg/L	0.00000614	0.00044	0.10	0.0906	0.0950	0.0968	0.085 to 0.115	90.6	70 to 130	4.75	20
AX15111	Calcium, Total	mg/L	0.00194	0.22	5.00	11.6	11.5	4.76	4.25 to 5.75	88.7	70 to 130	0.882	20
AX15111	Arsenic, Total	mg/L	0.0000124	0.0022	0.10	0.0867	0.0861	0.0909	0.085 to 0.115	86.7	70 to 130	0.703	20
AX15111	Lead, Total	mg/L	0.00000493	0.0022	0.10	0.0869	0.0900	0.0979	0.085 to 0.115	86.9	70 to 130	3.45	20
AX15111	Antimony, Total	mg/L	0.0000205	0.00132	0.10	0.0933	0.0935	0.0935	0.085 to 0.115	93.3	70 to 130	0.144	20
AX15111	Beryllium, Total	mg/L	0.00000890	0.00132	0.10	0.0822	0.0847	0.0939	0.085 to 0.115	82.2	70 to 130	2.95	20
AX15111	Selenium, Total	mg/L	0.0000329	0.0044	0.10	0.0834	0.0827	0.0901	0.085 to 0.115	83.4	70 to 130	0.826	20
AX15111	Boron, Total	mg/L	-0.00328	0.044	1.00	1.02	1.03	0.985	0.85 to 1.15	93.7	70 to 130	0.673	20
AX15111	Chromium, Total	mg/L	0.0000225	0.0044	0.10	0.0920	0.0906	0.0937	0.085 to 0.115	92.0	70 to 130	1.54	20
AX15111	Cobalt, Total	mg/L	-0.00000968	0.0044	0.10	0.110	0.110	0.104	0.085 to 0.115	103	70 to 130	0.638	20
AX15111	Cadmium, Total	mg/L	0.00000143	0.00044	0.10	0.0895	0.0870	0.0962	0.085 to 0.115	89.5	70 to 130	2.73	20
AX15111	Molybdenum, Total	mg/L	0.00000786	0.0044	0.10	0.0988	0.0979	0.0963	0.085 to 0.115	98.8	70 to 130	0.946	20
AX15111	Barium, Total	mg/L	0.0000101	0.0044	0.10	0.159	0.159	0.0924	0.085 to 0.115	76.2	70 to 130	0.370	20
AX15111	Lithium, Total	mg/L	-0.0000399	0.022	0.20	0.190	0.184	0.200	0.17 to 0.23	94.8	70 to 130	3.23	20
AX15111	Mercury, Total by CVAA	mg/L	0.00000671	0.0005	0.004	0.00379	0.00369	0.00375	0.0034 to 0.0046	94.6	70 to 130	2.58	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
Version: 2.0

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-25

Laboratory ID Number: AX15111

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15112	Solids, Dissolved	mg/L	5.00	25			349	49.0	40 to 60			0.143	5

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CC:

Reported: 7/24/2017
Version: 2.0

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

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AX15112

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005		0.0220	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0764	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1		0.695	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		55.0	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	J	0.00805	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05		0.626	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	J	0.00752	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	7/6/2017	SM 2540C		1		25		348	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		17	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10		0.13	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		5	7.00	25		120	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AX15112

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15121	Barium, Total	mg/L	-0.00000113	0.0044	0.10	0.0797	0.0841	0.0915	0.085 to 0.115	79.7	70 to 130	5.31	20
AX15121	Lithium, Total	mg/L	-0.0000507	0.022	0.20	0.184	0.182	0.187	0.17 to 0.23	92.2	70 to 130	1.59	20
AX15121	Thallium, Total	mg/L	0.00000642	0.00044	0.10	0.0875	0.0915	0.0992	0.085 to 0.115	87.5	70 to 130	4.39	20
AX15121	Cobalt, Total	mg/L	-0.00000678	0.0044	0.10	0.101	0.104	0.107	0.085 to 0.115	101	70 to 130	2.77	20
AX15121	Selenium, Total	mg/L	0.0000185	0.0044	0.10	0.0808	0.0826	0.0915	0.085 to 0.115	80.8	70 to 130	2.21	20
AX15121	Beryllium, Total	mg/L	0.00000450	0.00132	0.10	0.0832	0.0863	0.0949	0.085 to 0.115	83.2	70 to 130	3.76	20
AX15121	Boron, Total	mg/L	-0.00378	0.044	1.00	0.918	0.915	0.948	0.85 to 1.15	91.8	70 to 130	0.373	20
AX15121	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0819	0.0853	0.0918	0.085 to 0.115	81.9	70 to 130	4.12	20
AX15121	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0889	0.0926	0.0960	0.085 to 0.115	88.9	70 to 130	4.10	20
AX15121	Mercury, Total by CVAA	mg/L	0.00000516	0.0005	0.004	0.00376	0.00374	0.00376	0.0034 to 0.0046	93.9	70 to 130	0.414	20
AX15121	Molybdenum, Total	mg/L	0.00000685	0.0044	0.10	0.0955	0.0964	0.100	0.085 to 0.115	95.5	70 to 130	1.00	20
AX15121	Cadmium, Total	mg/L	0.00000445	0.00044	0.10	0.0865	0.0866	0.0953	0.085 to 0.115	86.5	70 to 130	0.203	20
AX15121	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0877	0.0905	0.100	0.085 to 0.115	87.7	70 to 130	3.17	20
AX15121	Antimony, Total	mg/L	0.0000258	0.00132	0.10	0.0894	0.0936	0.0965	0.085 to 0.115	89.4	70 to 130	4.55	20
AX15121	Calcium, Total	mg/L	-0.00116	0.22	5.00	4.76	4.70	5.01	4.25 to 5.75	95.1	70 to 130	1.13	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-14

Laboratory ID Number: AX15112

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15112	Solids, Dissolved	mg/L	5.00	25			349	49.0	40 to 60			0.143	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:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX15113

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5	U	Not Detected	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	7/6/2017	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00	U	<0.60	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10	U	<0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX15113

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15121	Barium, Total	mg/L	-0.00000113	0.0044	0.10	0.0797	0.0841	0.0915	0.085 to 0.115	79.7	70 to 130	5.31	20
AX15121	Antimony, Total	mg/L	0.0000258	0.00132	0.10	0.0894	0.0936	0.0965	0.085 to 0.115	89.4	70 to 130	4.55	20
AX15121	Calcium, Total	mg/L	-0.00116	0.22	5.00	4.76	4.70	5.01	4.25 to 5.75	95.1	70 to 130	1.13	20
AX15121	Cobalt, Total	mg/L	-0.00000678	0.0044	0.10	0.101	0.104	0.107	0.085 to 0.115	101	70 to 130	2.77	20
AX15121	Selenium, Total	mg/L	0.0000185	0.0044	0.10	0.0808	0.0826	0.0915	0.085 to 0.115	80.8	70 to 130	2.21	20
AX15121	Cadmium, Total	mg/L	0.00000445	0.00044	0.10	0.0865	0.0866	0.0953	0.085 to 0.115	86.5	70 to 130	0.203	20
AX15121	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0877	0.0905	0.100	0.085 to 0.115	87.7	70 to 130	3.17	20
AX15121	Lithium, Total	mg/L	-0.0000507	0.022	0.20	0.184	0.182	0.187	0.17 to 0.23	92.2	70 to 130	1.59	20
AX15121	Thallium, Total	mg/L	0.00000642	0.00044	0.10	0.0875	0.0915	0.0992	0.085 to 0.115	87.5	70 to 130	4.39	20
AX15121	Beryllium, Total	mg/L	0.00000450	0.00132	0.10	0.0832	0.0863	0.0949	0.085 to 0.115	83.2	70 to 130	3.76	20
AX15121	Boron, Total	mg/L	-0.00378	0.044	1.00	0.918	0.915	0.948	0.85 to 1.15	91.8	70 to 130	0.373	20
AX15121	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0819	0.0853	0.0918	0.085 to 0.115	81.9	70 to 130	4.12	20
AX15121	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0889	0.0926	0.0960	0.085 to 0.115	88.9	70 to 130	4.10	20
AX15121	Mercury, Total by CVAA	mg/L	0.00000516	0.0005	0.004	0.00376	0.00374	0.00376	0.0034 to 0.0046	93.9	70 to 130	0.414	20
AX15121	Molybdenum, Total	mg/L	0.00000685	0.0044	0.10	0.0955	0.0964	0.100	0.085 to 0.115	95.5	70 to 130	1.00	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX15113

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15127	Solids, Dissolved	mg/L	5.00	25			184	49.0	40 to 60			2.51	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:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AX15114

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	J	0.00406	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0874	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1		0.153	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		26.0	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003		0.00406	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	J	0.00219	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05		0.146	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0598	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	J	0.00720	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	J	0.000244	mg/L
General Characteristics										
* Solids, Dissolved	KRC	7/6/2017	SM 2540C		1		25		176	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		9.4	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10		0.18	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		5	7.00	25		71	mg/L

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Laboratory certification ID: E571114
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Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AX15114

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15121	Barium, Total	mg/L	-0.00000113	0.0044	0.10	0.0797	0.0841	0.0915	0.085 to 0.115	79.7	70 to 130	5.31	20
AX15121	Beryllium, Total	mg/L	0.00000450	0.00132	0.10	0.0832	0.0863	0.0949	0.085 to 0.115	83.2	70 to 130	3.76	20
AX15121	Boron, Total	mg/L	-0.00378	0.044	1.00	0.918	0.915	0.948	0.85 to 1.15	91.8	70 to 130	0.373	20
AX15121	Lithium, Total	mg/L	-0.0000507	0.022	0.20	0.184	0.182	0.187	0.17 to 0.23	92.2	70 to 130	1.59	20
AX15121	Thallium, Total	mg/L	0.00000642	0.00044	0.10	0.0875	0.0915	0.0992	0.085 to 0.115	87.5	70 to 130	4.39	20
AX15121	Cobalt, Total	mg/L	-0.00000678	0.0044	0.10	0.101	0.104	0.107	0.085 to 0.115	101	70 to 130	2.77	20
AX15121	Selenium, Total	mg/L	0.0000185	0.0044	0.10	0.0808	0.0826	0.0915	0.085 to 0.115	80.8	70 to 130	2.21	20
AX15121	Cadmium, Total	mg/L	0.00000445	0.00044	0.10	0.0865	0.0866	0.0953	0.085 to 0.115	86.5	70 to 130	0.203	20
AX15121	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0877	0.0905	0.100	0.085 to 0.115	87.7	70 to 130	3.17	20
AX15121	Antimony, Total	mg/L	0.0000258	0.00132	0.10	0.0894	0.0936	0.0965	0.085 to 0.115	89.4	70 to 130	4.55	20
AX15121	Calcium, Total	mg/L	-0.00116	0.22	5.00	4.76	4.70	5.01	4.25 to 5.75	95.1	70 to 130	1.13	20
AX15121	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0819	0.0853	0.0918	0.085 to 0.115	81.9	70 to 130	4.12	20
AX15121	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0889	0.0926	0.0960	0.085 to 0.115	88.9	70 to 130	4.10	20
AX15121	Mercury, Total by CVAA	mg/L	0.00000516	0.0005	0.004	0.00376	0.00374	0.00376	0.0034 to 0.0046	93.9	70 to 130	0.414	20
AX15121	Molybdenum, Total	mg/L	0.00000685	0.0044	0.10	0.0955	0.0964	0.100	0.085 to 0.115	95.5	70 to 130	1.00	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-13

Laboratory ID Number: AX15114

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15127	Solids, Dissolved	mg/L	5.00	25			184	49.0	40 to 60			2.51	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:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AX15115

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0603	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	J	0.00170	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		14.2	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	J	0.000429	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0109	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	J	0.00443	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	CES	7/6/2017	SM 2540C		1		25		93.3	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		3.0	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10		0.22	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		2	2.80	10		45	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AX15115

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15121	Barium, Total	mg/L	-0.00000113	0.0044	0.10	0.0797	0.0841	0.0915	0.085 to 0.115	79.7	70 to 130	5.31	20
AX15121	Antimony, Total	mg/L	0.0000258	0.00132	0.10	0.0894	0.0936	0.0965	0.085 to 0.115	89.4	70 to 130	4.55	20
AX15121	Calcium, Total	mg/L	-0.00116	0.22	5.00	4.76	4.70	5.01	4.25 to 5.75	95.1	70 to 130	1.13	20
AX15121	Lithium, Total	mg/L	-0.0000507	0.022	0.20	0.184	0.182	0.187	0.17 to 0.23	92.2	70 to 130	1.59	20
AX15121	Thallium, Total	mg/L	0.00000642	0.00044	0.10	0.0875	0.0915	0.0992	0.085 to 0.115	87.5	70 to 130	4.39	20
AX15121	Beryllium, Total	mg/L	0.00000450	0.00132	0.10	0.0832	0.0863	0.0949	0.085 to 0.115	83.2	70 to 130	3.76	20
AX15121	Boron, Total	mg/L	-0.00378	0.044	1.00	0.918	0.915	0.948	0.85 to 1.15	91.8	70 to 130	0.373	20
AX15121	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0819	0.0853	0.0918	0.085 to 0.115	81.9	70 to 130	4.12	20
AX15121	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0889	0.0926	0.0960	0.085 to 0.115	88.9	70 to 130	4.10	20
AX15121	Mercury, Total by CVAA	mg/L	0.00000516	0.0005	0.004	0.00376	0.00374	0.00376	0.0034 to 0.0046	93.9	70 to 130	0.414	20
AX15121	Molybdenum, Total	mg/L	0.00000685	0.0044	0.10	0.0955	0.0964	0.100	0.085 to 0.115	95.5	70 to 130	1.00	20
AX15121	Cobalt, Total	mg/L	-0.00000678	0.0044	0.10	0.101	0.104	0.107	0.085 to 0.115	101	70 to 130	2.77	20
AX15121	Selenium, Total	mg/L	0.0000185	0.0044	0.10	0.0808	0.0826	0.0915	0.085 to 0.115	80.8	70 to 130	2.21	20
AX15121	Cadmium, Total	mg/L	0.00000445	0.00044	0.10	0.0865	0.0866	0.0953	0.085 to 0.115	86.5	70 to 130	0.203	20
AX15121	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0877	0.0905	0.100	0.085 to 0.115	87.7	70 to 130	3.17	20

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-26

Laboratory ID Number: AX15115

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15117	Solids, Dissolved	mg/L	7.00	25			25.3	47.0	40 to 60			0.00	5

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

Reported: 7/24/2017
Version: 2.0

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AX15116

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0661	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5	J	0.292	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0106	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	CES	7/6/2017	SM 2540C		1		25		30.7	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		2.1	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10	U	<0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		1	1.40	5.00	U	<1.4	mg/L

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Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
Version: 2.0

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

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AX15116

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15121	Barium, Total	mg/L	-0.00000113	0.0044	0.10	0.0797	0.0841	0.0915	0.085 to 0.115	79.7	70 to 130	5.31	20
AX15121	Beryllium, Total	mg/L	0.00000450	0.00132	0.10	0.0832	0.0863	0.0949	0.085 to 0.115	83.2	70 to 130	3.76	20
AX15121	Boron, Total	mg/L	-0.00378	0.044	1.00	0.918	0.915	0.948	0.85 to 1.15	91.8	70 to 130	0.373	20
AX15121	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0819	0.0853	0.0918	0.085 to 0.115	81.9	70 to 130	4.12	20
AX15121	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0889	0.0926	0.0960	0.085 to 0.115	88.9	70 to 130	4.10	20
AX15121	Mercury, Total by CVAA	mg/L	0.00000516	0.0005	0.004	0.00376	0.00374	0.00376	0.0034 to 0.0046	93.9	70 to 130	0.414	20
AX15121	Molybdenum, Total	mg/L	0.00000685	0.0044	0.10	0.0955	0.0964	0.100	0.085 to 0.115	95.5	70 to 130	1.00	20
AX15121	Cobalt, Total	mg/L	-0.00000678	0.0044	0.10	0.101	0.104	0.107	0.085 to 0.115	101	70 to 130	2.77	20
AX15121	Selenium, Total	mg/L	0.0000185	0.0044	0.10	0.0808	0.0826	0.0915	0.085 to 0.115	80.8	70 to 130	2.21	20
AX15121	Cadmium, Total	mg/L	0.00000445	0.00044	0.10	0.0865	0.0866	0.0953	0.085 to 0.115	86.5	70 to 130	0.203	20
AX15121	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0877	0.0905	0.100	0.085 to 0.115	87.7	70 to 130	3.17	20
AX15121	Antimony, Total	mg/L	0.0000258	0.00132	0.10	0.0894	0.0936	0.0965	0.085 to 0.115	89.4	70 to 130	4.55	20
AX15121	Calcium, Total	mg/L	-0.00116	0.22	5.00	4.76	4.70	5.01	4.25 to 5.75	95.1	70 to 130	1.13	20
AX15121	Lithium, Total	mg/L	-0.0000507	0.022	0.20	0.184	0.182	0.187	0.17 to 0.23	92.2	70 to 130	1.59	20
AX15121	Thallium, Total	mg/L	0.00000642	0.00044	0.10	0.0875	0.0915	0.0992	0.085 to 0.115	87.5	70 to 130	4.39	20

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-29

Laboratory ID Number: AX15116

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15117	Solids, Dissolved	mg/L	7.00	25			25.3	47.0	40 to 60			0.00	5

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Reported: 7/24/2017
Version: 2.0

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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-29 Dup

Laboratory ID Number: AX15117

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0623	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5	J	0.286	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0100	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	CES	7/6/2017	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00	J	1.9	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10	U	<0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		1	1.40	5.00	U	<1.4	mg/L

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Calera, AL 35040
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-29 Dup

Laboratory ID Number: AX15117

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15121	Barium, Total	mg/L	-0.00000113	0.0044	0.10	0.0797	0.0841	0.0915	0.085 to 0.115	79.7	70 to 130	5.31	20
AX15121	Lithium, Total	mg/L	-0.0000507	0.022	0.20	0.184	0.182	0.187	0.17 to 0.23	92.2	70 to 130	1.59	20
AX15121	Thallium, Total	mg/L	0.00000642	0.00044	0.10	0.0875	0.0915	0.0992	0.085 to 0.115	87.5	70 to 130	4.39	20
AX15121	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0819	0.0853	0.0918	0.085 to 0.115	81.9	70 to 130	4.12	20
AX15121	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0889	0.0926	0.0960	0.085 to 0.115	88.9	70 to 130	4.10	20
AX15121	Mercury, Total by CVAA	mg/L	0.00000516	0.0005	0.004	0.00376	0.00374	0.00376	0.0034 to 0.0046	93.9	70 to 130	0.414	20
AX15121	Molybdenum, Total	mg/L	0.00000685	0.0044	0.10	0.0955	0.0964	0.100	0.085 to 0.115	95.5	70 to 130	1.00	20
AX15121	Cobalt, Total	mg/L	-0.00000678	0.0044	0.10	0.101	0.104	0.107	0.085 to 0.115	101	70 to 130	2.77	20
AX15121	Selenium, Total	mg/L	0.0000185	0.0044	0.10	0.0808	0.0826	0.0915	0.085 to 0.115	80.8	70 to 130	2.21	20
AX15121	Antimony, Total	mg/L	0.0000258	0.00132	0.10	0.0894	0.0936	0.0965	0.085 to 0.115	89.4	70 to 130	4.55	20
AX15121	Calcium, Total	mg/L	-0.00116	0.22	5.00	4.76	4.70	5.01	4.25 to 5.75	95.1	70 to 130	1.13	20
AX15121	Beryllium, Total	mg/L	0.00000450	0.00132	0.10	0.0832	0.0863	0.0949	0.085 to 0.115	83.2	70 to 130	3.76	20
AX15121	Boron, Total	mg/L	-0.00378	0.044	1.00	0.918	0.915	0.948	0.85 to 1.15	91.8	70 to 130	0.373	20
AX15121	Cadmium, Total	mg/L	0.00000445	0.00044	0.10	0.0865	0.0866	0.0953	0.085 to 0.115	86.5	70 to 130	0.203	20
AX15121	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0877	0.0905	0.100	0.085 to 0.115	87.7	70 to 130	3.17	20

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-29 Dup

Laboratory ID Number: AX15117

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15117	Solids, Dissolved	mg/L	7.00	25			25.3	47.0	40 to 60			0.00	5

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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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AX15118

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0303	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		0.956	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	CES	7/6/2017	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		2.1	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10	U	<0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AX15118

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15121	Barium, Total	mg/L	-0.00000113	0.0044	0.10	0.0797	0.0841	0.0915	0.085 to 0.115	79.7	70 to 130	5.31	20
AX15121	Beryllium, Total	mg/L	0.00000450	0.00132	0.10	0.0832	0.0863	0.0949	0.085 to 0.115	83.2	70 to 130	3.76	20
AX15121	Boron, Total	mg/L	-0.00378	0.044	1.00	0.918	0.915	0.948	0.85 to 1.15	91.8	70 to 130	0.373	20
AX15121	Cobalt, Total	mg/L	-0.00000678	0.0044	0.10	0.101	0.104	0.107	0.085 to 0.115	101	70 to 130	2.77	20
AX15121	Selenium, Total	mg/L	0.0000185	0.0044	0.10	0.0808	0.0826	0.0915	0.085 to 0.115	80.8	70 to 130	2.21	20
AX15121	Antimony, Total	mg/L	0.0000258	0.00132	0.10	0.0894	0.0936	0.0965	0.085 to 0.115	89.4	70 to 130	4.55	20
AX15121	Calcium, Total	mg/L	-0.00116	0.22	5.00	4.76	4.70	5.01	4.25 to 5.75	95.1	70 to 130	1.13	20
AX15121	Lithium, Total	mg/L	-0.0000507	0.022	0.20	0.184	0.182	0.187	0.17 to 0.23	92.2	70 to 130	1.59	20
AX15121	Thallium, Total	mg/L	0.00000642	0.00044	0.10	0.0875	0.0915	0.0992	0.085 to 0.115	87.5	70 to 130	4.39	20
AX15121	Cadmium, Total	mg/L	0.00000445	0.00044	0.10	0.0865	0.0866	0.0953	0.085 to 0.115	86.5	70 to 130	0.203	20
AX15121	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0877	0.0905	0.100	0.085 to 0.115	87.7	70 to 130	3.17	20
AX15121	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0819	0.0853	0.0918	0.085 to 0.115	81.9	70 to 130	4.12	20
AX15121	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0889	0.0926	0.0960	0.085 to 0.115	88.9	70 to 130	4.10	20
AX15121	Mercury, Total by CVAA	mg/L	0.00000516	0.0005	0.004	0.00376	0.00374	0.00376	0.0034 to 0.0046	93.9	70 to 130	0.414	20
AX15121	Molybdenum, Total	mg/L	0.00000685	0.0044	0.10	0.0955	0.0964	0.100	0.085 to 0.115	95.5	70 to 130	1.00	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-30

Laboratory ID Number: AX15118

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15109	Solids, Dissolved	mg/L	7.00	25			319	47.0	40 to 60			0.468	5

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Expiration: June 30, 2018

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CC:

Reported: 7/24/2017
Version: 2.0

Alabama Power General Test Laboratory
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FAX (205) 257-1654

Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AX15119

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0492	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5	J	0.413	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	CES	7/6/2017	SM 2540C		1		25		27.3	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00	J	1.9	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10	U	<0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		1	1.40	5.00	U	<1.4	mg/L

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AX15119

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15121	Barium, Total	mg/L	-0.00000113	0.0044	0.10	0.0797	0.0841	0.0915	0.085 to 0.115	79.7	70 to 130	5.31	20
AX15121	Beryllium, Total	mg/L	0.00000450	0.00132	0.10	0.0832	0.0863	0.0949	0.085 to 0.115	83.2	70 to 130	3.76	20
AX15121	Boron, Total	mg/L	-0.00378	0.044	1.00	0.918	0.915	0.948	0.85 to 1.15	91.8	70 to 130	0.373	20
AX15121	Cobalt, Total	mg/L	-0.00000678	0.0044	0.10	0.101	0.104	0.107	0.085 to 0.115	101	70 to 130	2.77	20
AX15121	Selenium, Total	mg/L	0.0000185	0.0044	0.10	0.0808	0.0826	0.0915	0.085 to 0.115	80.8	70 to 130	2.21	20
AX15121	Antimony, Total	mg/L	0.0000258	0.00132	0.10	0.0894	0.0936	0.0965	0.085 to 0.115	89.4	70 to 130	4.55	20
AX15121	Calcium, Total	mg/L	-0.00116	0.22	5.00	4.76	4.70	5.01	4.25 to 5.75	95.1	70 to 130	1.13	20
AX15121	Lithium, Total	mg/L	-0.0000507	0.022	0.20	0.184	0.182	0.187	0.17 to 0.23	92.2	70 to 130	1.59	20
AX15121	Thallium, Total	mg/L	0.00000642	0.00044	0.10	0.0875	0.0915	0.0992	0.085 to 0.115	87.5	70 to 130	4.39	20
AX15121	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0819	0.0853	0.0918	0.085 to 0.115	81.9	70 to 130	4.12	20
AX15121	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0889	0.0926	0.0960	0.085 to 0.115	88.9	70 to 130	4.10	20
AX15121	Mercury, Total by CVAA	mg/L	0.00000516	0.0005	0.004	0.00376	0.00374	0.00376	0.0034 to 0.0046	93.9	70 to 130	0.414	20
AX15121	Molybdenum, Total	mg/L	0.00000685	0.0044	0.10	0.0955	0.0964	0.100	0.085 to 0.115	95.5	70 to 130	1.00	20
AX15121	Cadmium, Total	mg/L	0.00000445	0.00044	0.10	0.0865	0.0866	0.0953	0.085 to 0.115	86.5	70 to 130	0.203	20
AX15121	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0877	0.0905	0.100	0.085 to 0.115	87.7	70 to 130	3.17	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

Reported: 7/24/2017
Version: 2.0

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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-27

Laboratory ID Number: AX15119

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15109	Solids, Dissolved	mg/L	7.00	25			319	47.0	40 to 60			0.468	5

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CC:

Reported: 7/24/2017
Version: 2.0

Alabama Power General Test Laboratory
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Calera, AL 35040
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AX15120

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.278	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		3.76	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	J	0.000650	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	CES	7/6/2017	SM 2540C		1		25		46.0	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		2.0	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10	U	<0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		1	1.40	5.00		5.3	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

Reported: 7/24/2017
Version: 2.0

Alabama Power General Test Laboratory
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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AX15120

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15121	Barium, Total	mg/L	-0.00000113	0.0044	0.10	0.0797	0.0841	0.0915	0.085 to 0.115	79.7	70 to 130	5.31	20
AX15121	Beryllium, Total	mg/L	0.00000450	0.00132	0.10	0.0832	0.0863	0.0949	0.085 to 0.115	83.2	70 to 130	3.76	20
AX15121	Boron, Total	mg/L	-0.00378	0.044	1.00	0.918	0.915	0.948	0.85 to 1.15	91.8	70 to 130	0.373	20
AX15121	Cobalt, Total	mg/L	-0.00000678	0.0044	0.10	0.101	0.104	0.107	0.085 to 0.115	101	70 to 130	2.77	20
AX15121	Selenium, Total	mg/L	0.0000185	0.0044	0.10	0.0808	0.0826	0.0915	0.085 to 0.115	80.8	70 to 130	2.21	20
AX15121	Antimony, Total	mg/L	0.0000258	0.00132	0.10	0.0894	0.0936	0.0965	0.085 to 0.115	89.4	70 to 130	4.55	20
AX15121	Calcium, Total	mg/L	-0.00116	0.22	5.00	4.76	4.70	5.01	4.25 to 5.75	95.1	70 to 130	1.13	20
AX15121	Cadmium, Total	mg/L	0.00000445	0.00044	0.10	0.0865	0.0866	0.0953	0.085 to 0.115	86.5	70 to 130	0.203	20
AX15121	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0877	0.0905	0.100	0.085 to 0.115	87.7	70 to 130	3.17	20
AX15121	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0819	0.0853	0.0918	0.085 to 0.115	81.9	70 to 130	4.12	20
AX15121	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0889	0.0926	0.0960	0.085 to 0.115	88.9	70 to 130	4.10	20
AX15121	Mercury, Total by CVAA	mg/L	0.00000516	0.0005	0.004	0.00376	0.00374	0.00376	0.0034 to 0.0046	93.9	70 to 130	0.414	20
AX15121	Molybdenum, Total	mg/L	0.00000685	0.0044	0.10	0.0955	0.0964	0.100	0.085 to 0.115	95.5	70 to 130	1.00	20
AX15121	Lithium, Total	mg/L	-0.0000507	0.022	0.20	0.184	0.182	0.187	0.17 to 0.23	92.2	70 to 130	1.59	20
AX15121	Thallium, Total	mg/L	0.00000642	0.00044	0.10	0.0875	0.0915	0.0992	0.085 to 0.115	87.5	70 to 130	4.39	20

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Expiration: June 30, 2018

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Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-28

Laboratory ID Number: AX15120

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15109	Solids, Dissolved	mg/L	7.00	25			319	47.0	40 to 60			0.468	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:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX15121

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5	U	Not Detected	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	CES	7/6/2017	SM 2540C		1		25	U	Not Detected	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00	U	<0.60	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10	U	<0.032	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		1	1.40	5.00	U	<1.4	mg/L

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Comments: Test America, Pensacola NELAP ID: E81010

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX15121

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15121	Barium, Total	mg/L	-0.00000113	0.0044	0.10	0.0797	0.0841	0.0915	0.085 to 0.115	79.7	70 to 130	5.31	20
AX15121	Antimony, Total	mg/L	0.0000258	0.00132	0.10	0.0894	0.0936	0.0965	0.085 to 0.115	89.4	70 to 130	4.55	20
AX15121	Calcium, Total	mg/L	-0.00116	0.22	5.00	4.76	4.70	5.01	4.25 to 5.75	95.1	70 to 130	1.13	20
AX15121	Lithium, Total	mg/L	-0.0000507	0.022	0.20	0.184	0.182	0.187	0.17 to 0.23	92.2	70 to 130	1.59	20
AX15121	Thallium, Total	mg/L	0.00000642	0.00044	0.10	0.0875	0.0915	0.0992	0.085 to 0.115	87.5	70 to 130	4.39	20
AX15121	Cadmium, Total	mg/L	0.00000445	0.00044	0.10	0.0865	0.0866	0.0953	0.085 to 0.115	86.5	70 to 130	0.203	20
AX15121	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0877	0.0905	0.100	0.085 to 0.115	87.7	70 to 130	3.17	20
AX15121	Cobalt, Total	mg/L	-0.00000678	0.0044	0.10	0.101	0.104	0.107	0.085 to 0.115	101	70 to 130	2.77	20
AX15121	Selenium, Total	mg/L	0.0000185	0.0044	0.10	0.0808	0.0826	0.0915	0.085 to 0.115	80.8	70 to 130	2.21	20
AX15121	Beryllium, Total	mg/L	0.00000450	0.00132	0.10	0.0832	0.0863	0.0949	0.085 to 0.115	83.2	70 to 130	3.76	20
AX15121	Boron, Total	mg/L	-0.00378	0.044	1.00	0.918	0.915	0.948	0.85 to 1.15	91.8	70 to 130	0.373	20
AX15121	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0819	0.0853	0.0918	0.085 to 0.115	81.9	70 to 130	4.12	20
AX15121	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0889	0.0926	0.0960	0.085 to 0.115	88.9	70 to 130	4.10	20
AX15121	Mercury, Total by CVAA	mg/L	0.00000516	0.0005	0.004	0.00376	0.00374	0.00376	0.0034 to 0.0046	93.9	70 to 130	0.414	20
AX15121	Molybdenum, Total	mg/L	0.00000685	0.0044	0.10	0.0955	0.0964	0.100	0.085 to 0.115	95.5	70 to 130	1.00	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

Reported: 7/24/2017
Version: 2.0

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FAX (205) 257-1654

Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAPFB
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond Field Blank

Laboratory ID Number: AX15121

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15109	Solids, Dissolved	mg/L	7.00	25			319	47.0	40 to 60			0.468	5

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Alabama Power General Test Laboratory
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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AX15122

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0246	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1	U	Not Detected	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		28.6	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	U	Not Detected	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	CES	7/6/2017	SM 2540C		1		25		96.7	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		2.1	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10	J	0.080	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		1	1.40	5.00		14	mg/L

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Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AX15122

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15127	Antimony, Total	mg/L	0.0000258	0.00132	0.10	0.0976	0.102	0.0965	0.085 to 0.115	97.6	70 to 130	4.03	20
AX15127	Boron, Total	mg/L	-0.00409	0.044	1.00	1.17	1.17	0.923	0.85 to 1.15	93.0	70 to 130	0.170	20
AX15127	Thallium, Total	mg/L	0.00000642	0.00044	0.10	0.0983	0.101	0.0992	0.085 to 0.115	98.3	70 to 130	2.76	20
AX15127	Beryllium, Total	mg/L	0.00000450	0.00132	0.10	0.0894	0.0906	0.0949	0.085 to 0.115	89.4	70 to 130	1.31	20
AX15127	Calcium, Total	mg/L	0.00436	0.22	5.00	31.6	31.8	4.50	4.25 to 5.75	94.3	70 to 130	0.593	20
AX15127	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0950	0.0977	0.0960	0.085 to 0.115	95.0	70 to 130	2.83	20
AX15127	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0944	0.0954	0.100	0.085 to 0.115	94.4	70 to 130	1.05	20
AX15127	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0906	0.0931	0.0918	0.085 to 0.115	90.6	70 to 130	2.74	20
AX15127	Barium, Total	mg/L	-0.00000113	0.0044	0.10	0.120	0.124	0.0915	0.085 to 0.115	85.2	70 to 130	3.08	20
AX15127	Lithium, Total	mg/L	-0.0000427	0.022	0.20	0.280	0.288	0.181	0.17 to 0.23	91.9	70 to 130	2.77	20
AX15127	Mercury, Total by CVAA	mg/L	0.0000108	0.0005	0.004	0.00384	0.00381	0.00366	0.0034 to 0.0046	96.1	70 to 130	0.883	20
AX15127	Cadmium, Total	mg/L	0.00000445	0.00044	0.10	0.0911	0.0931	0.0953	0.085 to 0.115	91.1	70 to 130	2.13	20
AX15127	Cobalt, Total	mg/L	-0.00000678	0.0044	0.10	0.107	0.109	0.107	0.085 to 0.115	107	70 to 130	1.99	20
AX15127	Molybdenum, Total	mg/L	0.00000685	0.0044	0.10	0.183	0.190	0.100	0.085 to 0.115	99.6	70 to 130	3.88	20
AX15127	Selenium, Total	mg/L	0.0000185	0.0044	0.10	0.0866	0.0879	0.0915	0.085 to 0.115	86.6	70 to 130	1.50	20

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Comments: Test America, Pensacola NELAP ID: E81010

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 27-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-23

Laboratory ID Number: AX15122

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15109	Solids, Dissolved	mg/L	7.00	25			319	47.0	40 to 60			0.468	5

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Certificate Of Analysis

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AX15123

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0935	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1		1.72	mg/L
* Calcium, Total	HRG	7/6/2017	EPA 200.7		10	1	5		76.4	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0137	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	J	0.0401	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	7/6/2017	SM 2540C		1		50		612	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		49	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10	J	0.090	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		2	2.80	10		35	mg/L

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Batch QC Summary

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AX15123

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15127	Antimony, Total	mg/L	0.0000258	0.00132	0.10	0.0976	0.102	0.0965	0.085 to 0.115	97.6	70 to 130	4.03	20
AX15127	Thallium, Total	mg/L	0.00000642	0.00044	0.10	0.0983	0.101	0.0992	0.085 to 0.115	98.3	70 to 130	2.76	20
AX15127	Boron, Total	mg/L	-0.00409	0.044	1.00	1.17	1.17	0.923	0.85 to 1.15	93.0	70 to 130	0.170	20
AX15127	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0906	0.0931	0.0918	0.085 to 0.115	90.6	70 to 130	2.74	20
AX15127	Barium, Total	mg/L	-0.00000113	0.0044	0.10	0.120	0.124	0.0915	0.085 to 0.115	85.2	70 to 130	3.08	20
AX15127	Lithium, Total	mg/L	-0.0000427	0.022	0.20	0.280	0.288	0.181	0.17 to 0.23	91.9	70 to 130	2.77	20
AX15127	Mercury, Total by CVAA	mg/L	0.0000108	0.0005	0.004	0.00384	0.00381	0.00366	0.0034 to 0.0046	96.1	70 to 130	0.883	20
AX15127	Cadmium, Total	mg/L	0.00000445	0.00044	0.10	0.0911	0.0931	0.0953	0.085 to 0.115	91.1	70 to 130	2.13	20
AX15127	Cobalt, Total	mg/L	-0.00000678	0.0044	0.10	0.107	0.109	0.107	0.085 to 0.115	107	70 to 130	1.99	20
AX15127	Molybdenum, Total	mg/L	0.00000685	0.0044	0.10	0.183	0.190	0.100	0.085 to 0.115	99.6	70 to 130	3.88	20
AX15127	Selenium, Total	mg/L	0.0000185	0.0044	0.10	0.0866	0.0879	0.0915	0.085 to 0.115	86.6	70 to 130	1.50	20
AX15127	Beryllium, Total	mg/L	0.00000450	0.00132	0.10	0.0894	0.0906	0.0949	0.085 to 0.115	89.4	70 to 130	1.31	20
AX15127	Calcium, Total	mg/L	0.00436	0.22	5.00	31.6	31.8	4.50	4.25 to 5.75	94.3	70 to 130	0.593	20
AX15127	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0950	0.0977	0.0960	0.085 to 0.115	95.0	70 to 130	2.83	20
AX15127	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0944	0.0954	0.100	0.085 to 0.115	94.4	70 to 130	1.05	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-8

Laboratory ID Number: AX15123

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15127	Solids, Dissolved	mg/L	5.00	25			184	49.0	40 to 60			2.51	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:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AX15124

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005		0.00718	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0897	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1		0.673	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		69.8	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0125	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05	J	0.0345	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	7/6/2017	SM 2540C		1		25		396	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		25	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10		0.16	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		2	2.80	10		34	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AX15124

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15127	Thallium, Total	mg/L	0.00000642	0.00044	0.10	0.0983	0.101	0.0992	0.085 to 0.115	98.3	70 to 130	2.76	20
AX15127	Antimony, Total	mg/L	0.0000258	0.00132	0.10	0.0976	0.102	0.0965	0.085 to 0.115	97.6	70 to 130	4.03	20
AX15127	Boron, Total	mg/L	-0.00409	0.044	1.00	1.17	1.17	0.923	0.85 to 1.15	93.0	70 to 130	0.170	20
AX15127	Beryllium, Total	mg/L	0.00000450	0.00132	0.10	0.0894	0.0906	0.0949	0.085 to 0.115	89.4	70 to 130	1.31	20
AX15127	Calcium, Total	mg/L	0.00436	0.22	5.00	31.6	31.8	4.50	4.25 to 5.75	94.3	70 to 130	0.593	20
AX15127	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0950	0.0977	0.0960	0.085 to 0.115	95.0	70 to 130	2.83	20
AX15127	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0944	0.0954	0.100	0.085 to 0.115	94.4	70 to 130	1.05	20
AX15127	Cadmium, Total	mg/L	0.00000445	0.00044	0.10	0.0911	0.0931	0.0953	0.085 to 0.115	91.1	70 to 130	2.13	20
AX15127	Cobalt, Total	mg/L	-0.00000678	0.0044	0.10	0.107	0.109	0.107	0.085 to 0.115	107	70 to 130	1.99	20
AX15127	Molybdenum, Total	mg/L	0.00000685	0.0044	0.10	0.183	0.190	0.100	0.085 to 0.115	99.6	70 to 130	3.88	20
AX15127	Selenium, Total	mg/L	0.0000185	0.0044	0.10	0.0866	0.0879	0.0915	0.085 to 0.115	86.6	70 to 130	1.50	20
AX15127	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0906	0.0931	0.0918	0.085 to 0.115	90.6	70 to 130	2.74	20
AX15127	Barium, Total	mg/L	-0.00000113	0.0044	0.10	0.120	0.124	0.0915	0.085 to 0.115	85.2	70 to 130	3.08	20
AX15127	Lithium, Total	mg/L	-0.0000427	0.022	0.20	0.280	0.288	0.181	0.17 to 0.23	91.9	70 to 130	2.77	20
AX15127	Mercury, Total by CVAA	mg/L	0.0000108	0.0005	0.004	0.00384	0.00381	0.00366	0.0034 to 0.0046	96.1	70 to 130	0.883	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-9

Laboratory ID Number: AX15124

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15127	Solids, Dissolved	mg/L	5.00	25			184	49.0	40 to 60			2.51	5

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Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AX15125

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005		0.0131	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.144	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1		1.05	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		60.8	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0134	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05		0.0954	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0102	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	7/6/2017	SM 2540C		1		25		304	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		20	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10	J	0.090	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		1	1.40	5.00		10	mg/L

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Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AX15125

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15127	Thallium, Total	mg/L	0.00000642	0.00044	0.10	0.0983	0.101	0.0992	0.085 to 0.115	98.3	70 to 130	2.76	20
AX15127	Antimony, Total	mg/L	0.0000258	0.00132	0.10	0.0976	0.102	0.0965	0.085 to 0.115	97.6	70 to 130	4.03	20
AX15127	Boron, Total	mg/L	-0.00409	0.044	1.00	1.17	1.17	0.923	0.85 to 1.15	93.0	70 to 130	0.170	20
AX15127	Beryllium, Total	mg/L	0.00000450	0.00132	0.10	0.0894	0.0906	0.0949	0.085 to 0.115	89.4	70 to 130	1.31	20
AX15127	Calcium, Total	mg/L	0.00436	0.22	5.00	31.6	31.8	4.50	4.25 to 5.75	94.3	70 to 130	0.593	20
AX15127	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0950	0.0977	0.0960	0.085 to 0.115	95.0	70 to 130	2.83	20
AX15127	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0944	0.0954	0.100	0.085 to 0.115	94.4	70 to 130	1.05	20
AX15127	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0906	0.0931	0.0918	0.085 to 0.115	90.6	70 to 130	2.74	20
AX15127	Barium, Total	mg/L	-0.00000113	0.0044	0.10	0.120	0.124	0.0915	0.085 to 0.115	85.2	70 to 130	3.08	20
AX15127	Lithium, Total	mg/L	-0.0000427	0.022	0.20	0.280	0.288	0.181	0.17 to 0.23	91.9	70 to 130	2.77	20
AX15127	Mercury, Total by CVAA	mg/L	0.0000108	0.0005	0.004	0.00384	0.00381	0.00366	0.0034 to 0.0046	96.1	70 to 130	0.883	20
AX15127	Cadmium, Total	mg/L	0.00000445	0.00044	0.10	0.0911	0.0931	0.0953	0.085 to 0.115	91.1	70 to 130	2.13	20
AX15127	Cobalt, Total	mg/L	-0.00000678	0.0044	0.10	0.107	0.109	0.107	0.085 to 0.115	107	70 to 130	1.99	20
AX15127	Molybdenum, Total	mg/L	0.00000685	0.0044	0.10	0.183	0.190	0.100	0.085 to 0.115	99.6	70 to 130	3.88	20
AX15127	Selenium, Total	mg/L	0.0000185	0.0044	0.10	0.0866	0.0879	0.0915	0.085 to 0.115	86.6	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: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-10

Laboratory ID Number: AX15125

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15127	Solids, Dissolved	mg/L	5.00	25			184	49.0	40 to 60			2.51	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

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Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AX15126

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005		0.00664	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.103	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1		0.313	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		22.6	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0664	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05		0.109	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	J	0.00616	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	7/6/2017	SM 2540C		1		25		227	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		24	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10		0.17	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		5	7.00	25		88	mg/L

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Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

Reported: 7/24/2017
Version: 2.0

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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AX15126

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15127	Thallium, Total	mg/L	0.00000642	0.00044	0.10	0.0983	0.101	0.0992	0.085 to 0.115	98.3	70 to 130	2.76	20
AX15127	Boron, Total	mg/L	-0.00409	0.044	1.00	1.17	1.17	0.923	0.85 to 1.15	93.0	70 to 130	0.170	20
AX15127	Antimony, Total	mg/L	0.0000258	0.00132	0.10	0.0976	0.102	0.0965	0.085 to 0.115	97.6	70 to 130	4.03	20
AX15127	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0906	0.0931	0.0918	0.085 to 0.115	90.6	70 to 130	2.74	20
AX15127	Barium, Total	mg/L	-0.00000113	0.0044	0.10	0.120	0.124	0.0915	0.085 to 0.115	85.2	70 to 130	3.08	20
AX15127	Lithium, Total	mg/L	-0.0000427	0.022	0.20	0.280	0.288	0.181	0.17 to 0.23	91.9	70 to 130	2.77	20
AX15127	Mercury, Total by CVAA	mg/L	0.0000108	0.0005	0.004	0.00384	0.00381	0.00366	0.0034 to 0.0046	96.1	70 to 130	0.883	20
AX15127	Beryllium, Total	mg/L	0.00000450	0.00132	0.10	0.0894	0.0906	0.0949	0.085 to 0.115	89.4	70 to 130	1.31	20
AX15127	Calcium, Total	mg/L	0.00436	0.22	5.00	31.6	31.8	4.50	4.25 to 5.75	94.3	70 to 130	0.593	20
AX15127	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0950	0.0977	0.0960	0.085 to 0.115	95.0	70 to 130	2.83	20
AX15127	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0944	0.0954	0.100	0.085 to 0.115	94.4	70 to 130	1.05	20
AX15127	Cadmium, Total	mg/L	0.00000445	0.00044	0.10	0.0911	0.0931	0.0953	0.085 to 0.115	91.1	70 to 130	2.13	20
AX15127	Cobalt, Total	mg/L	-0.00000678	0.0044	0.10	0.107	0.109	0.107	0.085 to 0.115	107	70 to 130	1.99	20
AX15127	Molybdenum, Total	mg/L	0.00000685	0.0044	0.10	0.183	0.190	0.100	0.085 to 0.115	99.6	70 to 130	3.88	20
AX15127	Selenium, Total	mg/L	0.0000185	0.0044	0.10	0.0866	0.0879	0.0915	0.085 to 0.115	86.6	70 to 130	1.50	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-11

Laboratory ID Number: AX15126

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15127	Solids, Dissolved	mg/L	5.00	25			184	49.0	40 to 60			2.51	5

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CC:

Reported: 7/24/2017
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

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AX15127

Name	Analyst	Test Date	Reference	Vio Spec	DF	MDL	RL	Q	Results	Units
Metals, Cyanide, Total Phenols										
* Arsenic, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Barium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0352	mg/L
* Beryllium, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Boron, Total	HRG	6/30/2017	EPA 200.7		2	0.02	0.1		0.243	mg/L
* Calcium, Total	HRG	6/30/2017	EPA 200.7		2	0.10	0.5		26.9	mg/L
* Cadmium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
* Antimony, Total	JHK	7/5/2017	EPA 200.8		5	0.00060	0.003	U	Not Detected	mg/L
* Cobalt, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Chromium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Mercury, Total by CVAA	ABB	7/11/2017	EPA 245.1		1	0.00025	0.0005	U	Not Detected	mg/L
* Lithium, Total	HRG	6/30/2017	EPA 200.7		2	0.010	0.05		0.0962	mg/L
* Molybdenum, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01		0.0833	mg/L
* Lead, Total	JHK	7/5/2017	EPA 200.8		5	0.0010	0.005	U	Not Detected	mg/L
* Selenium, Total	JHK	7/5/2017	EPA 200.8		5	0.0020	0.01	U	Not Detected	mg/L
* Thallium, Total	JHK	7/5/2017	EPA 200.8		5	0.00020	0.001	U	Not Detected	mg/L
General Characteristics										
* Solids, Dissolved	KRC	7/6/2017	SM 2540C		1		25		175	mg/L
* Chloride, Total, by Test America	SGC	7/20/2017	SM 4500 Cl_E		1	0.60	2.00		11	mg/L
* Fluoride, Total, by Test America	SGC	7/20/2017	SM 4500 F_C		1	0.032	0.10		0.18	mg/L
* Sulfate, Total, by Test America	SGC	7/20/2017	SM 4500 SO4_E		5	7.00	25		69	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AX15127

Sample	Analysis	Units	MB	MB Limit	Spike	MS	MSD	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15127	Antimony, Total	mg/L	0.0000258	0.00132	0.10	0.0976	0.102	0.0965	0.085 to 0.115	97.6	70 to 130	4.03	20
AX15127	Thallium, Total	mg/L	0.00000642	0.00044	0.10	0.0983	0.101	0.0992	0.085 to 0.115	98.3	70 to 130	2.76	20
AX15127	Boron, Total	mg/L	-0.00409	0.044	1.00	1.17	1.17	0.923	0.85 to 1.15	93.0	70 to 130	0.170	20
AX15127	Arsenic, Total	mg/L	0.0000138	0.0022	0.10	0.0906	0.0931	0.0918	0.085 to 0.115	90.6	70 to 130	2.74	20
AX15127	Barium, Total	mg/L	-0.00000113	0.0044	0.10	0.120	0.124	0.0915	0.085 to 0.115	85.2	70 to 130	3.08	20
AX15127	Lithium, Total	mg/L	-0.0000427	0.022	0.20	0.280	0.288	0.181	0.17 to 0.23	91.9	70 to 130	2.77	20
AX15127	Mercury, Total by CVAA	mg/L	0.0000108	0.0005	0.004	0.00384	0.00381	0.00366	0.0034 to 0.0046	96.1	70 to 130	0.883	20
AX15127	Cadmium, Total	mg/L	0.00000445	0.00044	0.10	0.0911	0.0931	0.0953	0.085 to 0.115	91.1	70 to 130	2.13	20
AX15127	Cobalt, Total	mg/L	-0.00000678	0.0044	0.10	0.107	0.109	0.107	0.085 to 0.115	107	70 to 130	1.99	20
AX15127	Molybdenum, Total	mg/L	0.00000685	0.0044	0.10	0.183	0.190	0.100	0.085 to 0.115	99.6	70 to 130	3.88	20
AX15127	Selenium, Total	mg/L	0.0000185	0.0044	0.10	0.0866	0.0879	0.0915	0.085 to 0.115	86.6	70 to 130	1.50	20
AX15127	Beryllium, Total	mg/L	0.00000450	0.00132	0.10	0.0894	0.0906	0.0949	0.085 to 0.115	89.4	70 to 130	1.31	20
AX15127	Calcium, Total	mg/L	0.00436	0.22	5.00	31.6	31.8	4.50	4.25 to 5.75	94.3	70 to 130	0.593	20
AX15127	Chromium, Total	mg/L	0.0000202	0.0044	0.10	0.0950	0.0977	0.0960	0.085 to 0.115	95.0	70 to 130	2.83	20
AX15127	Lead, Total	mg/L	0.00000424	0.0022	0.10	0.0944	0.0954	0.100	0.085 to 0.115	94.4	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

Reported: 7/24/2017
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

Alabama Power

Lab & Field SERVICES

To: Dustin Brooks
Greg Dyer

Customer Account: WMWGREAP
Sample Date: 28-Jun-17
Customer ID:
Delivery Date: 29-Jun-17

Description: Greene County Ash Pond - MW-21

Laboratory ID Number: AX15127

Sample	Analysis	Units	MB	MB Limit	Spike	LFM	Sample Duplicate	LFB	LFB Limit	Rec	Rec Limit	Prec	Prec Limit
AX15127	Solids, Dissolved	mg/L	5.00	25			184	49.0	40 to 60			2.51	5

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* Test results for these accredited parameters meet all 2003 NELAC and 2009 TNI requirements, with exceptions noted on this report
Laboratory certification ID: E571114
Issued By: State of Florida, Department of Health
Expiration: June 30, 2018

Comments: Test America, Pensacola NELAP ID: E81010

CC:

Reported: 7/24/2017
Version: 2.0

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

Alabama Power

Lab & Field SERVICES

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

Alabama Power Lab & Field SERVICES

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

☑ Field Complete
☑ Lab Complete

Lab ETA: 06/29/2017 10:30

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Anthony Goggins	Location	Greene 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-31	06/27/2017	12:31	4	Groundwater		AX15092
MW-31DUP	06/27/2017	12:31	4	Sample Duplicate		AX15093
MW-33	06/27/2017	13:39	4	Groundwater		AX15094
MW-32	06/27/2017	14:35	4	Groundwater		AX15095
MW-1	06/27/2017	15:37	4	Groundwater		AX15096
MW-2	06/28/2017	09:54	4	Groundwater		AX15097
FB-3	06/28/2017	10:00	4	Field Blank		AX15098
MW-3	06/28/2017	10:46	4	Groundwater		AX15099
MW-5	06/28/2017	11:37	4	Groundwater		AX15100
MW-6	06/28/2017	12:30	4	Groundwater		AX15101
EB-1	06/28/2017	12:42	4	Equipment Blank		AX15102
MW-7	06/28/2017	13:50	4	Groundwater		AX15103
MW-12	06/28/2017	14:59	4	Groundwater		AX15104

Relinquished By	Received By	Date/Time
Anthony Goggins	Sarah Copeland Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US Date: 2017.06.29 12:45:07 -05'00'	06/29/2017 12:45

SmarTroll ID	5141-26150-1-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20009-2-1	Cooler Temp	0.8 degrees C
		Thermometer ID	5408-27568-2-2
		pH Strip ID	5881-30147-10-1

5.0

Alabama Power Lab & Field SERVICES

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

☑ Field Complete
☑ Lab Complete

Lab ETA: 06/29/2017 10:00

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Nick Pitts	Location	Greene Ash Pond

Analysis Requested	Bottle 1 (500mL): Metals, Bottle 2 (250mL): Hg, Bottle 3 (500mL): TDS, Bottle 4 (250mL): Anions
Comments	All anions were outsourced to Test America, Pensacola.

Sample #	Date	Time	Bottle Count	Description	Lab Filter	Lab Id
MW-18	06/27/2017	11:15	4	Groundwater		AX15105
MW-17	06/27/2017	12:28	4	Groundwater		AX15106
MW-16	06/27/2017	14:15	4	Groundwater		AX15107
MW-15	06/27/2017	15:40	4	Groundwater		AX15108
MW-15 Dup	06/27/2017	15:40	4	Sample Duplicate		AX15109
MW-24	06/28/2017	09:55	4	Groundwater		AX15110
MW-25	06/28/2017	11:15	4	Groundwater		AX15111
MW-14	06/28/2017	13:00	4	Groundwater		AX15112
FB-2	06/28/2017	11:35	4	Field Blank		AX15113
MW-13	06/28/2017	14:12	4	Groundwater		AX15114

Relinquished By	Received By	Date/Time
	Sarah Copeland Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US Date: 2017.06.29 12:47:48 -05'00'	06/29/2017 12:47

SmarTroll ID	4696-23441-1-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	4677-23343-4-2	Cooler Temp	1.1 degrees C
		Thermometer ID	5408-27568-2-2
		pH Strip ID	5881-30147-10-1

5.0

Alabama Power Lab & Field SERVICES

Chain of Custody
Groundwater

APC General Testing Laboratory
General Service Complex Building 8

☑ Field Complete
☑ Lab Complete

Lab ETA: 06/29/2017 11:00

Requested Complete Date	Routine	Results To	Dustin Brooks, Greg Dyer
Site Representative	Jason Arledge	Requested By	Greg Dyer
Collector	Ben Rothschadl	Location	Greene 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-26	06/27/2017	09:26	4	Groundwater		AX15115
MW-29	06/27/2017	10:36	4	Groundwater		AX15116
MW-29 DUP	06/27/2017	10:36	4	Sample Duplicate		AX15117
MW-30	06/27/2017	11:45	4	Groundwater		AX15118
MW-27	06/27/2017	12:50	4	Groundwater		AX15119
MW-28	06/27/2017	14:00	4	Groundwater		AX15120
FB-1	06/27/2017	14:20	4	Field Blank		AX15121
MW-23	06/27/2017	15:20	4	Groundwater		AX15122
MW-8	06/28/2017	10:33	4	Groundwater		AX15123
MW-9	06/28/2017	11:32	4	Groundwater		AX15124
MW-10	06/28/2017	12:36	4	Groundwater		AX15125
MW-11	06/28/2017	13:39	4	Groundwater		AX15126
MW-21	06/28/2017	14:33	4	Groundwater		AX15127

Relinquished By	Received By	Date/Time
[signature]	Sarah Copeland Digitally signed by Sarah Copeland DN: cn=Sarah Copeland, o, ou, email=sgcopela@southernco.com, c=US Date: 2017.06.29 12:57:18 -05'00'	06/29/2017 12:57

SmarTroll ID	5151-26193-1-1	All metals and radiological bottles have pH < 2	☑
Turbidity ID	3901-20010-2-2	Cooler Temp	0.4 degrees C
		Thermometer ID	5408-27568-2-2
		pH Strip ID	5881-30147-10-1

5.0

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: 400-140127-1
TestAmerica SDG: Greene County Ash Pond (8)
Client Project/Site: CCR Plant Greene

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

Attn: Sarah Copeland

Cheyenne Whitmire

Authorized for release by:
7/18/2017 4:50:24 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 Greene

TestAmerica Job ID: 400-140127-1
SDG: Greene County Ash Pond (8)

Job ID: 400-140127-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-140127-1

General Chemistry
Method(s) SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 360173 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 360174 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) SM 4500 SO4 E: The following samples were diluted to bring the concentration of target analytes within the calibration range: AX15096 MW-1 (400-140127-5), AX15097 MW-2 (400-140127-6), AX15100 MW-5 (400-140127-9), AX15101 MW-6 (400-140127-10), AX15101 MW-6 (400-140127-10[MS]), AX15101 MW-6 (400-140127-10[MSD]),AX15103 MW-7 (400-140127-12), AX15104 MW-12 (400-140127-13), AX15106 MW-17 (400-140127-15), AX15107 MW-16 (400-140127-16), AX15108 MW-15 (400-140127-17), AX15109 MW-15 DUP (400-140127-18),AX15110 MW-24 (400-140127-19), AX15111 MW-25 (400-140127-20), AX15111 MW-25 (400-140127-20[MS]), AX15111 MW-25 (400-140127-20[MSD]), AX15112 MW-14 (400-140127-21), AX15114 MW-13 (400-140127-23), AX15115 MW-26 (400-140127-24), AX15123 MW-8 (400-140127-32), AX15124 MW-9 (400-140127-33), AX15126 MW-11 (400-140127-35), AX15127 MW-21 (400-140127-36), AX15127 MW-21 (400-140127-36[MS]) and AX15127 MW-21 (400-140127-36[MSD]). Elevated reporting limits (RLs) are provided.

Method(s) SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 360225 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 Greene

TestAmerica Job ID: 400-140127-1
SDG: Greene County Ash Pond (8)

Client Sample ID: AX15092 MW-31 — Lab Sample ID: 400-140127-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.4		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.050	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	3.4	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15093 MW-31 DUP — Lab Sample ID: 400-140127-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.8		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.050	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	3.5	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15094 MW-33 — Lab Sample ID: 400-140127-3

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
Fluoride	0.070	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	13		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15095 MW-32 — Lab Sample ID: 400-140127-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	4.0		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.040	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	2.7	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15096 MW-1 — Lab Sample ID: 400-140127-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	29		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.040	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	830		200	56	mg/L	40		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15097 MW-2 — Lab Sample ID: 400-140127-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	15		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.090	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	230		100	28	mg/L	20		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15098 FB-3 — Lab Sample ID: 400-140127-7

No Detections.

Client Sample ID: AX15099 MW-3 — Lab Sample ID: 400-140127-8

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	0.10		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA

Client Sample ID: AX15100 MW-5 — Lab Sample ID: 400-140127-9

This Detection Summary does not include radiochemical test results.

Client Sample ID: AX15100 MW-5 (Continued) — Lab Sample ID: 400-140127-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	17		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.21		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	45		10	2.8	mg/L	2		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15101 MW-6 — Lab Sample ID: 400-140127-10

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	0.18		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	100	F1	25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15102 EB-1 — Lab Sample ID: 400-140127-11

No Detections.

Client Sample ID: AX15103 MW-7 — Lab Sample ID: 400-140127-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	45		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.080	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	210		75	21	mg/L	15		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15104 MW-12 — Lab Sample ID: 400-140127-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	12		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.17		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	71		25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15105 MW-18 — Lab Sample ID: 400-140127-14

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	0.18		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	9.7		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15106 MW-17 — Lab Sample ID: 400-140127-15

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	0.38		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	44		10	2.8	mg/L	2		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15107 MW-16 — Lab Sample ID: 400-140127-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	17		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.22		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	75		25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 400-140127-1
SDG: Greene County Ash Pond (8)

Client Sample ID: AX15108 MW-15 — Lab Sample ID: 400-140127-17

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	0.10		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	150		75	21	mg/L	15		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15109 MW-15 DUP — Lab Sample ID: 400-140127-18

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	0.10		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	150		75	21	mg/L	15		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15110 MW-24 — Lab Sample ID: 400-140127-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.7		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	56		10	2.8	mg/L	2		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15111 MW-25 — Lab Sample ID: 400-140127-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	22	F1	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	35	F1	10	2.8	mg/L	2		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15112 MW-14 — Lab Sample ID: 400-140127-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	17		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.13		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	120		25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15113 FB-2 — Lab Sample ID: 400-140127-22

No Detections.

Client Sample ID: AX15114 MW-13 — Lab Sample ID: 400-140127-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	9.4		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
Sulfate	71		25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15115 MW-26 — Lab Sample ID: 400-140127-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	3.0		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.22		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	45		10	2.8	mg/L	2		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15116 MW-29 — Lab Sample ID: 400-140127-25

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Client Sample ID: AX15116 MW-29 (Continued) — Lab Sample ID: 400-140127-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.1		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: AX15117 MW-29 DUP — Lab Sample ID: 400-140127-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.9	J	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: AX15118 MW-30 — Lab Sample ID: 400-140127-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.1		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: AX15119 MW-27 — Lab Sample ID: 400-140127-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.9	J	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: AX15120 MW-28 — Lab Sample ID: 400-140127-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.0		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	5.3		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15121 FB-1 — Lab Sample ID: 400-140127-30

No Detections.

Client Sample ID: AX15122 MW-23 — Lab Sample ID: 400-140127-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	2.1		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.080	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	14		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15123 MW-8 — Lab Sample ID: 400-140127-32

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	0.090	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	35		10	2.8	mg/L	2		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15124 MW-9 — Lab Sample ID: 400-140127-33

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	0.16		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	34		10	2.8	mg/L	2		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15125 MW-10 — Lab Sample ID: 400-140127-34

This Detection Summary does not include radiochemical test results.

Detection Summary

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

TestAmerica Job ID: 400-140127-1
SDG: Greene County Ash Pond (8)

Client Sample ID: AX15125 MW-10 (Continued) — Lab Sample ID: 400-140127-34

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	20		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.090	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	10		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15126 MW-11 — Lab Sample ID: 400-140127-35

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	0.17		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	88		25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA

Client Sample ID: AX15127 MW-21 — Lab Sample ID: 400-140127-36

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	11		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.18		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	69	F1	25	7.0	mg/L	5		SM 4500 SO4 E	Total/NA

This Detection Summary does not include radiochemical test results.

Method Summary

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

TestAmerica Job ID: 400-140127-1
SDG: Greene County 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 Greene

TestAmerica Job ID: 400-140127-1
SDG: Greene County Ash Pond (8)

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-140127-1	AX15092 MW-31	Water	06/27/17 12:31	07/06/17 08:52
400-140127-2	AX15093 MW-31 DUP	Water	06/27/17 12:31	07/06/17 08:52
400-140127-3	AX15094 MW-33	Water	06/27/17 13:39	07/06/17 08:52
400-140127-4	AX15095 MW-32	Water	06/27/17 14:35	07/06/17 08:52
400-140127-5	AX15096 MW-1	Water	06/27/17 15:37	07/06/17 08:52
400-140127-6	AX15097 MW-2	Water	06/28/17 09:54	07/06/17 08:52
400-140127-7	AX15098 FB-3	Water	06/28/17 10:00	07/06/17 08:52
400-140127-8	AX15099 MW-3	Water	06/28/17 10:46	07/06/17 08:52
400-140127-9	AX15100 MW-5	Water	06/28/17 11:37	07/06/17 08:52
400-140127-10	AX15101 MW-6	Water	06/28/17 12:30	07/06/17 08:52
400-140127-11	AX15102 EB-1	Water	06/28/17 12:42	07/06/17 08:52
400-140127-12	AX15103 MW-7	Water	06/28/17 13:50	07/06/17 08:52
400-140127-13	AX15104 MW-12	Water	06/28/17 14:59	07/06/17 08:52
400-140127-14	AX15105 MW-18	Water	06/27/17 11:15	07/06/17 08:52
400-140127-15	AX15106 MW-17	Water	06/27/17 12:28	07/06/17 08:52
400-140127-16	AX15107 MW-16	Water	06/27/17 14:15	07/06/17 08:52
400-140127-17	AX15108 MW-15	Water	06/27/17 15:40	07/06/17 08:52
400-140127-18	AX15109 MW-15 DUP	Water	06/27/17 15:40	07/06/17 08:52
400-140127-19	AX15110 MW-24	Water	06/28/17 09:55	07/06/17 08:52
400-140127-20	AX15111 MW-25	Water	06/28/17 11:15	07/06/17 08:52
400-140127-21	AX15112 MW-14	Water	06/28/17 13:00	07/06/17 08:52
400-140127-22	AX15113 FB-2	Water	06/28/17 11:35	07/06/17 08:52
400-140127-23	AX15114 MW-13	Water	06/28/17 14:12	07/06/17 08:52
400-140127-24	AX15115 MW-26	Water	06/27/17 09:26	07/06/17 08:52
400-140127-25	AX15116 MW-29	Water	06/27/17 10:36	07/06/17 08:52
400-140127-26	AX15117 MW-29 DUP	Water	06/27/17 10:36	07/06/17 08:52
400-140127-27	AX15118 MW-30	Water	06/27/17 11:45	07/06/17 08:52
400-140127-28	AX15119 MW-27	Water	06/27/17 12:50	07/06/17 08:52
400-140127-29	AX15120 MW-28	Water	06/27/17 14:00	07/06/17 08:52
400-140127-30	AX15121 FB-1	Water	06/27/17 14:20	07/06/17 08:52
400-140127-31	AX15122 MW-23	Water	06/27/17 15:20	07/06/17 08:52
400-140127-32	AX15123 MW-8	Water	06/28/17 10:33	07/06/17 08:52
400-140127-33	AX15124 MW-9	Water	06/28/17 11:32	07/06/17 08:52
400-140127-34	AX15125 MW-10	Water	06/28/17 12:36	07/06/17 08:52
400-140127-35	AX15126 MW-11	Water	06/28/17 13:39	07/06/17 08:52
400-140127-36	AX15127 MW-21	Water	06/28/17 14:33	07/06/17 08:52

Client Sample ID: AX15092 MW-31

Lab Sample ID: 400-140127-1
Date Collected: 06/27/17 12:31
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.4		2.0	0.60	mg/L			07/10/17 14:02	1
Fluoride	0.050	J	0.10	0.032	mg/L			07/10/17 17:41	1
Sulfate	3.4	J	5.0	1.4	mg/L			07/10/17 10:36	1

Client Sample ID: AX15093 MW-31 DUP

Lab Sample ID: 400-140127-2
Date Collected: 06/27/17 12:31
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.8		2.0	0.60	mg/L			07/11/17 12:07	1
Fluoride	0.050	J	0.10	0.032	mg/L			07/10/17 17:43	1
Sulfate	3.5	J	5.0	1.4	mg/L			07/10/17 11:02	1

Client Sample ID: AX15094 MW-33

Lab Sample ID: 400-140127-3
Date Collected: 06/27/17 13:39
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.2		2.0	0.60	mg/L			07/11/17 12:07	1
Fluoride	0.070	J	0.10	0.032	mg/L			07/10/17 17:46	1
Sulfate	13		5.0	1.4	mg/L			07/12/17 08:01	1

Client Sample ID: AX15095 MW-32

Lab Sample ID: 400-140127-4
Date Collected: 06/27/17 14:35
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	4.0		2.0	0.60	mg/L			07/11/17 12:07	1
Fluoride	0.040	J	0.10	0.032	mg/L			07/10/17 17:49	1
Sulfate	2.7	J	5.0	1.4	mg/L			07/12/17 07:40	1

Client Sample ID: AX15096 MW-1

Lab Sample ID: 400-140127-5
Date Collected: 06/27/17 15:37
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	29		2.0	0.60	mg/L			07/11/17 15:07	1
Fluoride	0.040	J	0.10	0.032	mg/L			07/10/17 17:50	1
Sulfate	830		200	56	mg/L			07/12/17 08:34	40

Client Sample ID: AX15097 MW-2

Lab Sample ID: 400-140127-6
Date Collected: 06/28/17 09:54
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	15		2.0	0.60	mg/L			07/11/17 15:07	1
Fluoride	0.090	J	0.10	0.032	mg/L			07/10/17 17:52	1
Sulfate	230		100	28	mg/L			07/12/17 08:24	20

Client Sample ID: AX15098 FB-3

Lab Sample ID: 400-140127-7
Date Collected: 06/28/17 10:00
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			07/11/17 15:07	1
Fluoride	<0.032		0.10	0.032	mg/L			07/10/17 17:55	1
Sulfate	<1.4		5.0	1.4	mg/L			07/12/17 07:59	1

Client Sample ID: AX15099 MW-3

Lab Sample ID: 400-140127-8
Date Collected: 06/28/17 10:46
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	26		2.0	0.60	mg/L			07/11/17 15:08	1
Fluoride	0.10		0.10	0.032	mg/L			07/13/17 10:13	1
Sulfate	<1.4		5.0	1.4	mg/L			07/12/17 08:01	1

Client Sample ID: AX15100 MW-5

Lab Sample ID: 400-140127-9
Date Collected: 06/28/17 11:37
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		2.0	0.60	mg/L			07/11/17 15:08	1
Fluoride	0.21		0.10	0.032	mg/L			07/13/17 10:15	1
Sulfate	45		10	2.8	mg/L			07/12/17 10:22	2

Client Sample ID: AX15101 MW-6

Lab Sample ID: 400-140127-10
Date Collected: 06/28/17 12:30
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	36		2.0	0.60	mg/L			07/10/17 13:26	1
Fluoride	0.18		0.10	0.032	mg/L			07/13/17 10:08	1
Sulfate	100	F1	25	7.0	mg/L			07/12/17 08:05	5

Client Sample ID: AX15102 EB-1

Lab Sample ID: 400-140127-11
Date Collected: 06/28/17 12:42
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			07/11/17 15:08	1

Client Sample ID: AX15102 EB-1

Lab Sample ID: 400-140127-11
Date Collected: 06/28/17 12:42
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			07/13/17 10:18	1
Sulfate	<1.4		5.0	1.4	mg/L			07/12/17 09:37	1

Client Sample ID: AX15103 MW-7

Lab Sample ID: 400-140127-12
Date Collected: 06/28/17 13:50
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	45		2.0	0.60	mg/L			07/11/17 15:08	1
Fluoride	0.080	J	0.10	0.032	mg/L			07/13/17 10:20	1
Sulfate	210		75	21	mg/L			07/12/17 12:28	15

Client Sample ID: AX15104 MW-12

Lab Sample ID: 400-140127-13
Date Collected: 06/28/17 14:59
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	12		2.0	0.60	mg/L			07/11/17 15:56	1
Fluoride	0.17		0.10	0.032	mg/L			07/13/17 10:22	1
Sulfate	71		25	7.0	mg/L			07/12/17 10:22	5

Client Sample ID: AX15105 MW-18

Lab Sample ID: 400-140127-14
Date Collected: 06/27/17 11:15
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25		2.0	0.60	mg/L			07/11/17 14:44	1
Fluoride	0.18		0.10	0.032	mg/L			07/13/17 10:24	1
Sulfate	9.7		5.0	1.4	mg/L			07/12/17 07:40	1

Client Sample ID: AX15106 MW-17

Lab Sample ID: 400-140127-15
Date Collected: 06/27/17 12:28
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24		2.0	0.60	mg/L			07/11/17 14:44	1
Fluoride	0.38		0.10	0.032	mg/L			07/13/17 10:25	1
Sulfate	44		10	2.8	mg/L			07/12/17 08:10	2

Client Sample ID: AX15107 MW-16

Lab Sample ID: 400-140127-16
Date Collected: 06/27/17 14:15
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		2.0	0.60	mg/L			07/11/17 14:44	1
Fluoride	0.22		0.10	0.032	mg/L			07/13/17 10:38	1

Client Sample ID: AX15107 MW-16

Lab Sample ID: 400-140127-16
Date Collected: 06/27/17 14:15
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	75		25	7.0	mg/L			07/12/17 08:10	5

Client Sample ID: AX15108 MW-15

Lab Sample ID: 400-140127-17
Date Collected: 06/27/17 15:40
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14		2.0	0.60	mg/L			07/11/17 14:44	1
Fluoride	0.10		0.10	0.032	mg/L			07/13/17 10:40	1
Sulfate	150		75	21	mg/L			07/12/17 08:10	15

Client Sample ID: AX15109 MW-15 DUP

Lab Sample ID: 400-140127-18
Date Collected: 06/27/17 15:40
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	14		2.0	0.60	mg/L			07/11/17 14:44	1
Fluoride	0.10		0.10	0.032	mg/L			07/13/17 10:42	1
Sulfate	150		75	21	mg/L			07/12/17 08:10	15

Client Sample ID: AX15110 MW-24

Lab Sample ID: 400-140127-19
Date Collected: 06/28/17 09:55
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	5.7		2.0	0.60	mg/L			07/11/17 15:56	1
Fluoride	<0.032		0.10	0.032	mg/L			07/13/17 10:44	1
Sulfate	56		10	2.8	mg/L			07/12/17 10:22	2

Client Sample ID: AX15111 MW-25

Lab Sample ID: 400-140127-20
Date Collected: 06/28/17 11:15
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	22	F1	2.0	0.60	mg/L			07/11/17 15:56	1
Fluoride	0.040	J	0.10	0.032	mg/L			07/17/17 10:41	1
Sulfate	35	F1	10	2.8	mg/L			07/12/17 10:18	2

Client Sample ID: AX15112 MW-14

Lab Sample ID: 400-140127-21
Date Collected: 06/28/17 13:00
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	17		2.0	0.60	mg/L			07/11/17 15:56	1
Fluoride	0.13		0.10	0.032	mg/L			07/13/17 10:46	1
Sulfate	120		25	7.0	mg/L			07/12/17 10:22	5

Client Sample ID: AX15113 FB-2

Lab Sample ID: 400-140127-22
Date Collected: 06/28/17 11:35
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			07/11/17 15:56	1
Fluoride	<0.032		0.10	0.032	mg/L			07/13/17 10:48	1
Sulfate	<1.4		5.0	1.4	mg/L			07/12/17 09:37	1

Client Sample ID: AX15114 MW-13

Lab Sample ID: 400-140127-23
Date Collected: 06/28/17 14:12
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	9.4		2.0	0.60	mg/L			07/11/17 15:56	1
Fluoride	0.18		0.10	0.032	mg/L			07/17/17 11:17	1
Sulfate	71		25	7.0	mg/L			07/12/17 12:28	5

Client Sample ID: AX15115 MW-26

Lab Sample ID: 400-140127-24
Date Collected: 06/27/17 09:26
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	3.0		2.0	0.60	mg/L			07/11/17 14:44	1
Fluoride	0.22		0.10	0.032	mg/L			07/17/17 11:02	1
Sulfate	45		10	2.8	mg/L			07/12/17 08:12	2

Client Sample ID: AX15116 MW-29

Lab Sample ID: 400-140127-25
Date Collected: 06/27/17 10:36
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	2.1		2.0	0.60	mg/L			07/11/17 14:44	1
Fluoride	<0.032		0.10	0.032	mg/L			07/17/17 10:59	1
Sulfate	<1.4		5.0	1.4	mg/L			07/12/17 07:42	1

Client Sample ID: AX15117 MW-29 DUP

Lab Sample ID: 400-140127-26
Date Collected: 06/27/17 10:36
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	1.9	J	2.0	0.60	mg/L			07/11/17 14:45	1
Fluoride	<0.032		0.10	0.032	mg/L			07/17/17 10:47	1
Sulfate	<1.4		5.0	1.4	mg/L			07/12/17 07:59	1

Client Sample ID: AX15118 MW-30

Lab Sample ID: 400-140127-27
Date Collected: 06/27/17 11:45
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.1**		2.0	0.60	mg/L			07/11/17 14:45	1
Fluoride	<0.032		0.10	0.032	mg/L			07/17/17 10:49	1
Sulfate	<1.4		5.0	1.4	mg/L			07/12/17 07:59	1

Client Sample ID: AX15119 MW-27

Lab Sample ID: 400-140127-28
Date Collected: 06/27/17 12:50
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**1.9**	**J**	2.0	0.60	mg/L			07/11/17 15:07	1
Fluoride	<0.032		0.10	0.032	mg/L			07/17/17 10:56	1
Sulfate	<1.4		5.0	1.4	mg/L			07/12/17 07:59	1

Client Sample ID: AX15120 MW-28

Lab Sample ID: 400-140127-29
Date Collected: 06/27/17 14:00
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.0**		2.0	0.60	mg/L			07/11/17 15:07	1
Fluoride	<0.032		0.10	0.032	mg/L			07/17/17 10:52	1
Sulfate	**5.3**		5.0	1.4	mg/L			07/12/17 07:59	1

Client Sample ID: AX15121 FB-1

Lab Sample ID: 400-140127-30
Date Collected: 06/27/17 14:20
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			07/11/17 14:44	1
Fluoride	<0.032		0.10	0.032	mg/L			07/17/17 09:35	1
Sulfate	<1.4		5.0	1.4	mg/L			07/12/17 07:59	1

Client Sample ID: AX15122 MW-23

Lab Sample ID: 400-140127-31
Date Collected: 06/27/17 15:20
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**2.1**		2.0	0.60	mg/L			07/11/17 15:07	1
Fluoride	**0.080**	**J**	0.10	0.032	mg/L			07/17/17 09:40	1
Sulfate	**14**		5.0	1.4	mg/L			07/12/17 07:59	1

Client Sample ID: AX15123 MW-8

Lab Sample ID: 400-140127-32
Date Collected: 06/28/17 10:33
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	**49**		2.0	0.60	mg/L			07/11/17 15:56	1

Client Sample ID: AX15123 MW-8

Lab Sample ID: 400-140127-32
Date Collected: 06/28/17 10:33
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	0.090	J	0.10	0.032	mg/L			07/17/17 09:43	1
Sulfate	35		10	2.8	mg/L			07/12/17 10:25	2

Client Sample ID: AX15124 MW-9

Lab Sample ID: 400-140127-33
Date Collected: 06/28/17 11:32
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	25		2.0	0.60	mg/L			07/11/17 15:56	1
Fluoride	0.16		0.10	0.032	mg/L			07/17/17 09:45	1
Sulfate	34		10	2.8	mg/L			07/12/17 11:54	2

Client Sample ID: AX15125 MW-10

Lab Sample ID: 400-140127-34
Date Collected: 06/28/17 12:36
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	20		2.0	0.60	mg/L			07/11/17 15:57	1
Fluoride	0.090	J	0.10	0.032	mg/L			07/17/17 09:46	1
Sulfate	10		5.0	1.4	mg/L			07/12/17 10:11	1

Client Sample ID: AX15126 MW-11

Lab Sample ID: 400-140127-35
Date Collected: 06/28/17 13:39
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	24		2.0	0.60	mg/L			07/11/17 15:57	1
Fluoride	0.17		0.10	0.032	mg/L			07/17/17 09:49	1
Sulfate	88		25	7.0	mg/L			07/12/17 12:32	5

Client Sample ID: AX15127 MW-21

Lab Sample ID: 400-140127-36
Date Collected: 06/28/17 14:33
Matrix: Water
Date Received: 07/06/17 08:52

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	11		2.0	0.60	mg/L			07/11/17 16:11	1
Fluoride	0.18		0.10	0.032	mg/L			07/13/17 10:32	1
Sulfate	69	F1	25	7.0	mg/L			07/12/17 12:28	5

Qualifiers

General Chemistry

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

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

Client Sample ID: AX15092 MW-31

Lab Sample ID: 400-140127-1
Date Collected: 06/27/17 12:31
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360013	07/10/17 14:02	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359969	07/10/17 17:41	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	359901	07/10/17 10:36	RRC	TAL PEN

Client Sample ID: AX15093 MW-31 DUP

Lab Sample ID: 400-140127-2
Date Collected: 06/27/17 12:31
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360050	07/11/17 12:07	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359969	07/10/17 17:43	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	359901	07/10/17 11:02	RRC	TAL PEN

Client Sample ID: AX15094 MW-33

Lab Sample ID: 400-140127-3
Date Collected: 06/27/17 13:39
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360050	07/11/17 12:07	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359969	07/10/17 17:46	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	360174	07/12/17 08:01	RRC	TAL PEN

Client Sample ID: AX15095 MW-32

Lab Sample ID: 400-140127-4
Date Collected: 06/27/17 14:35
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360050	07/11/17 12:07	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359969	07/10/17 17:49	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	360174	07/12/17 07:40	RRC	TAL PEN

Client Sample ID: AX15096 MW-1

Lab Sample ID: 400-140127-5
Date Collected: 06/27/17 15:37
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360172	07/11/17 15:07	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359969	07/10/17 17:50	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		40	360174	07/12/17 08:34	RRC	TAL PEN

Client Sample ID: AX15097 MW-2

Lab Sample ID: 400-140127-6
Date Collected: 06/28/17 09:54
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360172	07/11/17 15:07	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359969	07/10/17 17:52	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		20	360174	07/12/17 08:24	RRC	TAL PEN

Client Sample ID: AX15098 FB-3

Lab Sample ID: 400-140127-7
Date Collected: 06/28/17 10:00
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360172	07/11/17 15:07	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359969	07/10/17 17:55	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	360174	07/12/17 07:59	RRC	TAL PEN

Client Sample ID: AX15099 MW-3

Lab Sample ID: 400-140127-8
Date Collected: 06/28/17 10:46
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360172	07/11/17 15:08	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360332	07/13/17 10:13	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	360174	07/12/17 08:01	RRC	TAL PEN

Client Sample ID: AX15100 MW-5

Lab Sample ID: 400-140127-9
Date Collected: 06/28/17 11:37
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360172	07/11/17 15:08	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360332	07/13/17 10:15	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		2	360225	07/12/17 10:22	RRC	TAL PEN

Client Sample ID: AX15101 MW-6

Lab Sample ID: 400-140127-10
Date Collected: 06/28/17 12:30
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360013	07/10/17 13:26	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360332	07/13/17 10:08	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	360174	07/12/17 08:05	RRC	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-140127-1
SDG: Greene County Ash Pond (8)

Client Sample ID: AX15102 EB-1

Lab Sample ID: 400-140127-11
Matrix: Water
Date Collected: 06/28/17 12:42
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360172	07/11/17 15:08	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360332	07/13/17 10:18	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	360225	07/12/17 09:37	RRC	TAL PEN

Client Sample ID: AX15103 MW-7

Lab Sample ID: 400-140127-12
Matrix: Water
Date Collected: 06/28/17 13:50
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360172	07/11/17 15:08	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360332	07/13/17 10:20	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		15	360225	07/12/17 12:28	RRC	TAL PEN

Client Sample ID: AX15104 MW-12

Lab Sample ID: 400-140127-13
Matrix: Water
Date Collected: 06/28/17 14:59
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360173	07/11/17 15:56	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360332	07/13/17 10:22	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	360225	07/12/17 10:22	RRC	TAL PEN

Client Sample ID: AX15105 MW-18

Lab Sample ID: 400-140127-14
Matrix: Water
Date Collected: 06/27/17 11:15
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360172	07/11/17 14:44	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360332	07/13/17 10:24	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	360174	07/12/17 07:40	RRC	TAL PEN

Client Sample ID: AX15106 MW-17

Lab Sample ID: 400-140127-15
Matrix: Water
Date Collected: 06/27/17 12:28
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360172	07/11/17 14:44	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360332	07/13/17 10:25	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		2	360174	07/12/17 08:10	RRC	TAL PEN

Client Sample ID: AX15107 MW-16

Lab Sample ID: 400-140127-16
Date Collected: 06/27/17 14:15
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360172	07/11/17 14:44	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360332	07/13/17 10:38	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	360174	07/12/17 08:10	RRC	TAL PEN

Client Sample ID: AX15108 MW-15

Lab Sample ID: 400-140127-17
Date Collected: 06/27/17 15:40
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360172	07/11/17 14:44	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360332	07/13/17 10:40	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		15	360174	07/12/17 08:10	RRC	TAL PEN

Client Sample ID: AX15109 MW-15 DUP

Lab Sample ID: 400-140127-18
Date Collected: 06/27/17 15:40
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360172	07/11/17 14:44	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360332	07/13/17 10:42	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		15	360174	07/12/17 08:10	RRC	TAL PEN

Client Sample ID: AX15110 MW-24

Lab Sample ID: 400-140127-19
Date Collected: 06/28/17 09:55
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360173	07/11/17 15:56	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360332	07/13/17 10:44	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		2	360225	07/12/17 10:22	RRC	TAL PEN

Client Sample ID: AX15111 MW-25

Lab Sample ID: 400-140127-20
Date Collected: 06/28/17 11:15
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360173	07/11/17 15:56	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360700	07/17/17 10:41	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		2	360225	07/12/17 10:18	RRC	TAL PEN

Client Sample ID: AX15112 MW-14

Lab Sample ID: 400-140127-21
Date Collected: 06/28/17 13:00
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360173	07/11/17 15:56	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360332	07/13/17 10:46	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	360225	07/12/17 10:22	RRC	TAL PEN

Client Sample ID: AX15113 FB-2

Lab Sample ID: 400-140127-22
Date Collected: 06/28/17 11:35
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360173	07/11/17 15:56	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360332	07/13/17 10:48	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	360225	07/12/17 09:37	RRC	TAL PEN

Client Sample ID: AX15114 MW-13

Lab Sample ID: 400-140127-23
Date Collected: 06/28/17 14:12
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360173	07/11/17 15:56	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360700	07/17/17 11:17	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	360225	07/12/17 12:28	RRC	TAL PEN

Client Sample ID: AX15115 MW-26

Lab Sample ID: 400-140127-24
Date Collected: 06/27/17 09:26
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360172	07/11/17 14:44	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360700	07/17/17 11:02	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		2	360174	07/12/17 08:12	RRC	TAL PEN

Client Sample ID: AX15116 MW-29

Lab Sample ID: 400-140127-25
Date Collected: 06/27/17 10:36
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360172	07/11/17 14:44	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360700	07/17/17 10:59	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	360174	07/12/17 07:42	RRC	TAL PEN

Client Sample ID: AX15117 MW-29 DUP

Lab Sample ID: 400-140127-26
Date Collected: 06/27/17 10:36
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360172	07/11/17 14:45	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360700	07/17/17 10:47	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	360174	07/12/17 07:59	RRC	TAL PEN

Client Sample ID: AX15118 MW-30

Lab Sample ID: 400-140127-27
Date Collected: 06/27/17 11:45
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360172	07/11/17 14:45	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360700	07/17/17 10:49	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	360174	07/12/17 07:59	RRC	TAL PEN

Client Sample ID: AX15119 MW-27

Lab Sample ID: 400-140127-28
Date Collected: 06/27/17 12:50
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360172	07/11/17 15:07	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360700	07/17/17 10:56	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	360174	07/12/17 07:59	RRC	TAL PEN

Client Sample ID: AX15120 MW-28

Lab Sample ID: 400-140127-29
Date Collected: 06/27/17 14:00
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360172	07/11/17 15:07	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360700	07/17/17 10:52	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	360174	07/12/17 07:59	RRC	TAL PEN

Client Sample ID: AX15121 FB-1

Lab Sample ID: 400-140127-30
Date Collected: 06/27/17 14:20
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360172	07/11/17 14:44	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360686	07/17/17 09:35	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	360174	07/12/17 07:59	RRC	TAL PEN

Client Sample ID: AX15122 MW-23

Lab Sample ID: 400-140127-31
Date Collected: 06/27/17 15:20
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360172	07/11/17 15:07	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360686	07/17/17 09:40	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	360174	07/12/17 07:59	RRC	TAL PEN

Client Sample ID: AX15123 MW-8

Lab Sample ID: 400-140127-32
Date Collected: 06/28/17 10:33
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360173	07/11/17 15:56	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360686	07/17/17 09:43	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		2	360225	07/12/17 10:25	RRC	TAL PEN

Client Sample ID: AX15124 MW-9

Lab Sample ID: 400-140127-33
Date Collected: 06/28/17 11:32
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360173	07/11/17 15:56	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360686	07/17/17 09:45	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		2	360225	07/12/17 11:54	RRC	TAL PEN

Client Sample ID: AX15125 MW-10

Lab Sample ID: 400-140127-34
Date Collected: 06/28/17 12:36
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360173	07/11/17 15:57	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360686	07/17/17 09:46	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	360225	07/12/17 10:11	RRC	TAL PEN

Client Sample ID: AX15126 MW-11

Lab Sample ID: 400-140127-35
Date Collected: 06/28/17 13:39
Matrix: Water
Date Received: 07/06/17 08:52

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 Cl- E		1	360173	07/11/17 15:57	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360686	07/17/17 09:49	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	360225	07/12/17 12:32	RRC	TAL PEN

Lab Chronicle

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

TestAmerica Job ID: 400-140127-1
SDG: Greene County Ash Pond (8)

Client Sample ID: AX15127 MW-21

Date Collected: 06/28/17 14:33
Date Received: 07/06/17 08:52

Lab Sample ID: 400-140127-36

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	360173	07/11/17 16:11	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	360332	07/13/17 10:32	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		5	360225	07/12/17 12:28	RRC	TAL PEN

Laboratory References:

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

General Chemistry

Analysis Batch: 359901

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-140127-1	AX15092 MW-31	Total/NA	Water	SM 4500 SO4 E	
400-140127-2	AX15093 MW-31 DUP	Total/NA	Water	SM 4500 SO4 E	
MB 400-359901/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-359901/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-359901/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-140127-1 MS	AX15092 MW-31	Total/NA	Water	SM 4500 SO4 E	
400-140127-1 MSD	AX15092 MW-31	Total/NA	Water	SM 4500 SO4 E	
400-140127-2 MS	AX15093 MW-31 DUP	Total/NA	Water	SM 4500 SO4 E	
400-140127-2 MSD	AX15093 MW-31 DUP	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 359969

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-140127-1	AX15092 MW-31	Total/NA	Water	SM 4500 F C	
400-140127-2	AX15093 MW-31 DUP	Total/NA	Water	SM 4500 F C	
400-140127-3	AX15094 MW-33	Total/NA	Water	SM 4500 F C	
400-140127-4	AX15095 MW-32	Total/NA	Water	SM 4500 F C	
400-140127-5	AX15096 MW-1	Total/NA	Water	SM 4500 F C	
400-140127-6	AX15097 MW-2	Total/NA	Water	SM 4500 F C	
400-140127-7	AX15098 FB-3	Total/NA	Water	SM 4500 F C	
MB 400-359969/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-359969/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-139785-A-29 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-139785-A-29 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-139868-L-1 DU	Duplicate	Total/NA	Water	SM 4500 F C	

Analysis Batch: 360013

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-140127-1	AX15092 MW-31	Total/NA	Water	SM 4500 Cl- E	
400-140127-10	AX15101 MW-6	Total/NA	Water	SM 4500 Cl- E	
MB 400-360013/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-360013/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-360013/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-140127-1 MS	AX15092 MW-31	Total/NA	Water	SM 4500 Cl- E	
400-140127-1 MSD	AX15092 MW-31	Total/NA	Water	SM 4500 Cl- E	
400-140127-10 MS	AX15101 MW-6	Total/NA	Water	SM 4500 Cl- E	
400-140127-10 MSD	AX15101 MW-6	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 360050

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-140127-2	AX15093 MW-31 DUP	Total/NA	Water	SM 4500 Cl- E	
400-140127-3	AX15094 MW-33	Total/NA	Water	SM 4500 Cl- E	
400-140127-4	AX15095 MW-32	Total/NA	Water	SM 4500 Cl- E	
MB 400-360050/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-360050/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-360050/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-140290-A-4 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-140290-A-4 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 360172

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-140127-5	AX15096 MW-1	Total/NA	Water	SM 4500 Cl- E	

General Chemistry (Continued)

Analysis Batch: 360172 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-140127-6	AX15097 MW-2	Total/NA	Water	SM 4500 Cl- E	
400-140127-7	AX15098 FB-3	Total/NA	Water	SM 4500 Cl- E	
400-140127-8	AX15099 MW-3	Total/NA	Water	SM 4500 Cl- E	
400-140127-9	AX15100 MW-5	Total/NA	Water	SM 4500 Cl- E	
400-140127-11	AX15102 EB-1	Total/NA	Water	SM 4500 Cl- E	
400-140127-12	AX15103 MW-7	Total/NA	Water	SM 4500 Cl- E	
400-140127-14	AX15105 MW-18	Total/NA	Water	SM 4500 Cl- E	
400-140127-15	AX15106 MW-17	Total/NA	Water	SM 4500 Cl- E	
400-140127-16	AX15107 MW-16	Total/NA	Water	SM 4500 Cl- E	
400-140127-17	AX15108 MW-15	Total/NA	Water	SM 4500 Cl- E	
400-140127-18	AX15109 MW-15 DUP	Total/NA	Water	SM 4500 Cl- E	
400-140127-24	AX15115 MW-26	Total/NA	Water	SM 4500 Cl- E	
400-140127-25	AX15116 MW-29	Total/NA	Water	SM 4500 Cl- E	
400-140127-26	AX15117 MW-29 DUP	Total/NA	Water	SM 4500 Cl- E	
400-140127-27	AX15118 MW-30	Total/NA	Water	SM 4500 Cl- E	
400-140127-28	AX15119 MW-27	Total/NA	Water	SM 4500 Cl- E	
400-140127-29	AX15120 MW-28	Total/NA	Water	SM 4500 Cl- E	
400-140127-30	AX15121 FB-1	Total/NA	Water	SM 4500 Cl- E	
400-140127-31	AX15122 MW-23	Total/NA	Water	SM 4500 Cl- E	
MB 400-360172/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-360172/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-360172/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-140127-28 MS	AX15119 MW-27	Total/NA	Water	SM 4500 Cl- E	
400-140127-28 MSD	AX15119 MW-27	Total/NA	Water	SM 4500 Cl- E	
400-140127-30 MS	AX15121 FB-1	Total/NA	Water	SM 4500 Cl- E	
400-140127-30 MSD	AX15121 FB-1	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 360173

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-140127-13	AX15104 MW-12	Total/NA	Water	SM 4500 Cl- E	
400-140127-19	AX15110 MW-24	Total/NA	Water	SM 4500 Cl- E	
400-140127-20	AX15111 MW-25	Total/NA	Water	SM 4500 Cl- E	
400-140127-21	AX15112 MW-14	Total/NA	Water	SM 4500 Cl- E	
400-140127-22	AX15113 FB-2	Total/NA	Water	SM 4500 Cl- E	
400-140127-23	AX15114 MW-13	Total/NA	Water	SM 4500 Cl- E	
400-140127-32	AX15123 MW-8	Total/NA	Water	SM 4500 Cl- E	
400-140127-33	AX15124 MW-9	Total/NA	Water	SM 4500 Cl- E	
400-140127-34	AX15125 MW-10	Total/NA	Water	SM 4500 Cl- E	
400-140127-35	AX15126 MW-11	Total/NA	Water	SM 4500 Cl- E	
400-140127-36	AX15127 MW-21	Total/NA	Water	SM 4500 Cl- E	
MB 400-360173/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-360173/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-360173/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-140127-20 MS	AX15111 MW-25	Total/NA	Water	SM 4500 Cl- E	
400-140127-20 MSD	AX15111 MW-25	Total/NA	Water	SM 4500 Cl- E	
400-140127-36 MS	AX15127 MW-21	Total/NA	Water	SM 4500 Cl- E	
400-140127-36 MSD	AX15127 MW-21	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 360174

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-140127-3	AX15094 MW-33	Total/NA	Water	SM 4500 SO4 E	

General Chemistry (Continued)

Analysis Batch: 360174 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-140127-4	AX15095 MW-32	Total/NA	Water	SM 4500 SO4 E	
400-140127-5	AX15096 MW-1	Total/NA	Water	SM 4500 SO4 E	
400-140127-6	AX15097 MW-2	Total/NA	Water	SM 4500 SO4 E	
400-140127-7	AX15098 FB-3	Total/NA	Water	SM 4500 SO4 E	
400-140127-8	AX15099 MW-3	Total/NA	Water	SM 4500 SO4 E	
400-140127-10	AX15101 MW-6	Total/NA	Water	SM 4500 SO4 E	
400-140127-14	AX15105 MW-18	Total/NA	Water	SM 4500 SO4 E	
400-140127-15	AX15106 MW-17	Total/NA	Water	SM 4500 SO4 E	
400-140127-16	AX15107 MW-16	Total/NA	Water	SM 4500 SO4 E	
400-140127-17	AX15108 MW-15	Total/NA	Water	SM 4500 SO4 E	
400-140127-18	AX15109 MW-15 DUP	Total/NA	Water	SM 4500 SO4 E	
400-140127-24	AX15115 MW-26	Total/NA	Water	SM 4500 SO4 E	
400-140127-25	AX15116 MW-29	Total/NA	Water	SM 4500 SO4 E	
400-140127-26	AX15117 MW-29 DUP	Total/NA	Water	SM 4500 SO4 E	
400-140127-27	AX15118 MW-30	Total/NA	Water	SM 4500 SO4 E	
400-140127-28	AX15119 MW-27	Total/NA	Water	SM 4500 SO4 E	
400-140127-29	AX15120 MW-28	Total/NA	Water	SM 4500 SO4 E	
400-140127-30	AX15121 FB-1	Total/NA	Water	SM 4500 SO4 E	
400-140127-31	AX15122 MW-23	Total/NA	Water	SM 4500 SO4 E	
MB 400-360174/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-360174/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-360174/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-140127-10 MS	AX15101 MW-6	Total/NA	Water	SM 4500 SO4 E	
400-140127-10 MSD	AX15101 MW-6	Total/NA	Water	SM 4500 SO4 E	
400-140127-30 MS	AX15121 FB-1	Total/NA	Water	SM 4500 SO4 E	
400-140127-30 MSD	AX15121 FB-1	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 360225

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-140127-9	AX15100 MW-5	Total/NA	Water	SM 4500 SO4 E	
400-140127-11	AX15102 EB-1	Total/NA	Water	SM 4500 SO4 E	
400-140127-12	AX15103 MW-7	Total/NA	Water	SM 4500 SO4 E	
400-140127-13	AX15104 MW-12	Total/NA	Water	SM 4500 SO4 E	
400-140127-19	AX15110 MW-24	Total/NA	Water	SM 4500 SO4 E	
400-140127-20	AX15111 MW-25	Total/NA	Water	SM 4500 SO4 E	
400-140127-21	AX15112 MW-14	Total/NA	Water	SM 4500 SO4 E	
400-140127-22	AX15113 FB-2	Total/NA	Water	SM 4500 SO4 E	
400-140127-23	AX15114 MW-13	Total/NA	Water	SM 4500 SO4 E	
400-140127-32	AX15123 MW-8	Total/NA	Water	SM 4500 SO4 E	
400-140127-33	AX15124 MW-9	Total/NA	Water	SM 4500 SO4 E	
400-140127-34	AX15125 MW-10	Total/NA	Water	SM 4500 SO4 E	
400-140127-35	AX15126 MW-11	Total/NA	Water	SM 4500 SO4 E	
400-140127-36	AX15127 MW-21	Total/NA	Water	SM 4500 SO4 E	
MB 400-360225/24	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-360225/25	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-360225/21	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-140127-20 MS	AX15111 MW-25	Total/NA	Water	SM 4500 SO4 E	
400-140127-20 MSD	AX15111 MW-25	Total/NA	Water	SM 4500 SO4 E	
400-140127-36 MS	AX15127 MW-21	Total/NA	Water	SM 4500 SO4 E	
400-140127-36 MSD	AX15127 MW-21	Total/NA	Water	SM 4500 SO4 E	

General Chemistry (Continued)

Analysis Batch: 360332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-140127-8	AX15099 MW-3	Total/NA	Water	SM 4500 F C	
400-140127-9	AX15100 MW-5	Total/NA	Water	SM 4500 F C	
400-140127-10	AX15101 MW-6	Total/NA	Water	SM 4500 F C	
400-140127-11	AX15102 EB-1	Total/NA	Water	SM 4500 F C	
400-140127-12	AX15103 MW-7	Total/NA	Water	SM 4500 F C	
400-140127-13	AX15104 MW-12	Total/NA	Water	SM 4500 F C	
400-140127-14	AX15105 MW-18	Total/NA	Water	SM 4500 F C	
400-140127-15	AX15106 MW-17	Total/NA	Water	SM 4500 F C	
400-140127-16	AX15107 MW-16	Total/NA	Water	SM 4500 F C	
400-140127-17	AX15108 MW-15	Total/NA	Water	SM 4500 F C	
400-140127-18	AX15109 MW-15 DUP	Total/NA	Water	SM 4500 F C	
400-140127-19	AX15110 MW-24	Total/NA	Water	SM 4500 F C	
400-140127-21	AX15112 MW-14	Total/NA	Water	SM 4500 F C	
400-140127-22	AX15113 FB-2	Total/NA	Water	SM 4500 F C	
400-140127-36	AX15127 MW-21	Total/NA	Water	SM 4500 F C	
MB 400-360332/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-360332/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-140127-10 MS	AX15101 MW-6	Total/NA	Water	SM 4500 F C	
400-140127-10 MSD	AX15101 MW-6	Total/NA	Water	SM 4500 F C	
400-140127-36 MS	AX15127 MW-21	Total/NA	Water	SM 4500 F C	
400-140127-36 MSD	AX15127 MW-21	Total/NA	Water	SM 4500 F C	

Analysis Batch: 360686

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-140127-30	AX15121 FB-1	Total/NA	Water	SM 4500 F C	
400-140127-31	AX15122 MW-23	Total/NA	Water	SM 4500 F C	
400-140127-32	AX15123 MW-8	Total/NA	Water	SM 4500 F C	
400-140127-33	AX15124 MW-9	Total/NA	Water	SM 4500 F C	
400-140127-34	AX15125 MW-10	Total/NA	Water	SM 4500 F C	
400-140127-35	AX15126 MW-11	Total/NA	Water	SM 4500 F C	
MB 400-360686/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-360686/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-140127-30 MS	AX15121 FB-1	Total/NA	Water	SM 4500 F C	
400-140127-30 MSD	AX15121 FB-1	Total/NA	Water	SM 4500 F C	

Analysis Batch: 360700

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-140127-20	AX15111 MW-25	Total/NA	Water	SM 4500 F C	
400-140127-23	AX15114 MW-13	Total/NA	Water	SM 4500 F C	
400-140127-24	AX15115 MW-26	Total/NA	Water	SM 4500 F C	
400-140127-25	AX15116 MW-29	Total/NA	Water	SM 4500 F C	
400-140127-26	AX15117 MW-29 DUP	Total/NA	Water	SM 4500 F C	
400-140127-27	AX15118 MW-30	Total/NA	Water	SM 4500 F C	
400-140127-28	AX15119 MW-27	Total/NA	Water	SM 4500 F C	
400-140127-29	AX15120 MW-28	Total/NA	Water	SM 4500 F C	
MB 400-360700/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-360700/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-140127-20 MS	AX15111 MW-25	Total/NA	Water	SM 4500 F C	
400-140127-20 MSD	AX15111 MW-25	Total/NA	Water	SM 4500 F C	

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-360013/6
Matrix: Water
Analysis Batch: 360013

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			07/10/17 13:04	1

Lab Sample ID: LCS 400-360013/7
Matrix: Water
Analysis Batch: 360013

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	29.9		mg/L		100	90 - 110

Lab Sample ID: MRL 400-360013/3
Matrix: Water
Analysis Batch: 360013

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	1.92	J	mg/L		96	50 - 150

Lab Sample ID: 400-140127-1 MS
Matrix: Water
Analysis Batch: 360013

Client Sample ID: AX15092 MW-31
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.4		10.0	16.6		mg/L		112	73 - 120

Lab Sample ID: 400-140127-1 MSD
Matrix: Water
Analysis Batch: 360013

Client Sample ID: AX15092 MW-31
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	5.4		10.0	16.5		mg/L		111	73 - 120	0	8

Lab Sample ID: 400-140127-10 MS
Matrix: Water
Analysis Batch: 360013

Client Sample ID: AX15101 MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	36		10.0	43.9		mg/L		75	73 - 120

Lab Sample ID: 400-140127-10 MSD
Matrix: Water
Analysis Batch: 360013

Client Sample ID: AX15101 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	36		10.0	43.7		mg/L		73	73 - 120	0	8

Lab Sample ID: MB 400-360050/6
Matrix: Water
Analysis Batch: 360050

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			07/11/17 11:00	1

Lab Sample ID: LCS 400-360050/7
Matrix: Water
Analysis Batch: 360050

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	29.9		mg/L		100	90 - 110

Lab Sample ID: MRL 400-360050/3
Matrix: Water
Analysis Batch: 360050

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	1.89	J	mg/L		94	50 - 150

Lab Sample ID: 400-140290-A-4 MS
Matrix: Water
Analysis Batch: 360050

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	9.3		10.0	19.9		mg/L		106	73 - 120

Lab Sample ID: 400-140290-A-4 MSD
Matrix: Water
Analysis Batch: 360050

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	9.3		10.0	20.1		mg/L		108	73 - 120	1	8

Lab Sample ID: MB 400-360172/6
Matrix: Water
Analysis Batch: 360172

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			07/11/17 13:41	1

Lab Sample ID: LCS 400-360172/7
Matrix: Water
Analysis Batch: 360172

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	30.7		mg/L		102	90 - 110

Lab Sample ID: MRL 400-360172/3
Matrix: Water
Analysis Batch: 360172

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	2.00		mg/L		100	50 - 150

Lab Sample ID: 400-140127-28 MS
Matrix: Water
Analysis Batch: 360172

Client Sample ID: AX15119 MW-27
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	1.9	J	10.0	12.9		mg/L		111	73 - 120

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: 400-140127-28 MSD — **Client Sample ID: AX15119 MW-27**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 360172

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	1.9	J	10.0	12.9		mg/L		110	73 - 120	0	8

Lab Sample ID: 400-140127-30 MS — **Client Sample ID: AX15121 FB-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 360172

Analyte	Sample Result	Sample Qualifier	Spike Added	FB Result	FB Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<0.60		10.0	10.7		mg/L		107	73 - 120

Lab Sample ID: 400-140127-30 MSD — **Client Sample ID: AX15121 FB-1**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 360172

Analyte	Sample Result	Sample Qualifier	Spike Added	FB Result	FB Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<0.60		10.0	10.7		mg/L		107	73 - 120	0	8

Lab Sample ID: MB 400-360173/6 — **Client Sample ID: Method Blank**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 360173

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			07/11/17 15:37	1

Lab Sample ID: LCS 400-360173/7 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 360173

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 400-360173/3 — **Client Sample ID: Lab Control Sample**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 360173

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: 400-140127-20 MS — **Client Sample ID: AX15111 MW-25**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 360173

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	22	F1	10.0	40.2	F1	mg/L		182	73 - 120

Lab Sample ID: 400-140127-20 MSD — **Client Sample ID: AX15111 MW-25**
Matrix: Water — **Prep Type: Total/NA**
Analysis Batch: 360173

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	22	F1	10.0	40.5	F1	mg/L		185	73 - 120	1	8

Lab Sample ID: 400-140127-36 MS
Matrix: Water
Analysis Batch: 360173

Client Sample ID: AX15127 MW-21
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Chloride	11		10.0	21.5		mg/L		107	73 - 120		

Lab Sample ID: 400-140127-36 MSD
Matrix: Water
Analysis Batch: 360173

Client Sample ID: AX15127 MW-21
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	11		10.0	21.4		mg/L		106	73 - 120	0	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-359969/3
Matrix: Water
Analysis Batch: 359969

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			07/10/17 17:02	1

Lab Sample ID: LCS 400-359969/4
Matrix: Water
Analysis Batch: 359969

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride			4.00	4.34		mg/L		109	90 - 110		

Lab Sample ID: 400-139785-A-29 MS
Matrix: Water
Analysis Batch: 359969

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	0.050	J	1.00	1.08		mg/L		103	75 - 125		

Lab Sample ID: 400-139785-A-29 MSD
Matrix: Water
Analysis Batch: 359969

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	0.050	J	1.00	1.04		mg/L		99	75 - 125	4	4

Lab Sample ID: 400-139868-L-1 DU
Matrix: Water
Analysis Batch: 359969

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier		DU Result	DU Qualifier	Unit	D			RPD	RPD Limit
Fluoride	0.14			0.140		mg/L				0	4

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: MB 400-360332/3
Matrix: Water
Analysis Batch: 360332

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			07/13/17 10:00	1

Lab Sample ID: LCS 400-360332/4
Matrix: Water
Analysis Batch: 360332

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	4.00	4.10		mg/L		103	90 - 110

Lab Sample ID: 400-140127-10 MS
Matrix: Water
Analysis Batch: 360332

Client Sample ID: AX15101 MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.18		1.00	1.17		mg/L		99	75 - 125

Lab Sample ID: 400-140127-10 MSD
Matrix: Water
Analysis Batch: 360332

Client Sample ID: AX15101 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	0.18		1.00	1.19		mg/L		101	75 - 125	2	4

Lab Sample ID: 400-140127-36 MS
Matrix: Water
Analysis Batch: 360332

Client Sample ID: AX15127 MW-21
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.18		1.00	1.19		mg/L		101	75 - 125

Lab Sample ID: 400-140127-36 MSD
Matrix: Water
Analysis Batch: 360332

Client Sample ID: AX15127 MW-21
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.18		1.00	1.19		mg/L		101	75 - 125	0	4

Lab Sample ID: MB 400-360686/3
Matrix: Water
Analysis Batch: 360686

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			07/17/17 09:25	1

Lab Sample ID: LCS 400-360686/4
Matrix: Water
Analysis Batch: 360686

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: 400-140127-30 MS
Matrix: Water
Analysis Batch: 360686

Client Sample ID: AX15121 FB-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	FB Result	FB Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride	<0.032		1.00	1.02		mg/L		102	75 - 125		

Lab Sample ID: 400-140127-30 MSD
Matrix: Water
Analysis Batch: 360686

Client Sample ID: AX15121 FB-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	FB Result	FB Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	<0.032		1.00	1.02		mg/L		102	75 - 125	0	4

Lab Sample ID: MB 400-360700/3
Matrix: Water
Analysis Batch: 360700

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			07/17/17 10:33	1

Lab Sample ID: LCS 400-360700/4
Matrix: Water
Analysis Batch: 360700

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride	4.00	3.79		mg/L		95	90 - 110		

Lab Sample ID: 400-140127-20 MS
Matrix: Water
Analysis Batch: 360700

Client Sample ID: AX15111 MW-25
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Fluoride	0.040	J	1.00	1.02		mg/L		98	75 - 125		

Lab Sample ID: 400-140127-20 MSD
Matrix: Water
Analysis Batch: 360700

Client Sample ID: AX15111 MW-25
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	1.00		mg/L		96	75 - 125	2	4

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-359901/6
Matrix: Water
Analysis Batch: 359901

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.4		5.0	1.4	mg/L			07/10/17 10:07	1

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: LCS 400-359901/7
Matrix: Water
Analysis Batch: 359901

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	16.3		mg/L		108	90 - 110

Lab Sample ID: MRL 400-359901/3
Matrix: Water
Analysis Batch: 359901

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	4.60	J	mg/L		92	50 - 150

Lab Sample ID: 400-140127-1 MS
Matrix: Water
Analysis Batch: 359901

Client Sample ID: AX15092 MW-31
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	3.4	J	10.0	14.6		mg/L		112	77 - 128

Lab Sample ID: 400-140127-1 MSD
Matrix: Water
Analysis Batch: 359901

Client Sample ID: AX15092 MW-31
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	3.4	J	10.0	14.6		mg/L		112	77 - 128	0	5

Lab Sample ID: 400-140127-2 MS
Matrix: Water
Analysis Batch: 359901

Client Sample ID: AX15093 MW-31 DUP
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	3.5	J	10.0	14.5		mg/L		109	77 - 128

Lab Sample ID: 400-140127-2 MSD
Matrix: Water
Analysis Batch: 359901

Client Sample ID: AX15093 MW-31 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	3.5	J	10.0	14.2		mg/L		107	77 - 128	2	5

Lab Sample ID: MB 400-360174/6
Matrix: Water
Analysis Batch: 360174

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.4		5.0	1.4	mg/L			07/12/17 07:18	1

Lab Sample ID: LCS 400-360174/7
Matrix: Water
Analysis Batch: 360174

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	16.2		mg/L		108	90 - 110

Lab Sample ID: MRL 400-360174/3
Matrix: Water
Analysis Batch: 360174

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	4.40	J	mg/L		88	50 - 150		

Lab Sample ID: 400-140127-10 MS
Matrix: Water
Analysis Batch: 360174

Client Sample ID: AX15101 MW-6
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	100	F1	50.0	112	F1	mg/L		20	77 - 128		

Lab Sample ID: 400-140127-10 MSD
Matrix: Water
Analysis Batch: 360174

Client Sample ID: AX15101 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	100	F1	50.0	111	F1	mg/L		19	77 - 128	1	5

Lab Sample ID: 400-140127-30 MS
Matrix: Water
Analysis Batch: 360174

Client Sample ID: AX15121 FB-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	FB Result	FB Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate	<1.4		10.0	10.5		mg/L		105	77 - 128		

Lab Sample ID: 400-140127-30 MSD
Matrix: Water
Analysis Batch: 360174

Client Sample ID: AX15121 FB-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	FB Result	FB Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	<1.4		10.0	9.94		mg/L		99	77 - 128	5	5

Lab Sample ID: MB 400-360225/24
Matrix: Water
Analysis Batch: 360225

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.4		5.0	1.4	mg/L			07/12/17 09:22	1

Lab Sample ID: LCS 400-360225/25
Matrix: Water
Analysis Batch: 360225

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

Analyte			Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits		
Sulfate			15.0	16.4		mg/L		109	90 - 110		

Lab Sample ID: MRL 400-360225/21
Matrix: Water
Analysis Batch: 360225

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	4.40	J	mg/L		88	50 - 150		

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: 400-140127-20 MS
Matrix: Water
Analysis Batch: 360225

Client Sample ID: AX15111 MW-25
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	35	F1	20.0	45.0	F1	mg/L		51	77 - 128

Lab Sample ID: 400-140127-20 MSD
Matrix: Water
Analysis Batch: 360225

Client Sample ID: AX15111 MW-25
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	35	F1	20.0	44.5	F1	mg/L		49	77 - 128	1	5

Lab Sample ID: 400-140127-36 MS
Matrix: Water
Analysis Batch: 360225

Client Sample ID: AX15127 MW-21
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	69	F1	50.0	79.5	F1	mg/L		21	77 - 128

Lab Sample ID: 400-140127-36 MSD
Matrix: Water
Analysis Batch: 360225

Client Sample ID: AX15127 MW-21
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	69	F1	50.0	79.0	F1	mg/L		20	77 - 128	1	5

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

Chain of Custody Record

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

Client Information	Sampler: Anthony Goggins	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 3
Company: Alabama Power General Test Laboratory				Job #: 400-140127
Address: 744 County Rd 87 GSC #8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6121(Tel)	PO #:			
Email: sgcopela@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Greene County Ash Pond (8)	SSOW#:			

Analysis Requested

400-140127 COC

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, 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)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 CL_E	SM 4500 SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N				
AX15092	6/27/17	1231	G	Water			X	X	X	1	MW-31
AX15093	6/27/17	1231	G	Water			X	X	X	1	MW-31 Dup (Sample Duplicate)
AX15094	6/27/17	1339	G	Water			X	X	X	1	MW-33
AX15095	6/27/17	1435	G	Water			X	X	X	1	MW-32
AX15096	6/27/17	1537	G	Water			X	X	X	1	MW-1
AX15097	6/28/17	0954	G	Water			X	X	X	1	MW-2
AX15098	6/28/17	1000	G	Water			X	X	X	1	FB-3 (Field Blank)
AX15099	6/28/17	1046	G	Water			X	X	X	1	MW-3
AX15100	6/28/17	1137	G	Water			X	X	X	1	MW-5
AX15101	6/28/17	1230	G	Water		Y	X	X	X	1	MW-6
AX15102	6/28/17	1242	G	Water			X	X	X	1	EB-1 (Equipment Blank)
AX15103	6/28/17	1350	G	Water			X	X	X	1	MW-7
AX15104	6/28/17	1459	G	Water			X	X	X	1	MW-12

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Sarah Copeland	Date/Time: 06/29/2017; 0930	Company APC	Received by:	Date/Time: 7-6-17 0852	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No | Custody Seal No.: | Cooler Temperature(s) °C and Other Remarks: 3.2C IR 2 TP

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: 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 2 of 3
Company: Alabama Power General Test Laboratory				Job #: 400-140127
Address: 744 County Rd 87 GSC #8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6121(Tel)	PO #:			
Email: sgcopela@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Greene County Ash Pond (8)	SSOW#:			

Analysis Requested

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, 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)
Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 CL_E	SM 4500 SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N				
AX15105	6/27/17	1115	G	Water			X	X	X	1	MW-18
AX15106	6/27/17	1228	G	Water			X	X	X	1	MW-17
AX15107	6/27/17	1415	G	Water			X	X	X	1	MW-16
AX15108	6/27/17	1540	G	Water			X	X	X	1	MW-15
AX15109	6/27/17	1540	G	Water			X	X	X	1	MW-15 Dup (Sample Duplicate)
AX15110	6/28/17	0955	G	Water			X	X	X	1	MW-24
AX15111	6/28/17	1115	G	Water		Y	X	X	X	1	MW-25
AX15112	6/28/17	1300	G	Water			X	X	X	1	MW-14
AX15113	6/28/17	1135	G	Water			X	X	X	1	FB-2 (Field Blank)
AX15114	6/28/17	1412	G	Water			X	X	X	1	MW-13

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Sarah Copeland	Date/Time: 06/29/2017; 0930	Company APC	Received by:	Date/Time: 7/6/17 0852	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ 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	Sampler: Ben Rothschadl	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 3 of 3
Company: Alabama Power General Test Laboratory				Job #: 400-140127
Address: 744 County Rd 87 GSC #8	Due Date Requested:			
City: Calera	TAT Requested (days): Routine			
State, Zip: AL, 35040				
Phone: 205-664-6121(Tel)	PO #:			
Email: sgcopela@southernco.com	WO #:			
Project Name: CCR	Project #: 40007143			
Site: Greene County Ash Pond (8)	SSOW#:			

Analysis Requested

Preservation Codes:

A - HCL	M - Hexane
B - NaOH	N - None
C - Zn Acetate	O - AsNaO2
D - Nitric Acid	P - Na2O4S
E - NaHSO4	Q - Na2SO3
F - MeOH	R - Na2S2O3
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)

Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	SM 4500 F_C	SM 4500 CL_E	SM 4500 SO4_E	Total Number of containers	Special Instructions/Note:
			Preservation Code:				N				
AX15115	6/27/17	0926	G	Water			X	X	X	1	MW-26
AX15116	6/27/17	1036	G	Water			X	X	X	1	MW-29
AX15117	6/27/17	1036	G	Water			X	X	X	1	MW-29 Dup (Sample Duplicate)
AX15118	6/27/17	1145	G	Water			X	X	X	1	MW-30
AX15119	6/27/17	1250	G	Water			X	X	X	1	MW-27
AX15120	6/27/17	1400	G	Water			X	X	X	1	MW-28
AX15121	6/27/17	1420	G	Water		Y	X	X	X	1	FB-1 (Field Blank)
AX15122	6/27/17	1520	G	Water			X	X	X	1	MW-23
AX15123	6/28/17	1033	G	Water			X	X	X	1	MW-8
AX15124	6/28/17	1132	G	Water			X	X	X	1	MW-9
AX15125	6/28/17	1236	G	Water			X	X	X	1	MW-10
AX15126	6/28/17	1339	G	Water			X	X	X	1	MW-11
AX15127	6/28/17	1433	G	Water		Y	X	X	X	1	MW-21

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown ☐ Radiological

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

Deliverable Requested: I, II, III, IV, Other (specify)

Special Instructions/QC Requirements:

Empty Kit Relinquished by:	Date:	Time:	Method of Shipment:

Relinquished by: Sarah Copeland	Date/Time: 06/29/2017; 0930	Company APC	Received by:	Date/Time: 7/6/17 0852	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company
Relinquished by:	Date/Time:	Company	Received by:	Date/Time:	Company

Custody Seals Intact: Δ Yes Δ No	Custody Seal No.:	Cooler Temperature(s) °C and Other Remarks:

Login Sample Receipt Checklist

Client: Alabama Power General Test Laboratory

Job Number: 400-140127-1
SDG Number: Greene County Ash Pond (8)

Login Number: 140127
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	3.2°C IR-2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <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 Greene

TestAmerica Job ID: 400-140127-1
SDG: Greene County Ash Pond (8)

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-18
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-18
Georgia	State Program	4	N/A	06-30-18
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17 *
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-18
Michigan	State Program	5	9912	06-30-17 *
New Jersey	NELAP	2	FL006	06-30-18
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17 *
Tennessee	State Program	4	TN02907	06-30-18
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-18
Washington	State Program	10	C915	05-15-18
West Virginia DEP	State Program	3	136	06-30-18

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

Appendix B
Statistical Data Evaluation

Intrawell Prediction Limits - Significant Results

Greene County Client: Southern Company Data: Greene County AP Printed 1/24/2018, 1:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (SU)	GC-AP-MW-11	6.176	5.913	8/29/2017	6.19	Yes	9	6.044	0.04558	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-28	6.15	4.81	8/30/2017	4.69	Yes	11	n/a	n/a	0	n/a	n/a	0.005613	NP Intra (normality) 1 of 3
pH (SU)	GC-AP-MW-32	6.128	5.879	8/30/2017	6.13	Yes	12	6.003	0.04292	0	None	No	0.0002351	Param Intra 1 of 3

Intrawell Prediction Limits - All Results

Greene County Client: Southern Company Data: Greene County AP Printed 1/24/2018, 1:35 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
pH (SU)	GC-AP-MW-11	6.176	5.913	8/29/2017	6.19	Yes	9	6.044	0.04558	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-12	7.099	6.65	8/29/2017	6.86	No	9	6.874	0.07764	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-21	7.326	6.523	8/29/2017	6.8	No	9	6.924	0.1388	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-23	6.858	6.212	8/29/2017	6.43	No	10	6.535	0.1116	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-24	5.625	5.245	8/29/2017	5.46	No	10	5.435	0.0657	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-26	6.669	4.327	8/29/2017	5.28	No	10	5.498	0.4046	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-27	5.725	4.439	8/29/2017	4.71	No	10	5.082	0.2223	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-28	6.15	4.81	8/30/2017	4.69	Yes	11	n/a	n/a	0	n/a	n/a	0.005613	NP Intra (normality) 1 of 3
pH (SU)	GC-AP-MW-29	7.629	4.336	8/30/2017	4.73	No	11	5.983	0.5689	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-30	5.671	5.004	8/30/2017	5.09	No	11	5.337	0.1152	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-31	7.42	5.786	8/30/2017	6.08	No	11	6.603	0.2823	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-32	6.128	5.879	8/30/2017	6.13	Yes	12	6.003	0.04292	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-33	7.202	3.845	8/30/2017	4.85	No	11	5.524	0.5801	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-1	6.12	5.714	8/30/2017	5.88	No	9	5.917	0.07018	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-2	6.259	5.944	8/30/2017	6.07	No	9	6.101	0.05442	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-3	6.472	6.237	8/30/2017	6.32	No	9	6.354	0.04065	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-5	6.792	6.468	8/30/2017	6.66	No	9	6.63	0.0559	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-6	6.615	6.316	8/29/2017	6.47	No	9	6.466	0.05151	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-7	6.517	6.365	8/29/2017	6.46	No	9	6.441	0.02619	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-8	6.401	6.13	8/29/2017	6.32	No	9	6.266	0.04693	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-9	6.614	6.246	8/29/2017	6.47	No	9	6.43	0.06364	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-10	6.842	6.082	8/29/2017	6.49	No	9	6.462	0.1312	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-13	7.075	5.979	8/29/2017	6.4	No	10	6.527	0.1893	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-14	6.559	6.167	8/29/2017	6.32	No	10	6.363	0.06767	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-15	6.275	5.973	8/30/2017	6.1	No	10	6.124	0.05232	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-16	6.453	6.143	8/30/2017	6.34	No	10	6.298	0.05371	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-17	6.639	6.143	8/30/2017	6.31	No	10	6.391	0.08582	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-18	6.393	6.177	8/30/2017	6.38	No	10	6.285	0.03719	0	None	No	0.0002351	Param Intra 1 of 3
pH (SU)	GC-AP-MW-25	5.487	5.141	8/29/2017	5.27	No	10	5.314	0.05967	0	None	No	0.0002351	Param Intra 1 of 3

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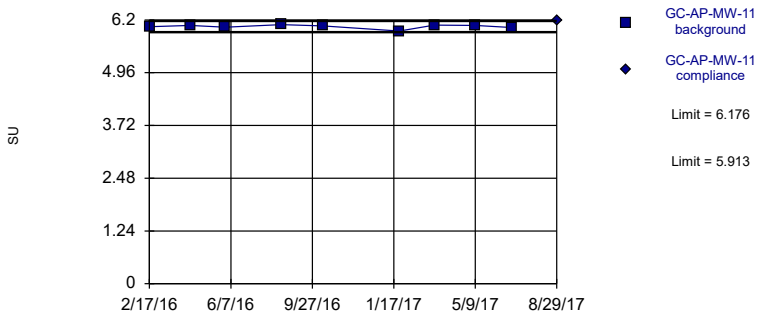
Exceeds Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.044, Std. Dev.=0.04558, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8452, critical = 0.764. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:33 PM View: PLs - Intrawell
Greene County Client: Southern Company Data: Greene County AP

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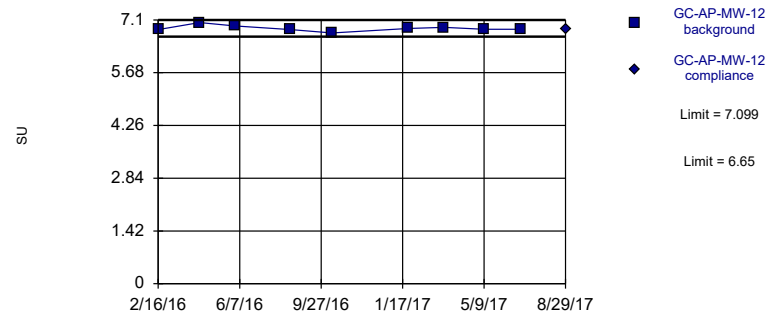
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.874, Std. Dev.=0.07764, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9237, critical = 0.764. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:33 PM View: PLs - Intrawell
Greene County Client: Southern Company Data: Greene County AP

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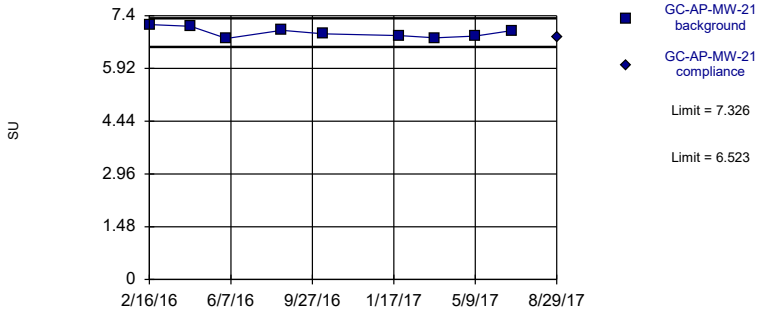
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.924, Std. Dev.=0.1388, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.928, critical = 0.764. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:33 PM View: PLs - Intrawell
Greene County Client: Southern Company Data: Greene County AP

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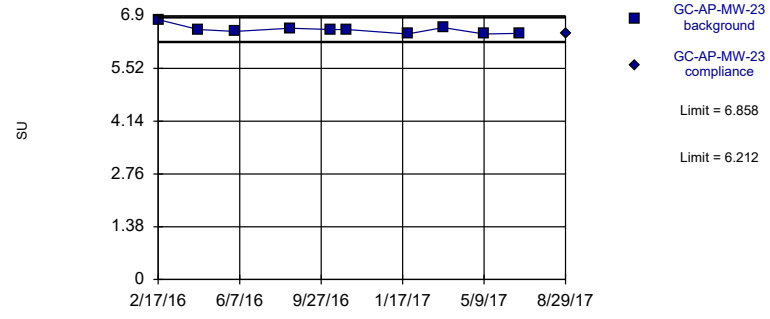
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.535, Std. Dev.=0.1116, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8465, critical = 0.781. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:33 PM View: PLs - Intrawell
Greene County Client: Southern Company Data: Greene County AP

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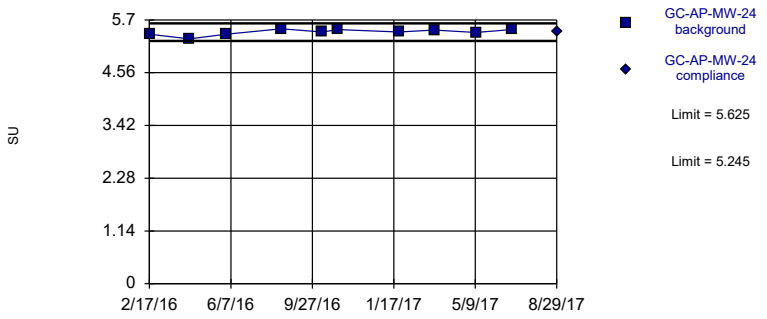
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.435, Std. Dev.=0.0657, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8972, critical = 0.781. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:33 PM View: PLs - Intrawell
Greene County Client: Southern Company Data: Greene County AP

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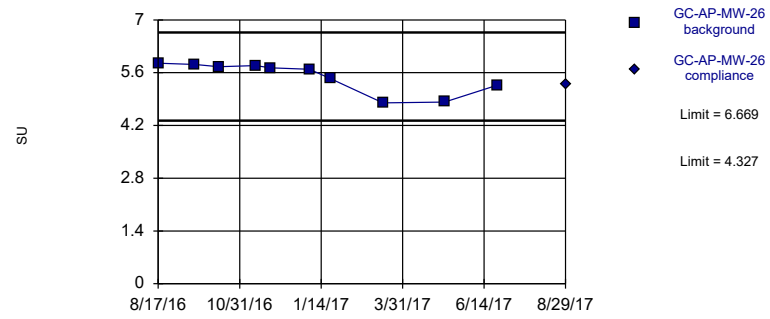
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.498, Std. Dev.=0.4046, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.7954, critical = 0.781. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:33 PM View: PLs - Intrawell
Greene County Client: Southern Company Data: Greene County AP

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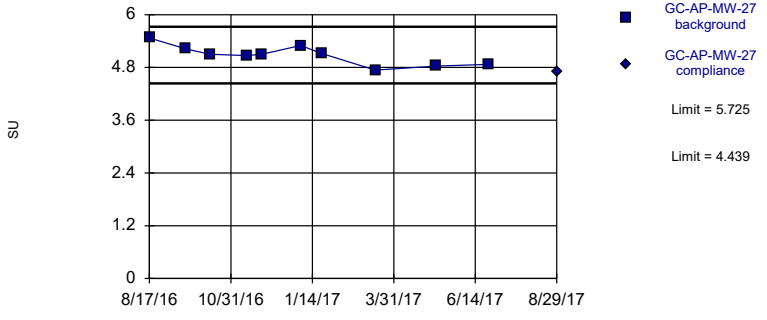
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.082, Std. Dev.=0.2223, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9637, critical = 0.781. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:33 PM View: PLs - Intrawell
Greene County Client: Southern Company Data: Greene County AP

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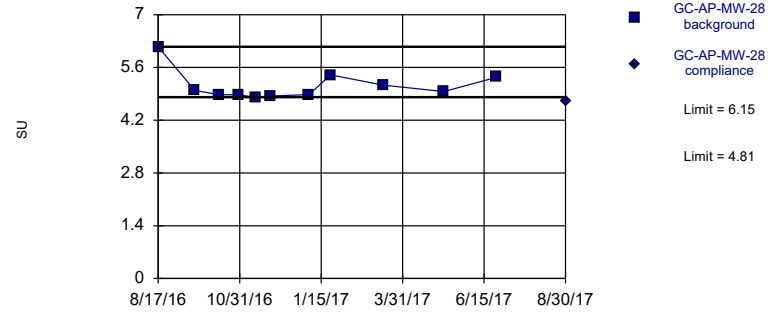
Exceeds Limits

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 11 background values. Well-constituent pair annual alpha = 0.01121. Individual comparison alpha = 0.005613 (1 of 3).

Constituent: pH Analysis Run 1/24/2018 1:33 PM View: PLs - Intrawell
Greene County Client: Southern Company Data: Greene County AP

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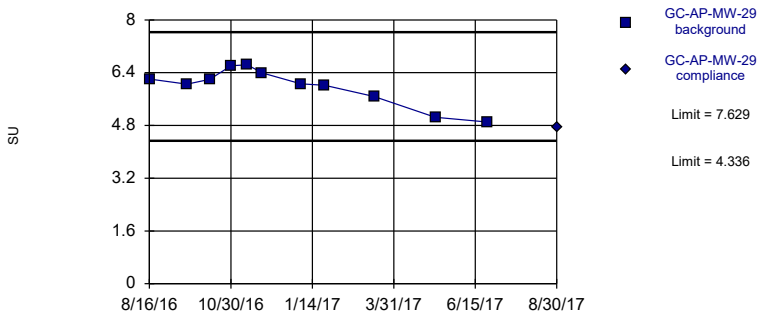
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.983, Std. Dev.=0.5689, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8823, critical = 0.792. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:33 PM View: PLs - Intrawell

Greene County Client: Southern Company Data: Greene County AP

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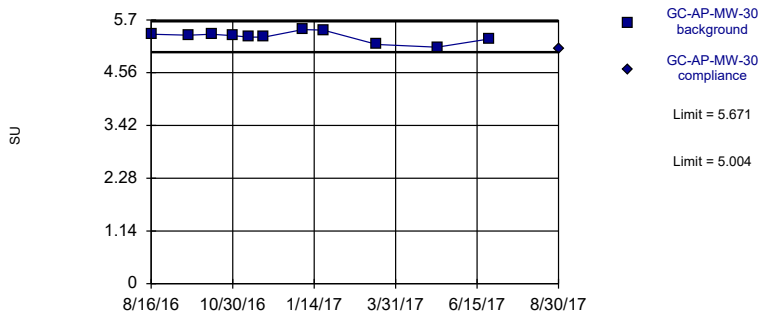
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.337, Std. Dev.=0.1152, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.92, critical = 0.792. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:33 PM View: PLs - Intrawell

Greene County Client: Southern Company Data: Greene County AP

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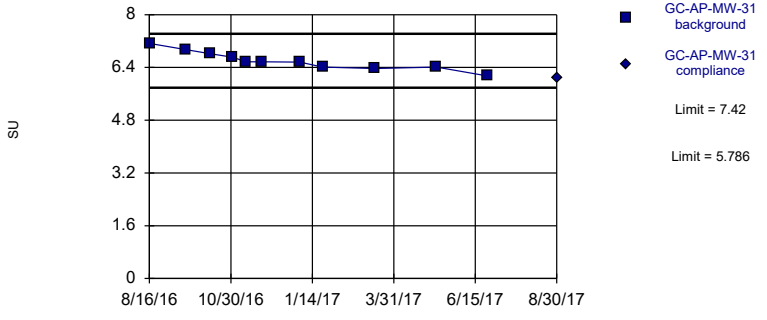
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.603, Std. Dev.=0.2823, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9709, critical = 0.792. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:33 PM View: PLs - Intrawell

Greene County Client: Southern Company Data: Greene County AP

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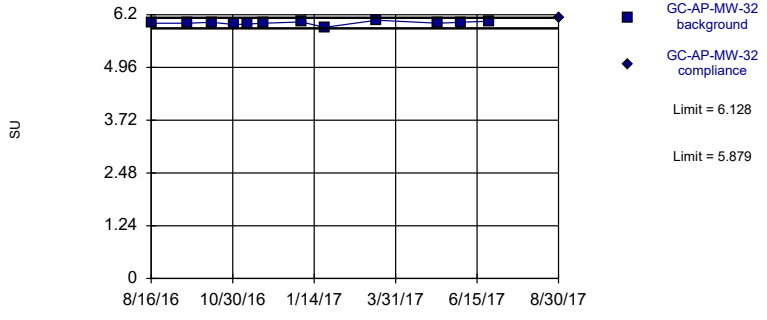
Exceeds Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.003, Std. Dev.=0.04292, n=12. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9184, critical = 0.805. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:33 PM View: PLs - Intrawell

Greene County Client: Southern Company Data: Greene County AP

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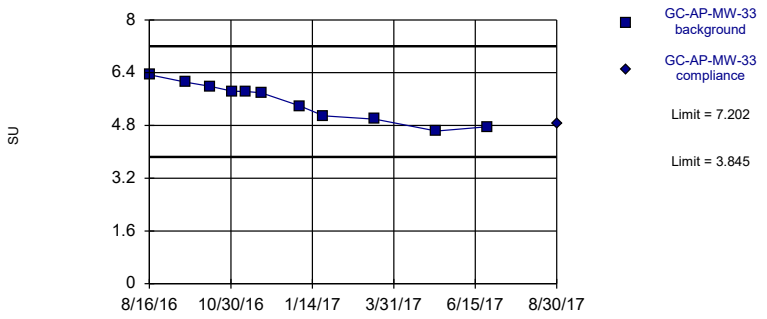
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.524, Std. Dev.=0.5801, n=11. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.93, critical = 0.792. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:33 PM View: PLs - Intrawell

Greene County Client: Southern Company Data: Greene County AP

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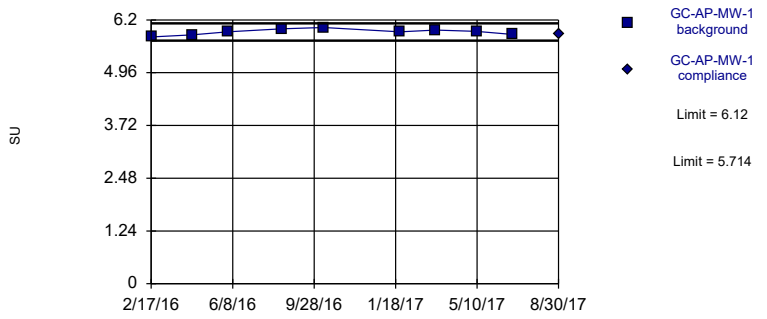
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.917, Std. Dev.=0.07018, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9716, critical = 0.764. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:33 PM View: PLs - Intrawell

Greene County Client: Southern Company Data: Greene County AP

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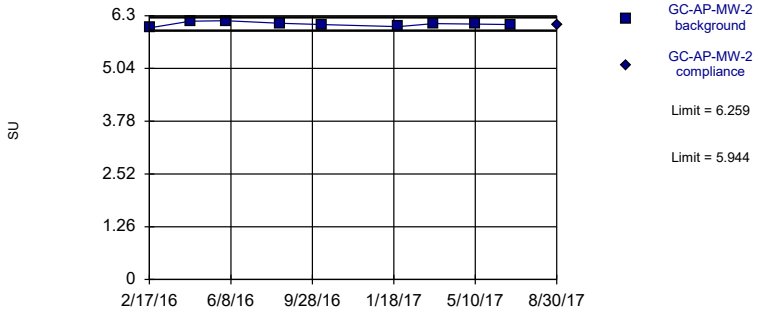
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.101, Std. Dev.=0.05442, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.951, critical = 0.764. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:33 PM View: PLs - Intrawell

Greene County Client: Southern Company Data: Greene County AP

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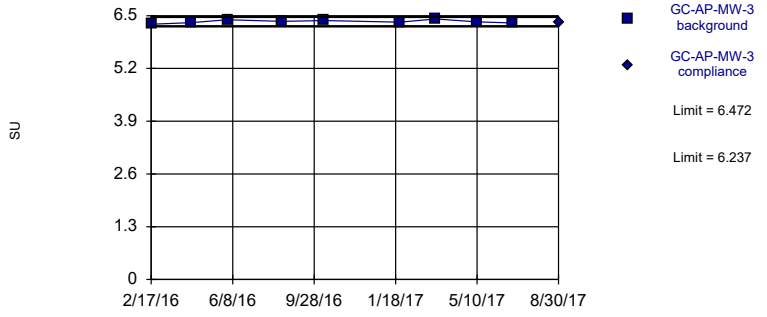
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.354, Std. Dev.=0.04065, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9876, critical = 0.764. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:34 PM View: PLs - Intrawell

Greene County Client: Southern Company Data: Greene County AP

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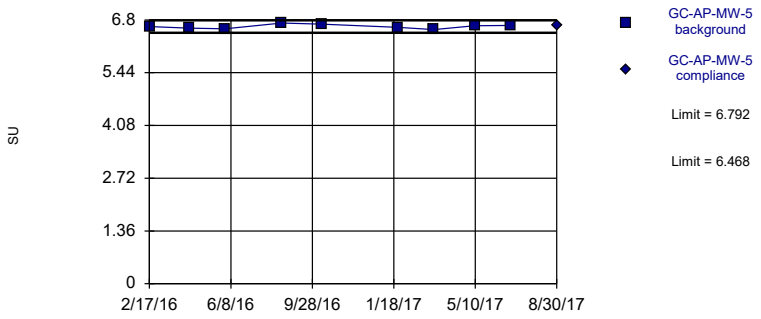
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.63, Std. Dev.=0.0559, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9815, critical = 0.764. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:34 PM View: PLs - Intrawell

Greene County Client: Southern Company Data: Greene County AP

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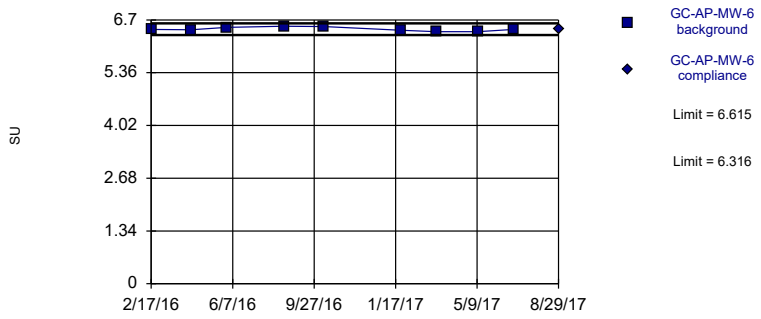
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.466, Std. Dev.=0.05151, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9154, critical = 0.764. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:34 PM View: PLs - Intrawell

Greene County Client: Southern Company Data: Greene County AP

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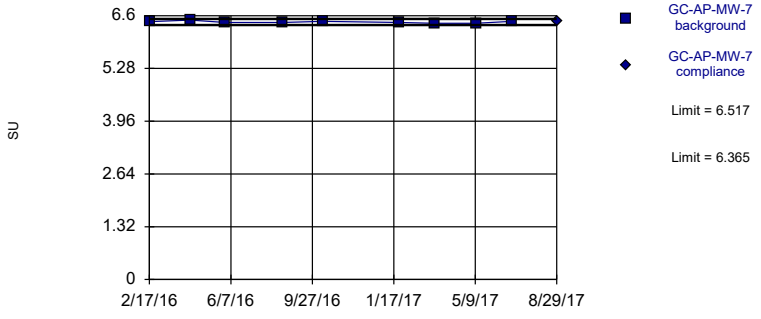
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.441, Std. Dev.=0.02619, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9222, critical = 0.764. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:34 PM View: PLs - Intrawell

Greene County Client: Southern Company Data: Greene County AP

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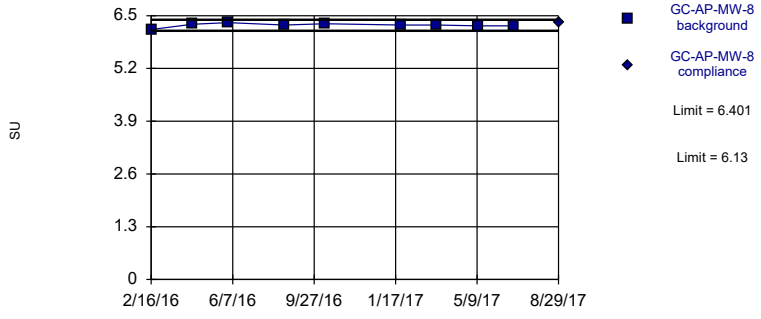
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.266, Std. Dev.=0.04693, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8756, critical = 0.764. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:34 PM View: PLs - Intrawell

Greene County Client: Southern Company Data: Greene County AP

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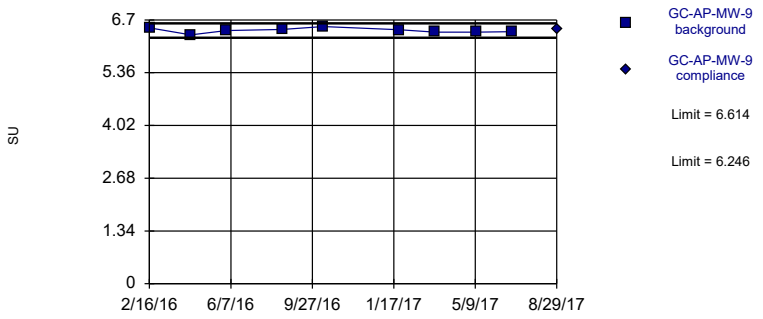
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.43, Std. Dev.=0.06364, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9768, critical = 0.764. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:34 PM View: PLs - Intrawell

Greene County Client: Southern Company Data: Greene County AP

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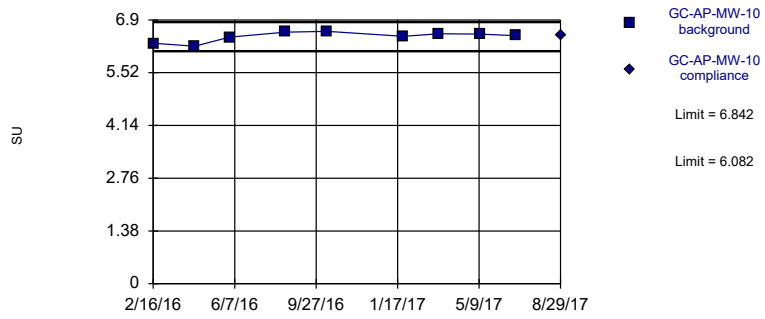
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.462, Std. Dev.=0.1312, n=9. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.875, critical = 0.764. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:34 PM View: PLs - Intrawell

Greene County Client: Southern Company Data: Greene County AP

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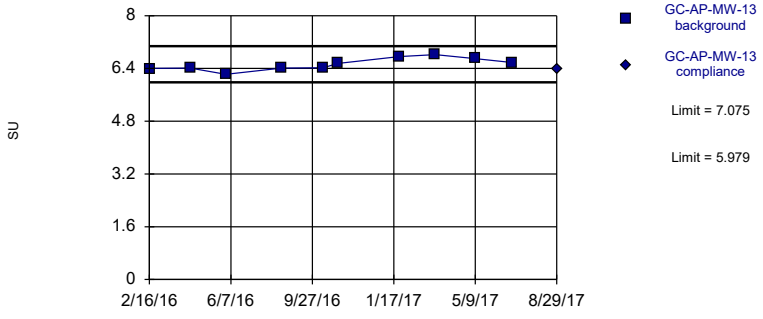
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.527, Std. Dev.=0.1893, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9407, critical = 0.781. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:34 PM View: PLs - Intrawell

Greene County Client: Southern Company Data: Greene County AP

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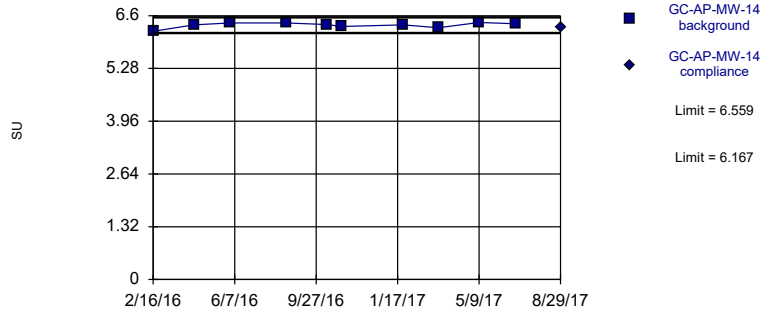
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.363, Std. Dev.=0.06767, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8676, critical = 0.781. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:34 PM View: PLs - Intrawell

Greene County Client: Southern Company Data: Greene County AP

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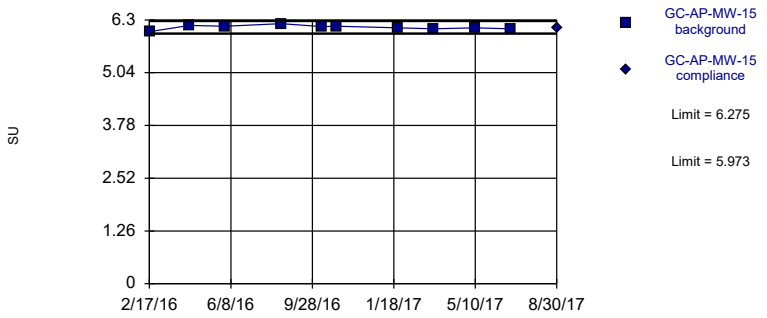
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.124, Std. Dev.=0.05232, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9664, critical = 0.781. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:34 PM View: PLs - Intrawell

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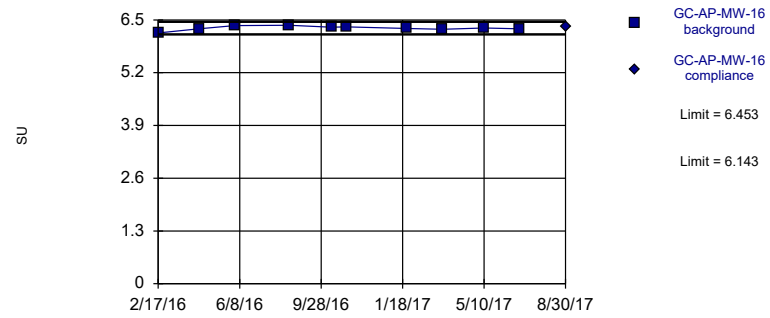
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.298, Std. Dev.=0.05371, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9214, critical = 0.781. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:34 PM View: PLs - Intrawell

Greene County Client: Southern Company Data: Greene County AP

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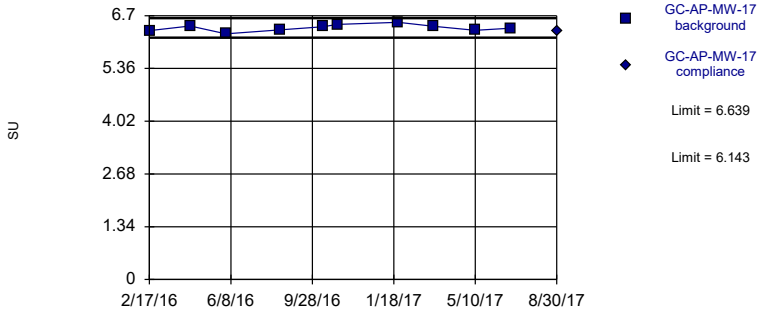
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.391, Std. Dev.=0.08582, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9828, critical = 0.781. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:34 PM View: PLs - Intrawell

Greene County Client: Southern Company Data: Greene County AP

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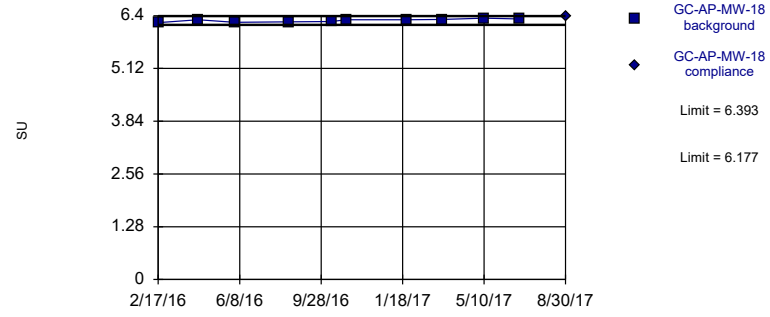
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=6.285, Std. Dev.=0.03719, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.923, critical = 0.781. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:34 PM View: PLs - Intrawell

Greene County Client: Southern Company Data: Greene County AP

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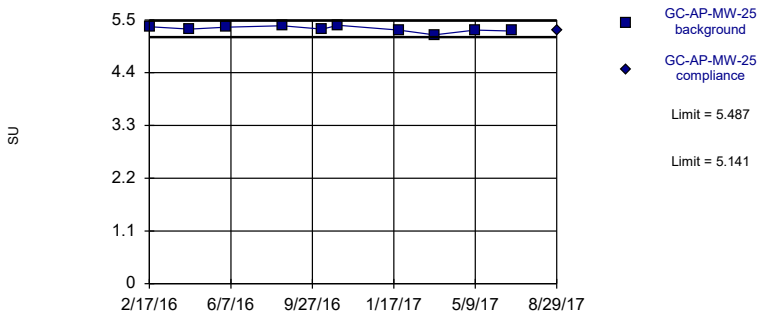
Within Limits

Prediction Limit

Intrawell Parametric



Background Data Summary: Mean=5.314, Std. Dev.=0.05967, n=10. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9375, critical = 0.781. Kappa overridden to 2.894.

Constituent: pH Analysis Run 1/24/2018 1:34 PM View: PLs - Intrawell

Greene County Client: Southern Company Data: Greene County AP

Interwell Prediction Limits - Significant Results

Greene County Client: Southern Company Data: Greene County AP Printed 1/24/2018, 1:39 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GC-AP-MW-6	0.615	n/a	8/29/2017	1.7	Yes	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-8	0.615	n/a	8/29/2017	1.63	Yes	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-9	0.615	n/a	8/29/2017	0.723	Yes	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-10	0.615	n/a	8/29/2017	1.17	Yes	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-14	0.615	n/a	8/29/2017	1	Yes	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-16	0.615	n/a	8/30/2017	1.36	Yes	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-17	0.615	n/a	8/30/2017	1.71	Yes	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-18	0.615	n/a	8/30/2017	1.53	Yes	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GC-AP-MW-1	42.7	n/a	8/30/2017	182	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-2	42.7	n/a	8/30/2017	67.8	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-3	42.7	n/a	8/30/2017	84	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-5	42.7	n/a	8/30/2017	78.9	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-6	42.7	n/a	8/29/2017	108	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-7	42.7	n/a	8/29/2017	113	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-8	42.7	n/a	8/29/2017	74.1	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-9	42.7	n/a	8/29/2017	72	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-10	42.7	n/a	8/29/2017	61.4	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-14	42.7	n/a	8/29/2017	83.6	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-15	42.7	n/a	8/30/2017	44.4	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-16	42.7	n/a	8/30/2017	65.7	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-17	42.7	n/a	8/30/2017	75.1	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-18	42.7	n/a	8/30/2017	78	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-3	24.7	n/a	8/30/2017	26	Yes	117	n/a	n/a	5.128	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-6	24.7	n/a	8/29/2017	35	Yes	117	n/a	n/a	5.128	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-7	24.7	n/a	8/29/2017	43	Yes	117	n/a	n/a	5.128	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-8	24.7	n/a	8/29/2017	52	Yes	117	n/a	n/a	5.128	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-9	24.7	n/a	8/29/2017	25	Yes	117	n/a	n/a	5.128	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-18	24.7	n/a	8/30/2017	25	Yes	117	n/a	n/a	5.128	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GC-AP-MW-17	0.31	n/a	8/30/2017	0.38	Yes	117	n/a	n/a	38.46	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-1	125	n/a	8/30/2017	910	Yes	117	n/a	n/a	13.68	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-2	125	n/a	8/30/2017	250	Yes	117	n/a	n/a	13.68	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-7	125	n/a	8/29/2017	220	Yes	117	n/a	n/a	13.68	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-14	125	n/a	8/29/2017	180	Yes	117	n/a	n/a	13.68	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-15	125	n/a	8/30/2017	160	Yes	117	n/a	n/a	13.68	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-17	125	n/a	8/30/2017	230	Yes	117	n/a	n/a	13.68	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-1	343.6	n/a	8/30/2017	1530	Yes	117	4.299	0.7447	6.838	None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-2	343.6	n/a	8/30/2017	478	Yes	117	4.299	0.7447	6.838	None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-3	343.6	n/a	8/30/2017	370	Yes	117	4.299	0.7447	6.838	None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-5	343.6	n/a	8/30/2017	432	Yes	117	4.299	0.7447	6.838	None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-6	343.6	n/a	8/29/2017	616	Yes	117	4.299	0.7447	6.838	None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-7	343.6	n/a	8/29/2017	924	Yes	117	4.299	0.7447	6.838	None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-8	343.6	n/a	8/29/2017	640	Yes	117	4.299	0.7447	6.838	None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-9	343.6	n/a	8/29/2017	402	Yes	117	4.299	0.7447	6.838	None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-10	343.6	n/a	8/29/2017	348	Yes	117	4.299	0.7447	6.838	None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-14	343.6	n/a	8/29/2017	528	Yes	117	4.299	0.7447	6.838	None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-16	343.6	n/a	8/30/2017	420	Yes	117	4.299	0.7447	6.838	None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-17	343.6	n/a	8/30/2017	646	Yes	117	4.299	0.7447	6.838	None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-18	343.6	n/a	8/30/2017	392	Yes	117	4.299	0.7447	6.838	None	ln(x)	0.0004702	Param Inter 1 of 2

Interwell Prediction Limits - All Results

Greene County Client: Southern Company Data: Greene County AP Printed 1/24/2018, 1:39 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDs	ND Adj.	Transform	Alpha	Method
Boron (mg/L)	GC-AP-MW-1	0.615	n/a	8/30/2017	0.138	No	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-2	0.615	n/a	8/30/2017	0.0915	No	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-3	0.615	n/a	8/30/2017	0.1ND	No	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-5	0.615	n/a	8/30/2017	0.407	No	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-6	0.615	n/a	8/29/2017	1.7	Yes	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-7	0.615	n/a	8/29/2017	0.51	No	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-8	0.615	n/a	8/29/2017	1.63	Yes	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-9	0.615	n/a	8/29/2017	0.723	Yes	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-10	0.615	n/a	8/29/2017	1.17	Yes	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-13	0.615	n/a	8/29/2017	0.112	No	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-14	0.615	n/a	8/29/2017	1	Yes	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-15	0.615	n/a	8/30/2017	0.441	No	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-16	0.615	n/a	8/30/2017	1.36	Yes	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-17	0.615	n/a	8/30/2017	1.71	Yes	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-18	0.615	n/a	8/30/2017	1.53	Yes	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Boron (mg/L)	GC-AP-MW-25	0.615	n/a	8/29/2017	0.0914	No	117	n/a	n/a	64.96	n/a	n/a	0.0001427	NP Inter (NDs) 1 of 2
Calcium (mg/L)	GC-AP-MW-1	42.7	n/a	8/30/2017	182	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-2	42.7	n/a	8/30/2017	67.8	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-3	42.7	n/a	8/30/2017	84	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-5	42.7	n/a	8/30/2017	78.9	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-6	42.7	n/a	8/29/2017	108	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-7	42.7	n/a	8/29/2017	113	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-8	42.7	n/a	8/29/2017	74.1	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-9	42.7	n/a	8/29/2017	72	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-10	42.7	n/a	8/29/2017	61.4	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-13	42.7	n/a	8/29/2017	22.3	No	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-14	42.7	n/a	8/29/2017	83.6	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-15	42.7	n/a	8/30/2017	44.4	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-16	42.7	n/a	8/30/2017	65.7	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-17	42.7	n/a	8/30/2017	75.1	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-18	42.7	n/a	8/30/2017	78	Yes	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Calcium (mg/L)	GC-AP-MW-25	42.7	n/a	8/29/2017	8.32	No	117	n/a	n/a	0	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-1	24.7	n/a	8/30/2017	23	No	117	n/a	n/a	5.128	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-2	24.7	n/a	8/30/2017	15	No	117	n/a	n/a	5.128	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-3	24.7	n/a	8/30/2017	26	Yes	117	n/a	n/a	5.128	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-5	24.7	n/a	8/30/2017	17	No	117	n/a	n/a	5.128	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-6	24.7	n/a	8/29/2017	35	Yes	117	n/a	n/a	5.128	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-7	24.7	n/a	8/29/2017	43	Yes	117	n/a	n/a	5.128	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-8	24.7	n/a	8/29/2017	52	Yes	117	n/a	n/a	5.128	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-9	24.7	n/a	8/29/2017	25	Yes	117	n/a	n/a	5.128	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-10	24.7	n/a	8/29/2017	20	No	117	n/a	n/a	5.128	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-13	24.7	n/a	8/29/2017	9.3	No	117	n/a	n/a	5.128	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-14	24.7	n/a	8/29/2017	17	No	117	n/a	n/a	5.128	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-15	24.7	n/a	8/30/2017	14	No	117	n/a	n/a	5.128	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-16	24.7	n/a	8/30/2017	16	No	117	n/a	n/a	5.128	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-17	24.7	n/a	8/30/2017	18	No	117	n/a	n/a	5.128	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-18	24.7	n/a	8/30/2017	25	Yes	117	n/a	n/a	5.128	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Chloride (mg/L)	GC-AP-MW-25	24.7	n/a	8/29/2017	22	No	117	n/a	n/a	5.128	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GC-AP-MW-1	0.31	n/a	8/30/2017	0.04	No	117	n/a	n/a	38.46	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GC-AP-MW-2	0.31	n/a	8/30/2017	0.07	No	117	n/a	n/a	38.46	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GC-AP-MW-3	0.31	n/a	8/30/2017	0.12	No	117	n/a	n/a	38.46	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GC-AP-MW-5	0.31	n/a	8/30/2017	0.25	No	117	n/a	n/a	38.46	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GC-AP-MW-6	0.31	n/a	8/29/2017	0.22	No	117	n/a	n/a	38.46	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GC-AP-MW-7	0.31	n/a	8/29/2017	0.09	No	117	n/a	n/a	38.46	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GC-AP-MW-8	0.31	n/a	8/29/2017	0.11	No	117	n/a	n/a	38.46	n/a	n/a	0.0001427	NP Inter (normality) 1 of 2

Interwell Prediction Limits - All Results

Greene County Client: Southern Company Data: Greene County AP Printed 1/24/2018, 1:39 PM

Constituent	Well	Upper Lim.	Lower Lim.	Date	Observ.	Sig.	Bg N	Bg Mean	Std. Dev.	%NDsND Adj.	Transform	Alpha	Method
Fluoride (mg/L)	GC-AP-MW-9	0.31	n/a	8/29/2017	0.19	No	117	n/a	n/a	38.46 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GC-AP-MW-10	0.31	n/a	8/29/2017	0.26	No	117	n/a	n/a	38.46 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GC-AP-MW-13	0.31	n/a	8/29/2017	0.19	No	117	n/a	n/a	38.46 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GC-AP-MW-14	0.31	n/a	8/29/2017	0.14	No	117	n/a	n/a	38.46 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GC-AP-MW-15	0.31	n/a	8/30/2017	0.13	No	117	n/a	n/a	38.46 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GC-AP-MW-16	0.31	n/a	8/30/2017	0.28	No	117	n/a	n/a	38.46 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GC-AP-MW-17	0.31	n/a	8/30/2017	0.38	Yes	117	n/a	n/a	38.46 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GC-AP-MW-18	0.31	n/a	8/30/2017	0.21	No	117	n/a	n/a	38.46 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Fluoride (mg/L)	GC-AP-MW-25	0.31	n/a	8/29/2017	0.1ND	No	117	n/a	n/a	38.46 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-1	125	n/a	8/30/2017	910	Yes	117	n/a	n/a	13.68 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-2	125	n/a	8/30/2017	250	Yes	117	n/a	n/a	13.68 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-3	125	n/a	8/30/2017	5ND	No	117	n/a	n/a	13.68 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-5	125	n/a	8/30/2017	96	No	117	n/a	n/a	13.68 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-6	125	n/a	8/29/2017	95	No	117	n/a	n/a	13.68 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-7	125	n/a	8/29/2017	220	Yes	117	n/a	n/a	13.68 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-8	125	n/a	8/29/2017	40	No	117	n/a	n/a	13.68 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-9	125	n/a	8/29/2017	34	No	117	n/a	n/a	13.68 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-10	125	n/a	8/29/2017	14	No	117	n/a	n/a	13.68 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-13	125	n/a	8/29/2017	72	No	117	n/a	n/a	13.68 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-14	125	n/a	8/29/2017	180	Yes	117	n/a	n/a	13.68 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-15	125	n/a	8/30/2017	160	Yes	117	n/a	n/a	13.68 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-16	125	n/a	8/30/2017	87	No	117	n/a	n/a	13.68 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-17	125	n/a	8/30/2017	230	Yes	117	n/a	n/a	13.68 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-18	125	n/a	8/30/2017	7.8	No	117	n/a	n/a	13.68 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
Sulfate (mg/L)	GC-AP-MW-25	125	n/a	8/29/2017	37	No	117	n/a	n/a	13.68 n/a	n/a	0.0001427	NP Inter (normality) 1 of 2
TDS (mg/L)	GC-AP-MW-1	343.6	n/a	8/30/2017	1530	Yes	117	4.299	0.7447	6.838 None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-2	343.6	n/a	8/30/2017	478	Yes	117	4.299	0.7447	6.838 None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-3	343.6	n/a	8/30/2017	370	Yes	117	4.299	0.7447	6.838 None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-5	343.6	n/a	8/30/2017	432	Yes	117	4.299	0.7447	6.838 None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-6	343.6	n/a	8/29/2017	616	Yes	117	4.299	0.7447	6.838 None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-7	343.6	n/a	8/29/2017	924	Yes	117	4.299	0.7447	6.838 None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-8	343.6	n/a	8/29/2017	640	Yes	117	4.299	0.7447	6.838 None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-9	343.6	n/a	8/29/2017	402	Yes	117	4.299	0.7447	6.838 None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-10	343.6	n/a	8/29/2017	348	Yes	117	4.299	0.7447	6.838 None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-13	343.6	n/a	8/29/2017	163	No	117	4.299	0.7447	6.838 None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-14	343.6	n/a	8/29/2017	528	Yes	117	4.299	0.7447	6.838 None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-15	343.6	n/a	8/30/2017	317	No	117	4.299	0.7447	6.838 None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-16	343.6	n/a	8/30/2017	420	Yes	117	4.299	0.7447	6.838 None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-17	343.6	n/a	8/30/2017	646	Yes	117	4.299	0.7447	6.838 None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-18	343.6	n/a	8/30/2017	392	Yes	117	4.299	0.7447	6.838 None	ln(x)	0.0004702	Param Inter 1 of 2
TDS (mg/L)	GC-AP-MW-25	343.6	n/a	8/29/2017	139	No	117	4.299	0.7447	6.838 None	ln(x)	0.0004702	Param Inter 1 of 2

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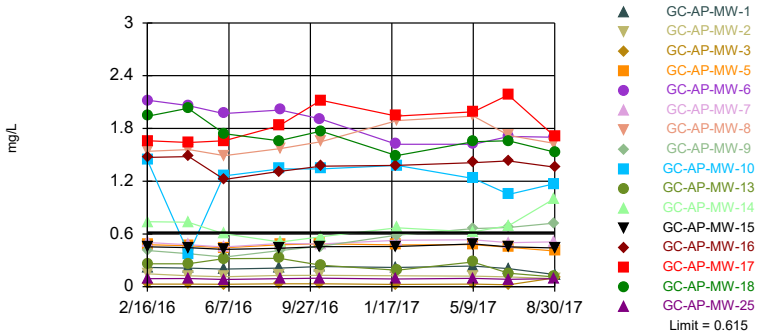
Hollow symbols indicate censored values.

Exceeds Limit: GC-AP-MW-6, GC-AP-MW-8, GC-AP-MW-9, GC-AP-MW-10, GC-AP-M

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because censored data exceeded 50%. Limit is highest of 117 background values. 64.96% NDs. Annual per-constituent alpha = 0.004557. Individual comparison alpha = 0.0001427 (1 of 2). Comparing 16 points to limit.

Constituent: Boron Analysis Run 1/24/2018 1:35 PM View: PLs - Interwell

Greene County Client: Southern Company Data: Greene County AP

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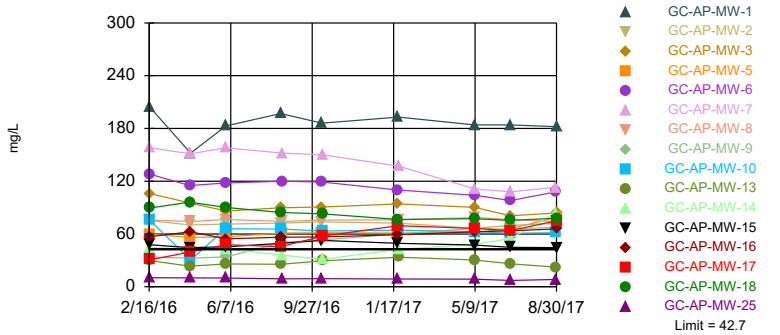
Exceeds Limit: GC-AP-MW-1, GC-AP-MW-2, GC-AP-MW-3, GC-AP-MW-5, GC-AP-MW

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 117 background values. Annual per-constituent alpha = 0.004557. Individual comparison alpha = 0.0001427 (1 of 2). Comparing 16 points to limit.

Constituent: Calcium Analysis Run 1/24/2018 1:35 PM View: PLs - Interwell

Greene County Client: Southern Company Data: Greene County AP

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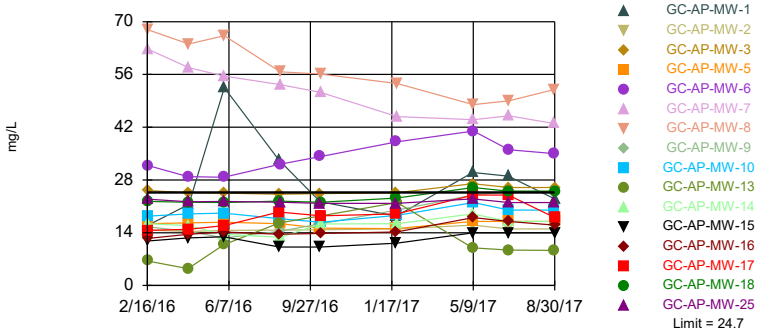
Exceeds Limit: GC-AP-MW-3, GC-AP-MW-6, GC-AP-MW-7, GC-AP-MW-8, GC-AP-MW

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 117 background values. 5.128% NDs. Annual per-constituent alpha = 0.004557. Individual comparison alpha = 0.0001427 (1 of 2). Comparing 16 points to limit.

Constituent: Chloride Analysis Run 1/24/2018 1:35 PM View: PLs - Interwell

Greene County Client: Southern Company Data: Greene County AP

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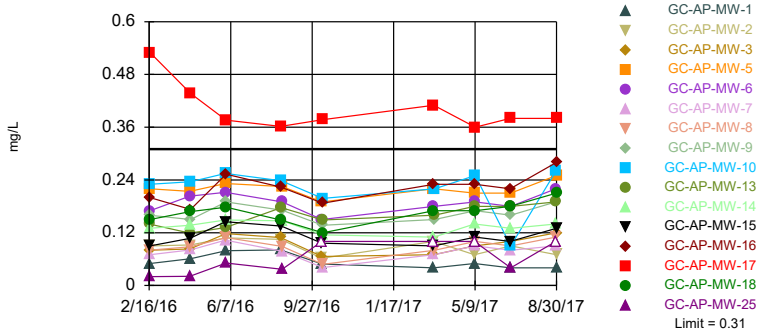
Hollow symbols indicate censored values.

Exceeds Limit: GC-AP-MW-17

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 117 background values. 38.46% NDs. Annual per-constituent alpha = 0.004557. Individual comparison alpha = 0.0001427 (1 of 2). Comparing 16 points to limit.

Constituent: Fluoride Analysis Run 1/24/2018 1:35 PM View: PLs - Interwell

Greene County Client: Southern Company Data: Greene County AP

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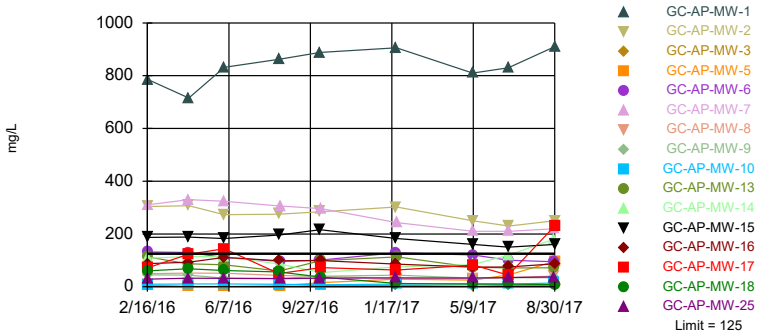
Hollow symbols indicate censored values.

Exceeds Limit: GC-AP-MW-1, GC-AP-MW-2, GC-AP-MW-7, GC-AP-MW-14, GC-AP-M

Prediction Limit

Interwell Non-parametric



Non-parametric test used in lieu of parametric prediction limit because the Chi Squared normality test showed the data to be non-normal at the 0.01 alpha level. Limit is highest of 117 background values. 13.68% NDs. Annual per-constituent alpha = 0.004557. Individual comparison alpha = 0.0001427 (1 of 2). Comparing 16 points to limit.

Constituent: Sulfate Analysis Run 1/24/2018 1:36 PM View: PLs - Interwell

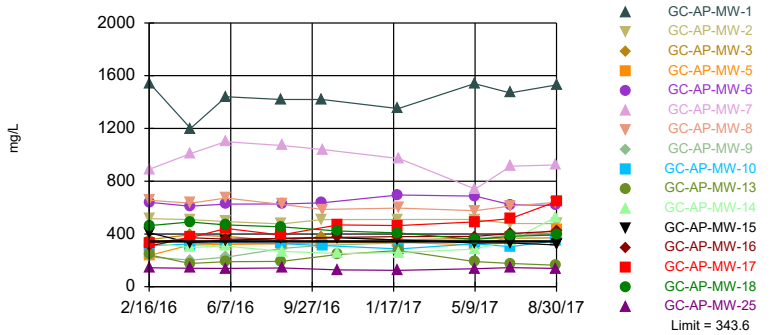
Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.6.00 Sanitas software licensed to Southern Company. UG

Exceeds Limit: GC-AP-MW-1, GC-AP-MW-2, GC-AP-MW-3, GC-AP-MW-5, GC-AP-MW

Prediction Limit

Interwell Parametric



Background Data Summary (based on natural log transformation): Mean=4.299, Std. Dev.=0.7447, n=117, 6.838% NDs. Normality test: Chi Squared @alpha = 0.01, calculated = 13.68, critical = 14.07. Kappa = 2.069 (c=7, w=16, 1 of 2, event alpha = 0.05132). Report alpha = 0.007498. Individual comparison alpha = 0.0004702. Comparing 16 points to limit.

Constituent: TDS Analysis Run 1/24/2018 1:36 PM View: PLs - Interwell

Greene County Client: Southern Company Data: Greene County AP

Trend Test Summary Table - Significant Results

Greene County Client: Southern Company Data: Greene County AP Printed 12/14/2017, 10:05 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GC-AP-MW-11 (Bg)**	**-0.155**	**-26**	**-25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	**GC-AP-MW-9**	**0.263**	**29**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-24 (Bg)**	**8.4**	**28**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-27 (Bg)**	**-0.4364**	**-26**	**-25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-29 (Bg)**	**-1.605**	**-26**	**-25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-31 (Bg)**	**-28.68**	**-36**	**-25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-32 (Bg)**	**0.861**	**26**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-33 (Bg)**	**-1.045**	**-26**	**-25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-5**	**6.485**	**29**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-7**	**-34.8**	**-27**	**-25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-9**	**24.71**	**33**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-17**	**27.61**	**28**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GC-AP-MW-24 (Bg)**	**2.238**	**30**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GC-AP-MW-7**	**-12.64**	**-32**	**-25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GC-AP-MW-8**	**-12.22**	**-28**	**-25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GC-AP-MW-9**	**8.694**	**27**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-24 (Bg)**	**30.35**	**33**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-31 (Bg)**	**1.762**	**32**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	**GC-AP-MW-7**	**-81.05**	**-27**	**-25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-11 (Bg)**	**36.73**	**26**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-24 (Bg)**	**51.82**	**30**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-31 (Bg)**	**-86.08**	**-30**	**-25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-5**	**55.89**	**28**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-9**	**131.2**	**32**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-16**	**42.48**	**32**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-17**	**140.8**	**32**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-18**	**-69.84**	**-26**	**-25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Trend Test Summary Table - All Results

Greene County Client: Southern Company Data: Greene County AP Printed 12/14/2017, 10:05 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Boron (mg/L)	**GC-AP-MW-11 (Bg)**	**-0.155**	**-26**	**-25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GC-AP-MW-12 (Bg)	-0.04543	-14	-25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-21 (Bg)	-0.01479	-10	-25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-23 (Bg)	0	7	25	No	9	66.67	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-24 (Bg)	0	0	25	No	9	100	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-26 (Bg)	0	-2	-25	No	9	88.89	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-27 (Bg)	0	3	25	No	9	77.78	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-28 (Bg)	0	-2	-25	No	9	88.89	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-29 (Bg)	0	2	25	No	9	88.89	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-30 (Bg)	0	0	25	No	9	100	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-31 (Bg)	0	-2	-25	No	9	88.89	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-32 (Bg)	0	0	25	No	9	100	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-33 (Bg)	0.02836	25	25	No	9	44.44	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-6	-0.3005	-25	-25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-8	0.1502	20	25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	**GC-AP-MW-9**	**0.263**	**29**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Boron (mg/L)	GC-AP-MW-10	-0.1515	-9	-25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-14	0.07116	4	25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-16	0.01188	0	25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-17	0.2838	19	25	No	9	0	n/a	n/a	0.01	NP
Boron (mg/L)	GC-AP-MW-18	-0.264	-21	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-11 (Bg)	1.487	6	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-12 (Bg)	-2.325	-8	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-21 (Bg)	-2.732	-8	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-23 (Bg)	-7.657	-20	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-24 (Bg)**	**8.4**	**28**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-26 (Bg)	4.448	14	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-27 (Bg)**	**-0.4364**	**-26**	**-25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-28 (Bg)	-0.04465	0	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-29 (Bg)**	**-1.605**	**-26**	**-25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-30 (Bg)	-0.1967	-6	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-31 (Bg)**	**-28.68**	**-36**	**-25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-32 (Bg)**	**0.861**	**26**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	**GC-AP-MW-33 (Bg)**	**-1.045**	**-26**	**-25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-1	-5.49	-9	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-2	-4.46	-15	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-3	-9.794	-18	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-5**	**6.485**	**29**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-6	-13.95	-22	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-7**	**-34.8**	**-27**	**-25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-8	0.3281	6	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-9**	**24.71**	**33**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-10	-4.001	-18	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-14	10.44	10	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-15	-0.5464	-6	-25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	GC-AP-MW-16	7.801	21	25	No	9	0	n/a	n/a	0.01	NP
Calcium (mg/L)	**GC-AP-MW-17**	**27.61**	**28**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Calcium (mg/L)	GC-AP-MW-18	-10.5	-24	-25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-11 (Bg)	1.871	7	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-12 (Bg)	2.479	6	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-21 (Bg)	3.898	13	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-23 (Bg)	-0.05573	-4	-25	No	9	11.11	n/a	n/a	0.01	NP
Chloride (mg/L)	**GC-AP-MW-24 (Bg)**	**2.238**	**30**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GC-AP-MW-26 (Bg)	0.3173	6	25	No	9	11.11	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-27 (Bg)	-0.03908	0	25	No	9	11.11	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-28 (Bg)	0.1213	2	25	No	9	11.11	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-29 (Bg)	-0.1414	-8	-25	No	9	11.11	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-30 (Bg)	-0.5222	-15	-25	No	9	11.11	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-31 (Bg)	0.4019	14	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-32 (Bg)	0.163	3	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-33 (Bg)	3.001	20	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-3	0.7982	10	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	GC-AP-MW-6	5.458	20	25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	**GC-AP-MW-7**	**-12.64**	**-32**	**-25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GC-AP-MW-8**	**-12.22**	**-28**	**-25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	**GC-AP-MW-9**	**8.694**	**27**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Chloride (mg/L)	GC-AP-MW-18	1.967	20	25	No	9	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-11 (Bg)	0.01741	7	25	No	9	0	n/a	n/a	0.01	NP

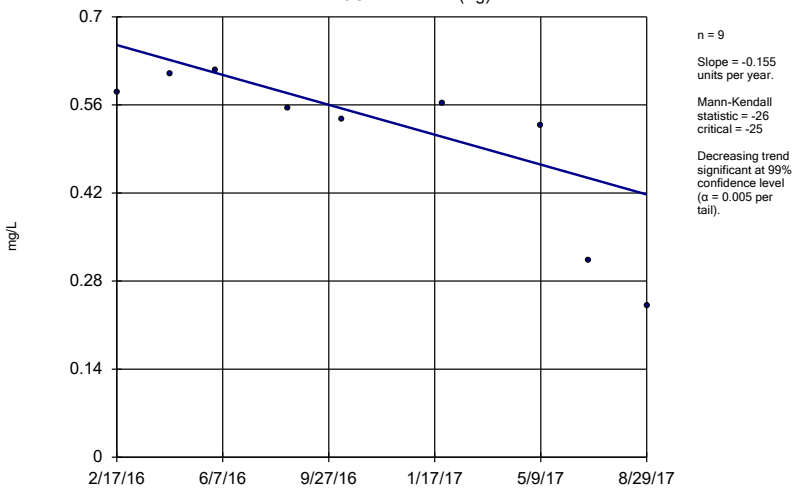
Trend Test Summary Table - All Results

Greene County Client: Southern Company Data: Greene County AP Printed 12/14/2017, 10:05 AM

Constituent	Well	Slope	Calc.	Critical	Sig.	N	%NDs	Normality	Xform	Alpha	Method
Fluoride (mg/L)	GC-AP-MW-12 (Bg)	0.006561	7	25	No	9	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-21 (Bg)	0.005794	1	25	No	9	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-23 (Bg)	0.001241	3	25	No	9	0	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-24 (Bg)	0.005044	8	25	No	9	44.44	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-26 (Bg)	0.1152	11	25	No	9	11.11	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-27 (Bg)	0	13	25	No	9	77.78	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-28 (Bg)	0	-1	-25	No	9	77.78	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-29 (Bg)	0	6	25	No	9	77.78	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-30 (Bg)	0	8	25	No	9	88.89	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-31 (Bg)	0	3	25	No	9	44.44	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-32 (Bg)	-3.5e-9	-5	-25	No	9	33.33	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-33 (Bg)	0.03059	18	25	No	9	44.44	n/a	n/a	0.01	NP
Fluoride (mg/L)	GC-AP-MW-17	-0.03541	-9	-25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-11 (Bg)	22.35	16	25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-12 (Bg)	-26.06	-18	-25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-21 (Bg)	-25.73	-18	-25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-23 (Bg)	-3.101	-15	-25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-24 (Bg)**	**30.35**	**33**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-26 (Bg)	27.13	10	25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-27 (Bg)	2.158	19	25	No	9	33.33	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-28 (Bg)	-1.449	-10	-25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-29 (Bg)	0	7	25	No	9	66.67	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-30 (Bg)	0	5	25	No	9	77.78	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-31 (Bg)**	**1.762**	**32**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-32 (Bg)	1.236	19	25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-33 (Bg)	4.857	20	25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-1	92.04	18	25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-2	-39.23	-19	-25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	**GC-AP-MW-7**	**-81.05**	**-27**	**-25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
Sulfate (mg/L)	GC-AP-MW-14	7.184	5	25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-15	-23.2	-16	-25	No	9	0	n/a	n/a	0.01	NP
Sulfate (mg/L)	GC-AP-MW-17	-3.293	0	25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-11 (Bg)**	**36.73**	**26**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-12 (Bg)	-34.17	-12	-25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-21 (Bg)	-9.206	-10	-25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-23 (Bg)	-39.48	-22	-25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-24 (Bg)**	**51.82**	**30**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-26 (Bg)	29.43	6	25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-27 (Bg)	3.348	6	25	No	9	33.33	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-28 (Bg)	-2.53	-1	-25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-29 (Bg)	-25.04	-22	-25	No	9	11.11	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-30 (Bg)	0	2	25	No	9	44.44	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-31 (Bg)**	**-86.08**	**-30**	**-25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-32 (Bg)	11.22	13	25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-33 (Bg)	-31.85	-23	-25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-1	64.11	6	25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-2	-12.58	-10	-25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-5**	**55.89**	**28**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-6	0.3151	0	25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-7	-127.9	-10	-25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	GC-AP-MW-8	-30.61	-12	-25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-9**	**131.2**	**32**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	GC-AP-MW-14	26.05	4	25	No	9	0	n/a	n/a	0.01	NP
TDS (mg/L)	**GC-AP-MW-16**	**42.48**	**32**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-17**	**140.8**	**32**	**25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**
TDS (mg/L)	**GC-AP-MW-18**	**-69.84**	**-26**	**-25**	**Yes**	**9**	**0**	**n/a**	**n/a**	**0.01**	**NP**

Sen's Slope Estimator

GC-AP-MW-11 (Bg)



n = 9

Slope = -0.155 units per year.

Mann-Kendall statistic = -26
critical = -25

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/14/2017 9:50 AM View: Trend Tests - Initial SSI's
Greene County Client: Southern Company Data: Greene County AP

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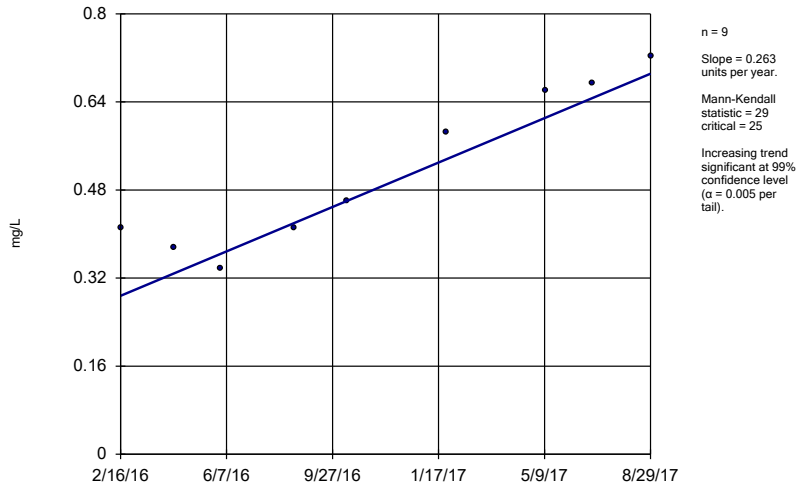
Sen's Slope Estimator

GC-AP-MW-9



n = 9

Slope = 0.263 units per year.

Mann-Kendall statistic = 29
critical = 25

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Boron Analysis Run 12/14/2017 9:50 AM View: Trend Tests - Initial SSI's
Greene County Client: Southern Company Data: Greene County AP

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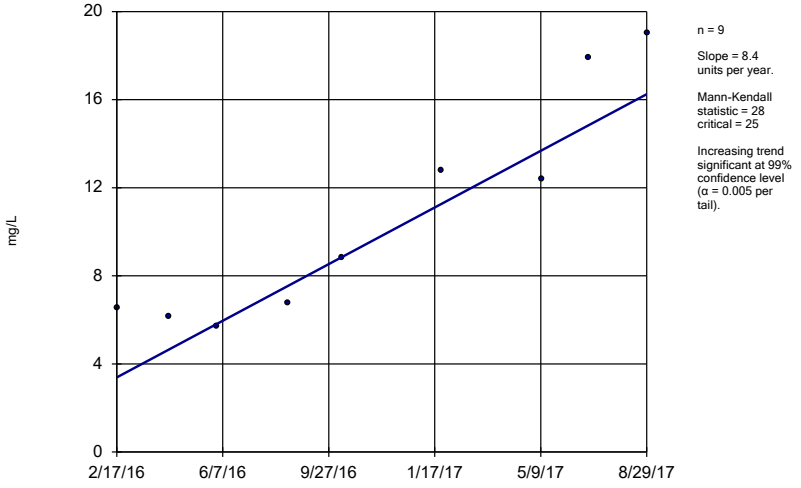
Sen's Slope Estimator

GC-AP-MW-24 (Bg)



n = 9

Slope = 8.4 units per year.

Mann-Kendall statistic = 28
critical = 25

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

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Greene County Client: Southern Company Data: Greene County AP

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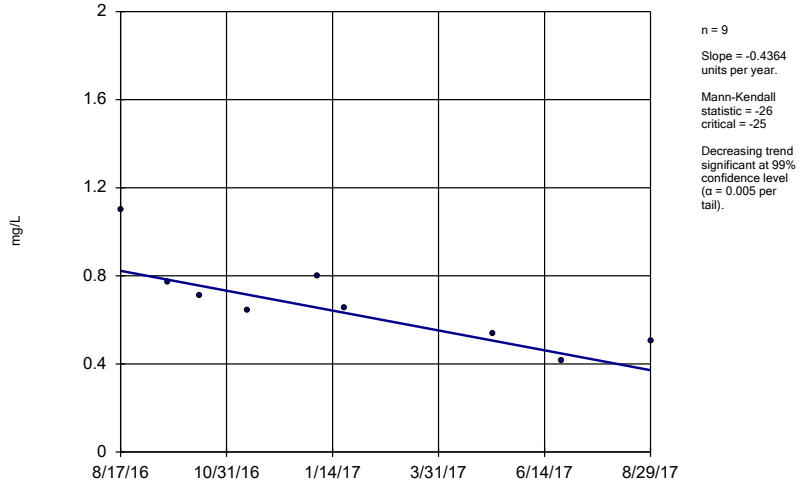
Sen's Slope Estimator

GC-AP-MW-27 (Bg)



n = 9

Slope = -0.4364 units per year.

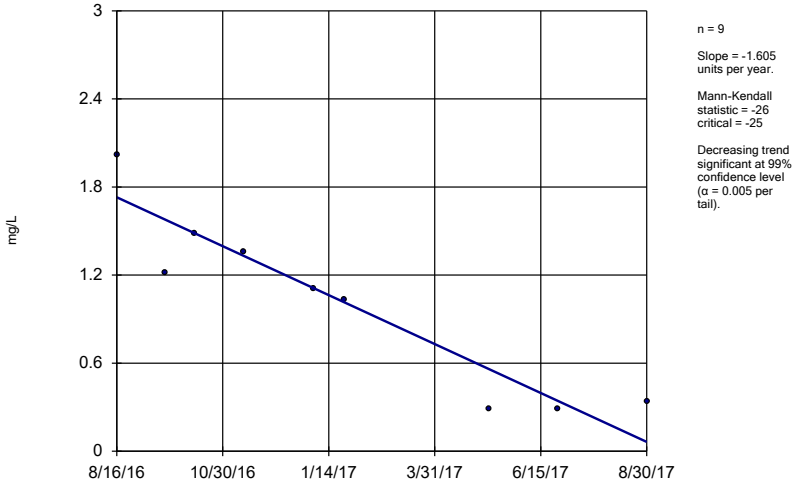
Mann-Kendall statistic = -26
critical = -25

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 12/14/2017 9:50 AM View: Trend Tests - Initial SSI's
Greene County Client: Southern Company Data: Greene County AP

Sen's Slope Estimator

GC-AP-MW-29 (Bg)



n = 9

Slope = -1.605 units per year.

Mann-Kendall statistic = -26
critical = -25

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 12/14/2017 9:50 AM View: Trend Tests - Initial SSI's

Greene County Client: Southern Company Data: Greene County AP

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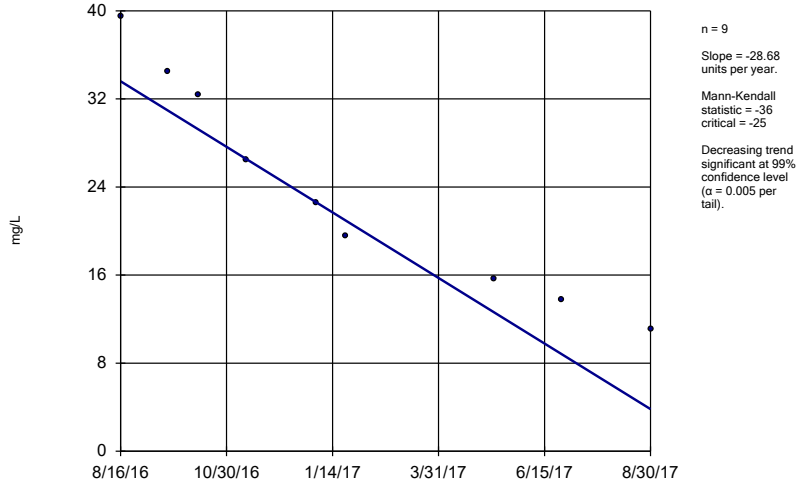
Sen's Slope Estimator

GC-AP-MW-31 (Bg)



n = 9

Slope = -28.68 units per year.

Mann-Kendall statistic = -36
critical = -25

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Calcium Analysis Run 12/14/2017 9:50 AM View: Trend Tests - Initial SSI's

Greene County Client: Southern Company Data: Greene County AP

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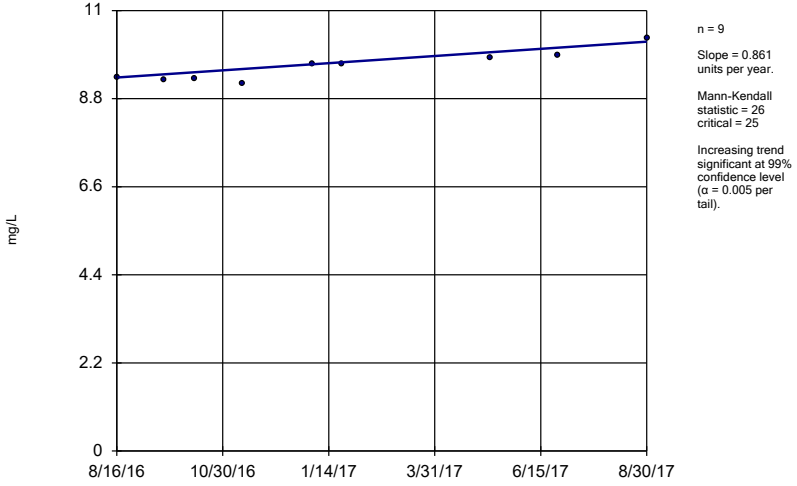
Sen's Slope Estimator

GC-AP-MW-32 (Bg)



n = 9

Slope = 0.861 units per year.

Mann-Kendall statistic = 26
critical = 25

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

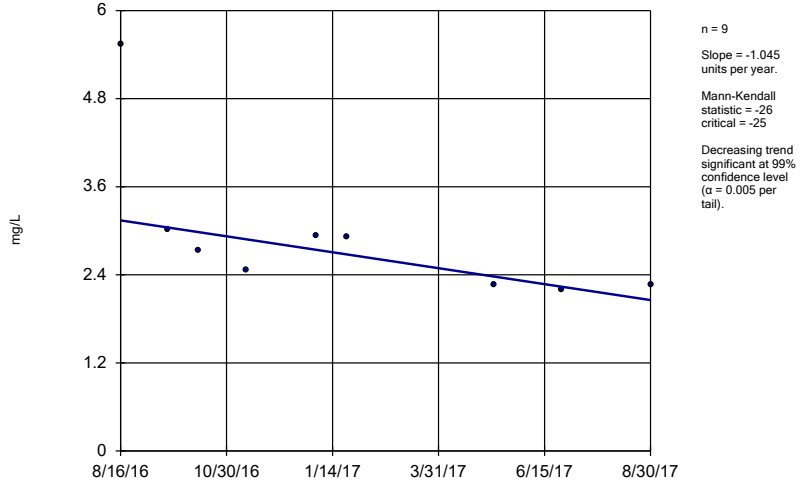
Constituent: Calcium Analysis Run 12/14/2017 9:50 AM View: Trend Tests - Initial SSI's

Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GC-AP-MW-33 (Bg)



n = 9

Slope = -1.045 units per year.

Mann-Kendall statistic = -26
critical = -25

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

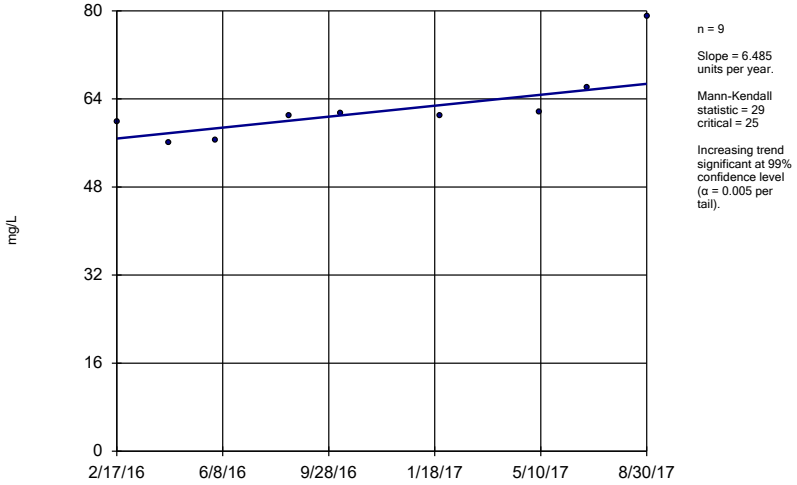
Constituent: Calcium Analysis Run 12/14/2017 9:50 AM View: Trend Tests - Initial SSI's

Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GC-AP-MW-5



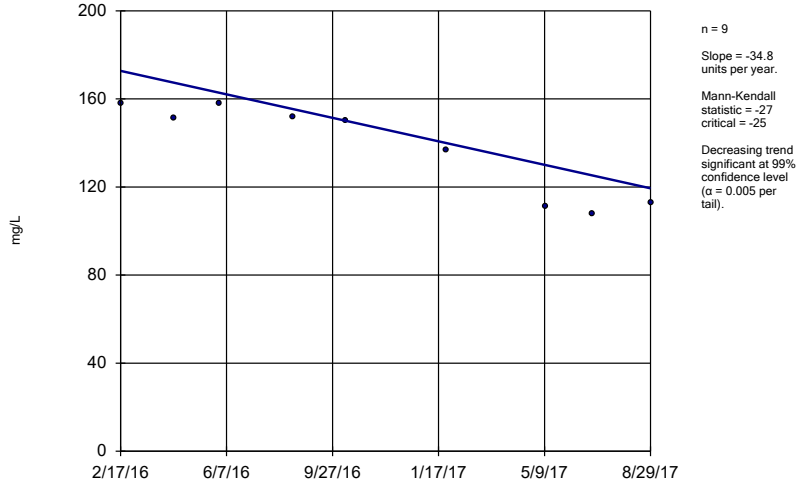
Constituent: Calcium Analysis Run 12/14/2017 9:50 AM View: Trend Tests - Initial SSI's

Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GC-AP-MW-7



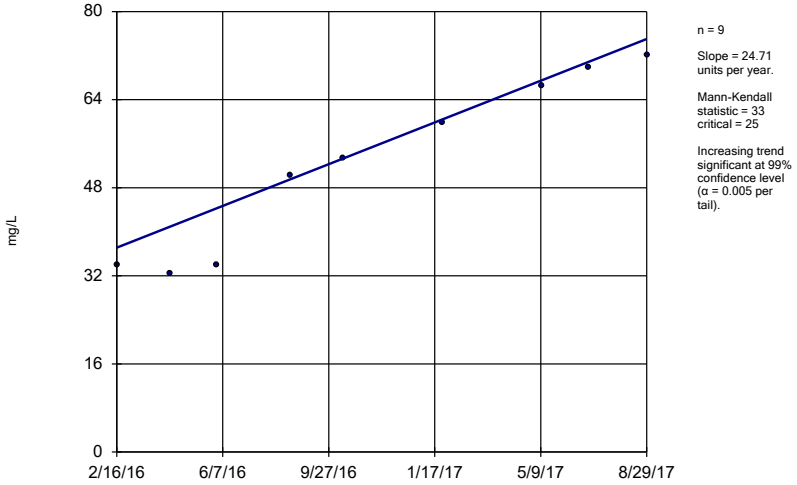
Constituent: Calcium Analysis Run 12/14/2017 9:50 AM View: Trend Tests - Initial SSI's

Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GC-AP-MW-9



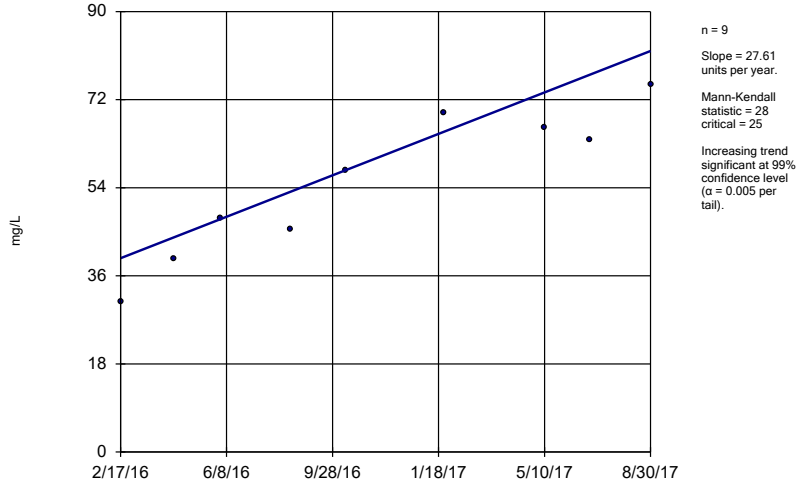
Constituent: Calcium Analysis Run 12/14/2017 9:50 AM View: Trend Tests - Initial SSI's

Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GC-AP-MW-17



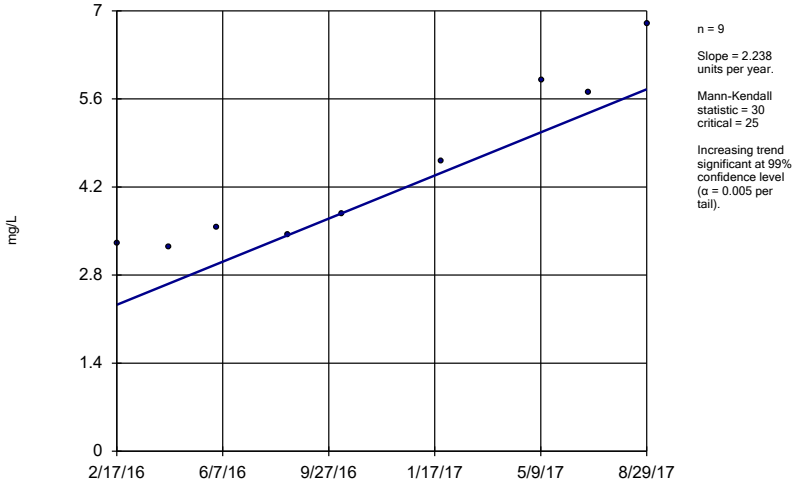
Constituent: Calcium Analysis Run 12/14/2017 9:51 AM View: Trend Tests - Initial SSI's

Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GC-AP-MW-24 (Bg)



n = 9

Slope = 2.238 units per year.

Mann-Kendall statistic = 30
critical = 25

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

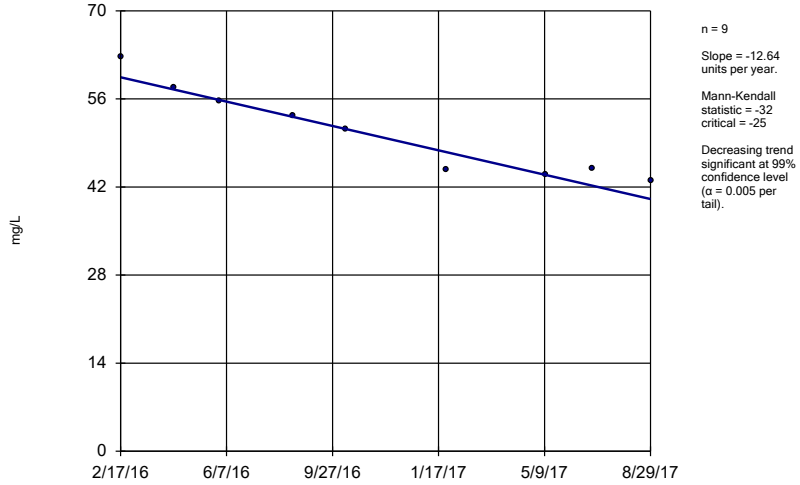
Constituent: Chloride Analysis Run 12/14/2017 9:51 AM View: Trend Tests - Initial SSI's

Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GC-AP-MW-7



n = 9

Slope = -12.64 units per year.

Mann-Kendall statistic = -32
critical = -25

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

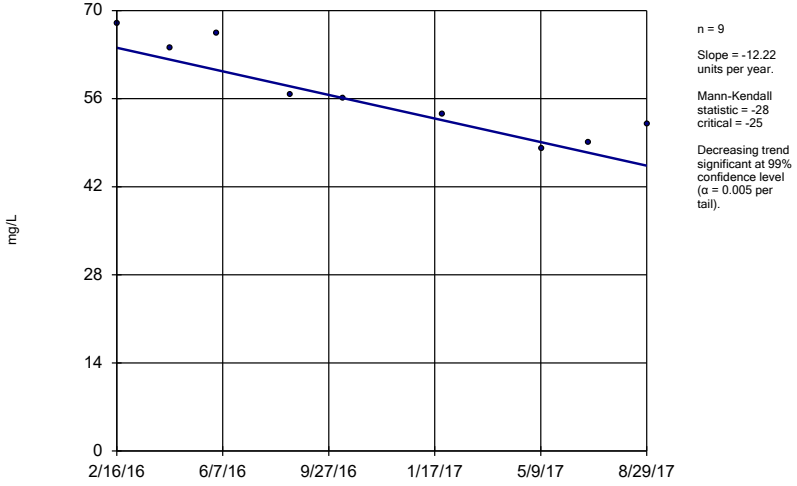
Constituent: Chloride Analysis Run 12/14/2017 9:51 AM View: Trend Tests - Initial SSI's

Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GC-AP-MW-8



n = 9

Slope = -12.22 units per year.

Mann-Kendall statistic = -28
critical = -25

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

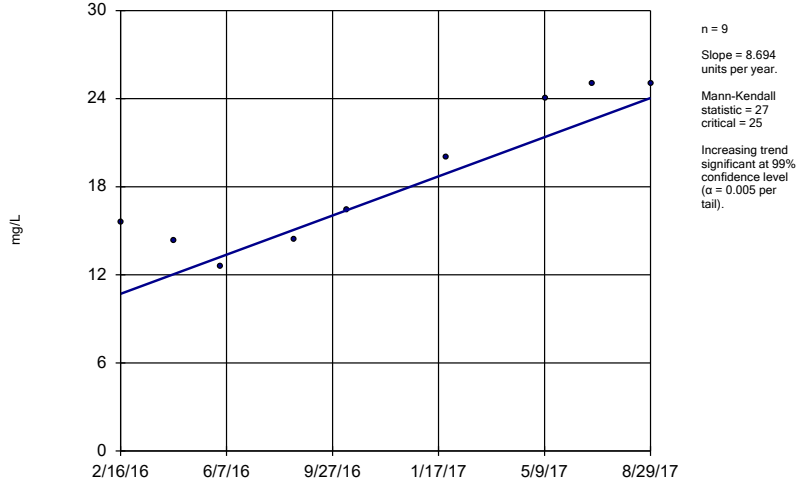
Constituent: Chloride Analysis Run 12/14/2017 9:51 AM View: Trend Tests - Initial SSI's

Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GC-AP-MW-9



n = 9

Slope = 8.694 units per year.

Mann-Kendall statistic = 27
critical = 25

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

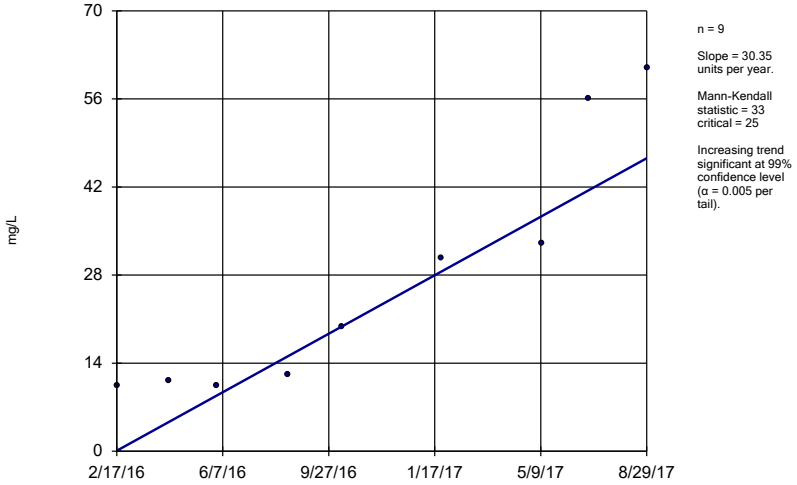
Constituent: Chloride Analysis Run 12/14/2017 9:51 AM View: Trend Tests - Initial SSI's

Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GC-AP-MW-24 (Bg)



n = 9

Slope = 30.35 units per year.

Mann-Kendall statistic = 33
critical = 25

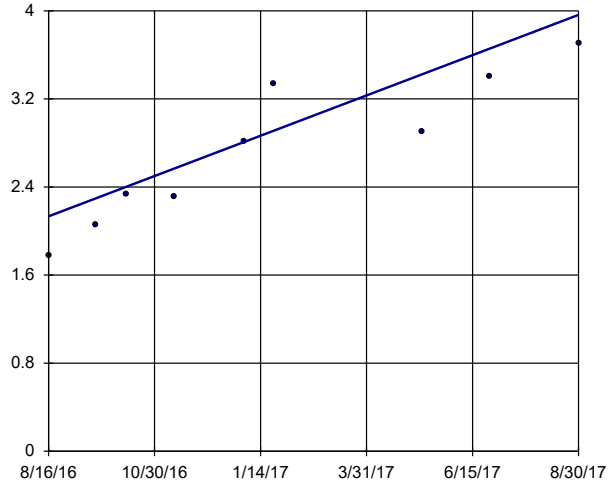
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/14/2017 9:51 AM View: Trend Tests - Initial SSI's
Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GC-AP-MW-31 (Bg)



n = 9

Slope = 1.762 units per year.

Mann-Kendall statistic = 32
critical = 25

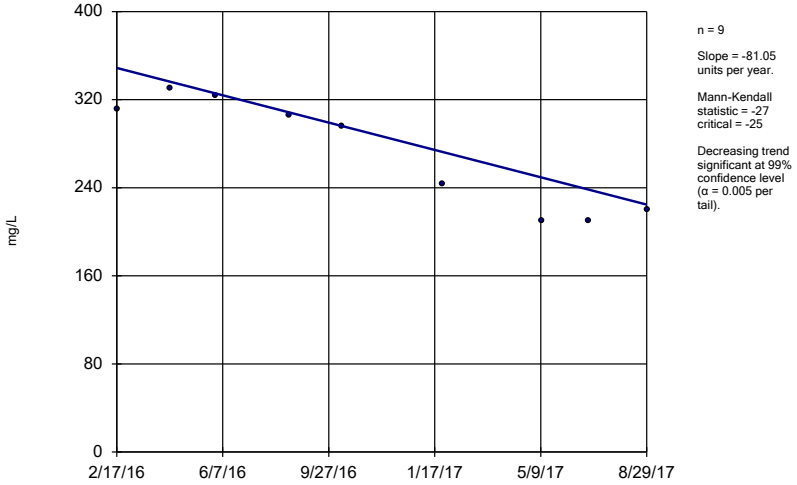
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/14/2017 9:51 AM View: Trend Tests - Initial SSI's
Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GC-AP-MW-7



n = 9

Slope = -81.05 units per year.

Mann-Kendall statistic = -27
critical = -25

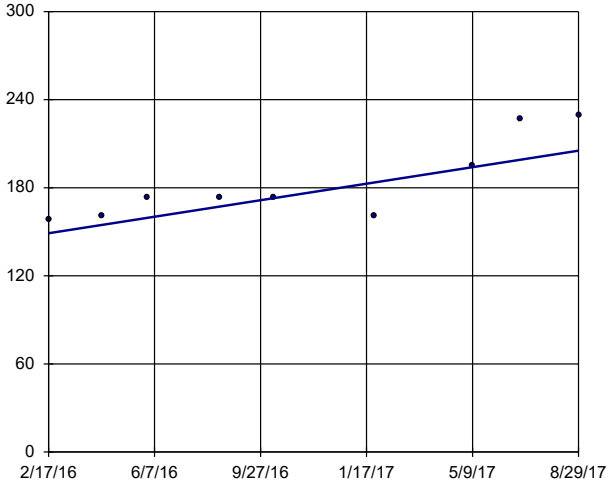
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: Sulfate Analysis Run 12/14/2017 9:51 AM View: Trend Tests - Initial SSI's
Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GC-AP-MW-11 (Bg)



n = 9

Slope = 36.73 units per year.

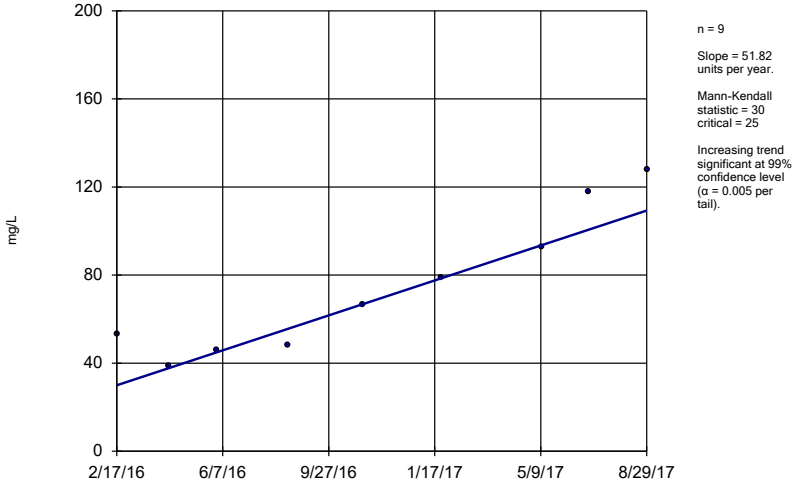
Mann-Kendall statistic = 26
critical = 25

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 12/14/2017 9:51 AM View: Trend Tests - Initial SSI's
Greene County Client: Southern Company Data: Greene County AP

Sen's Slope Estimator

GC-AP-MW-24 (Bg)



n = 9

Slope = 51.82 units per year.

Mann-Kendall statistic = 30 critical = 25

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

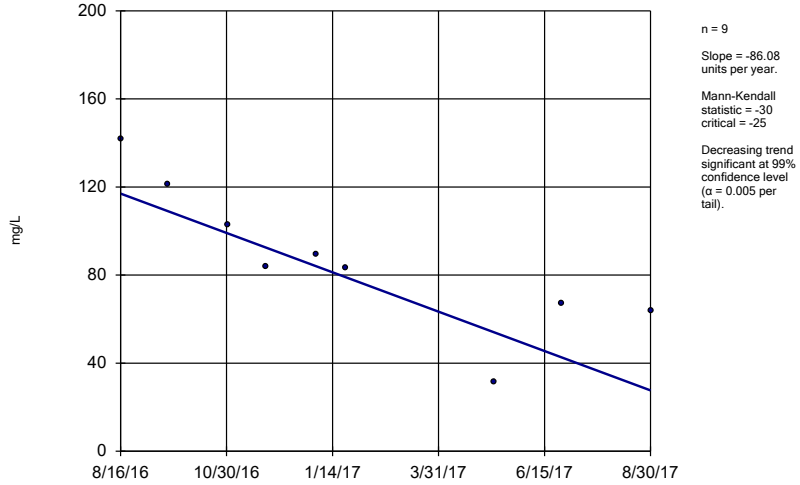
Constituent: TDS Analysis Run 12/14/2017 9:52 AM View: Trend Tests - Initial SSI's

Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GC-AP-MW-31 (Bg)



n = 9

Slope = -86.08 units per year.

Mann-Kendall statistic = -30 critical = -25

Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

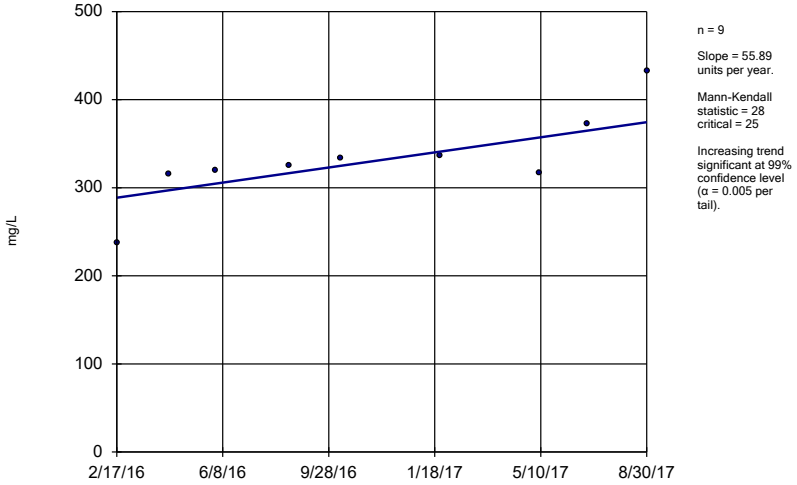
Constituent: TDS Analysis Run 12/14/2017 9:52 AM View: Trend Tests - Initial SSI's

Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GC-AP-MW-5



n = 9

Slope = 55.89 units per year.

Mann-Kendall statistic = 28 critical = 25

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

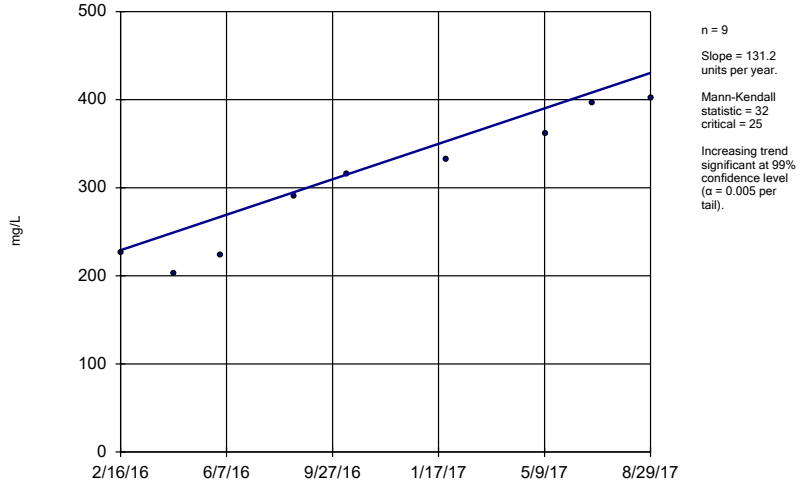
Constituent: TDS Analysis Run 12/14/2017 9:52 AM View: Trend Tests - Initial SSI's

Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GC-AP-MW-9



n = 9

Slope = 131.2 units per year.

Mann-Kendall statistic = 32 critical = 25

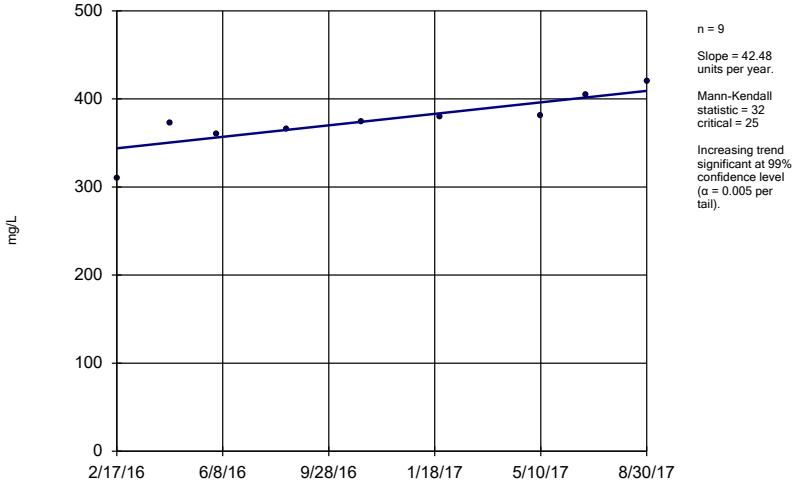
Increasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 12/14/2017 9:52 AM View: Trend Tests - Initial SSI's

Greene County Client: Southern Company Data: Greene County AP

Sen's Slope Estimator

GC-AP-MW-16



n = 9

Slope = 42.48 units per year.

Mann-Kendall statistic = 32
critical = 25

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

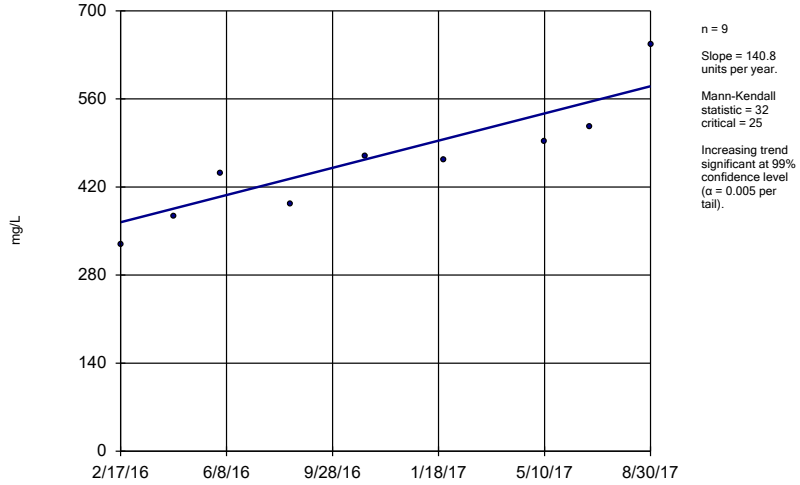
Constituent: TDS Analysis Run 12/14/2017 9:52 AM View: Trend Tests - Initial SSI's

Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GC-AP-MW-17



n = 9

Slope = 140.8 units per year.

Mann-Kendall statistic = 32
critical = 25

Increasing trend significant at 99% confidence level (α = 0.005 per tail).

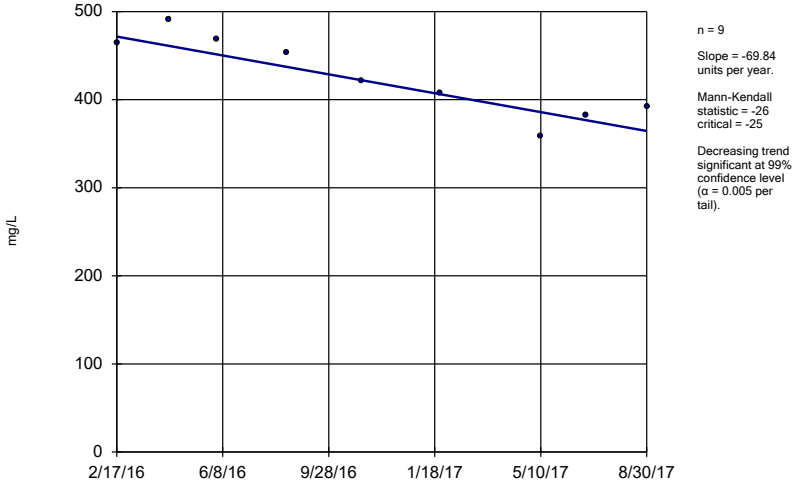
Constituent: TDS Analysis Run 12/14/2017 9:52 AM View: Trend Tests - Initial SSI's

Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

Sen's Slope Estimator

GC-AP-MW-18



n = 9

Slope = -69.84 units per year.

Mann-Kendall statistic = -26
critical = -25

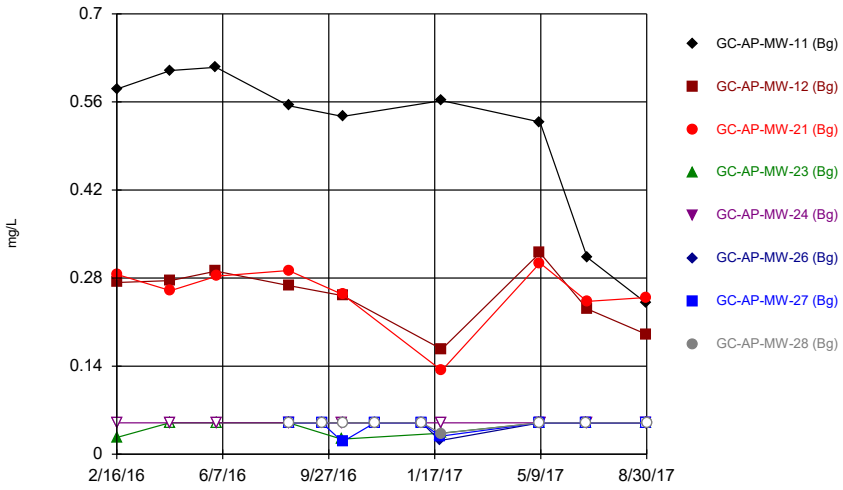
Decreasing trend significant at 99% confidence level (α = 0.005 per tail).

Constituent: TDS Analysis Run 12/14/2017 9:52 AM View: Trend Tests - Initial SSI's

Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG
Hollow symbols indicate censored values.

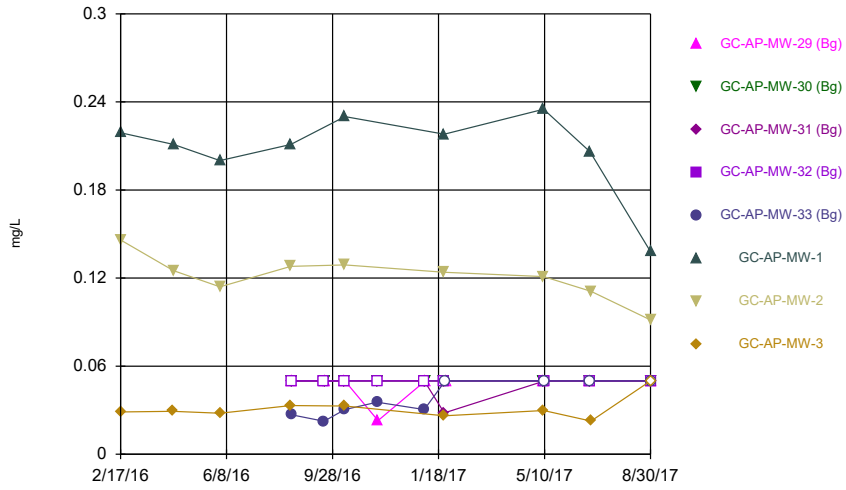
Time Series



Constituent: Boron Analysis Run 12/14/2017 9:35 AM View: Time Series
Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG
Hollow symbols indicate censored values.

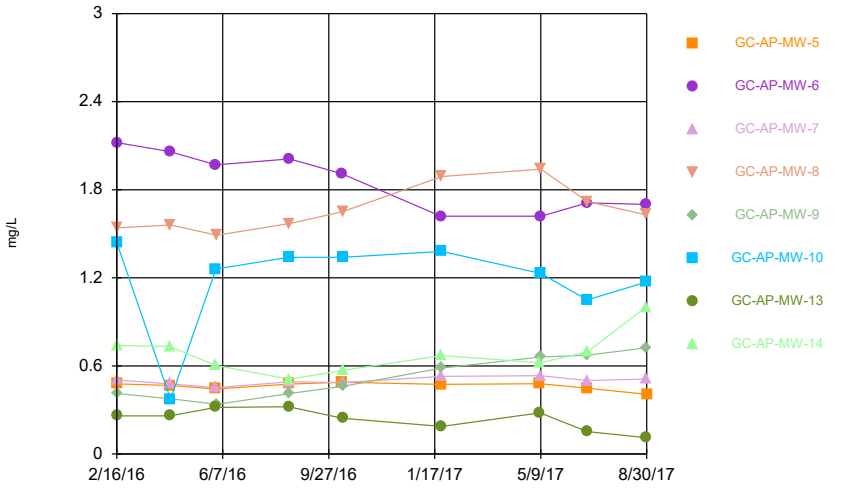
Time Series



Constituent: Boron Analysis Run 12/14/2017 9:35 AM View: Time Series
Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

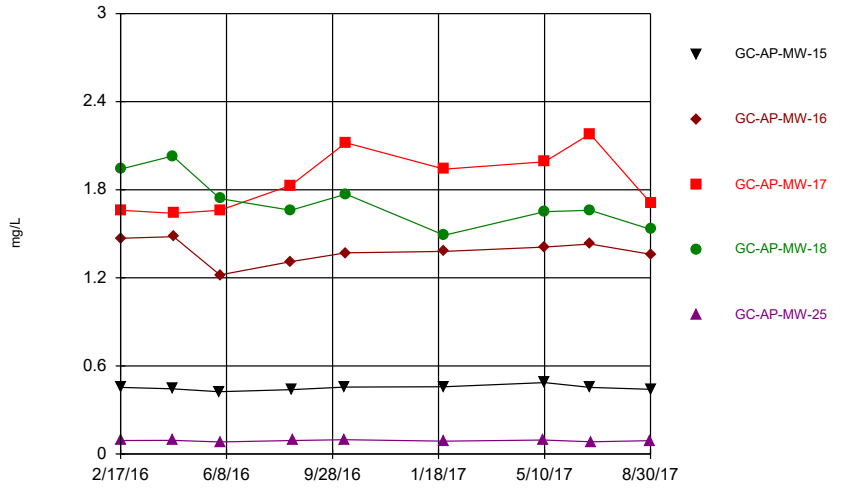
Time Series



Constituent: Boron Analysis Run 12/14/2017 9:35 AM View: Time Series
Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

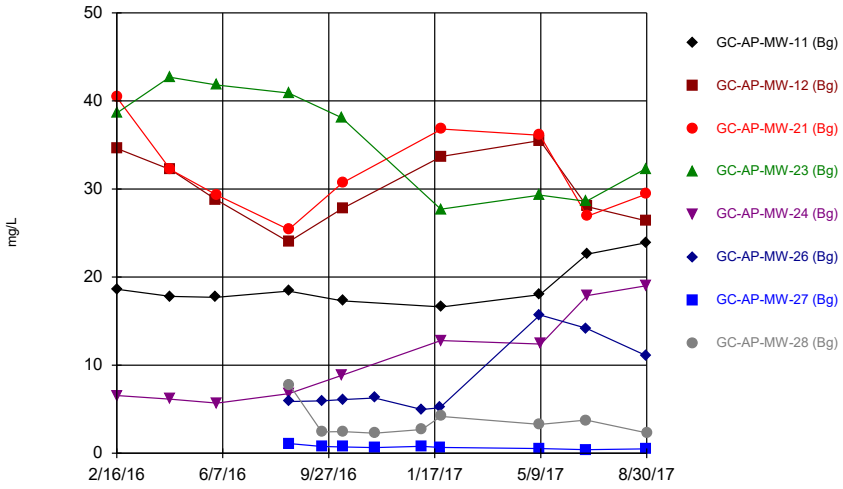
Time Series



Constituent: Boron Analysis Run 12/14/2017 9:35 AM View: Time Series
Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

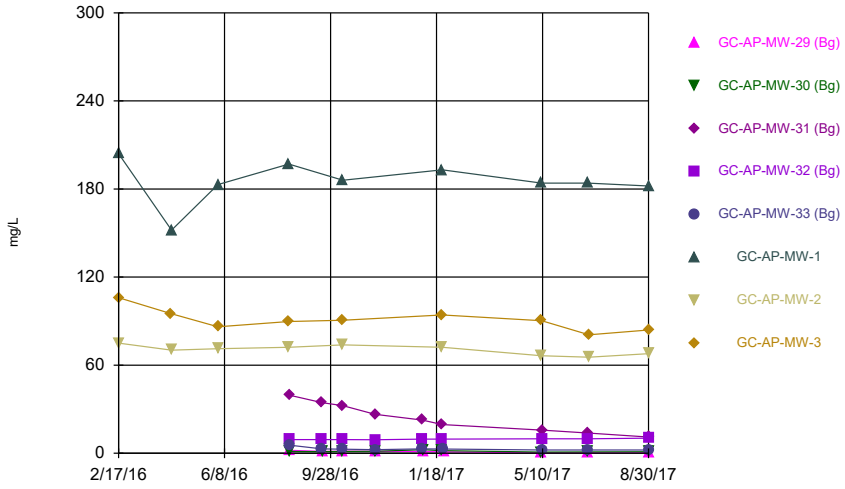
Time Series



Constituent: Calcium Analysis Run 12/14/2017 9:35 AM View: Time Series
Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

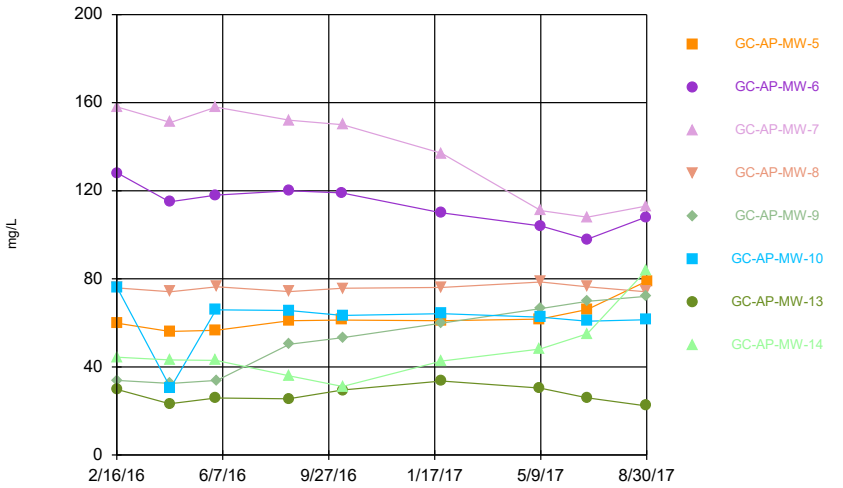
Time Series



Constituent: Calcium Analysis Run 12/14/2017 9:35 AM View: Time Series
Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

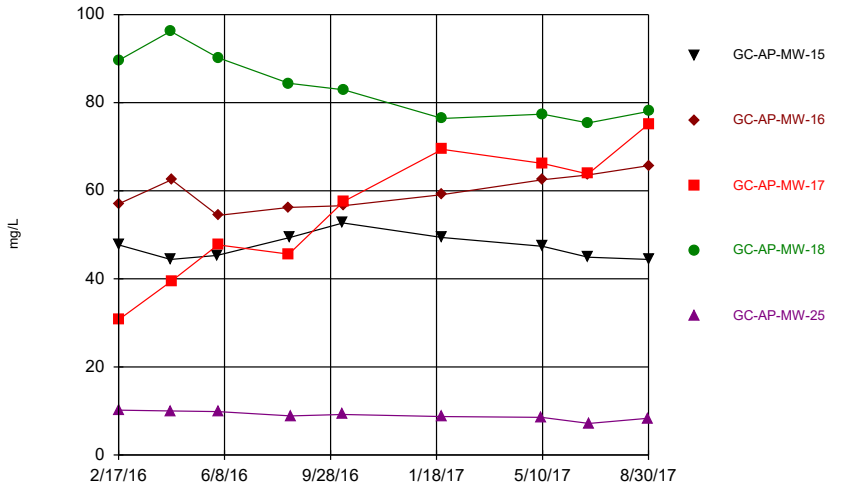
Time Series



Constituent: Calcium Analysis Run 12/14/2017 9:35 AM View: Time Series
Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

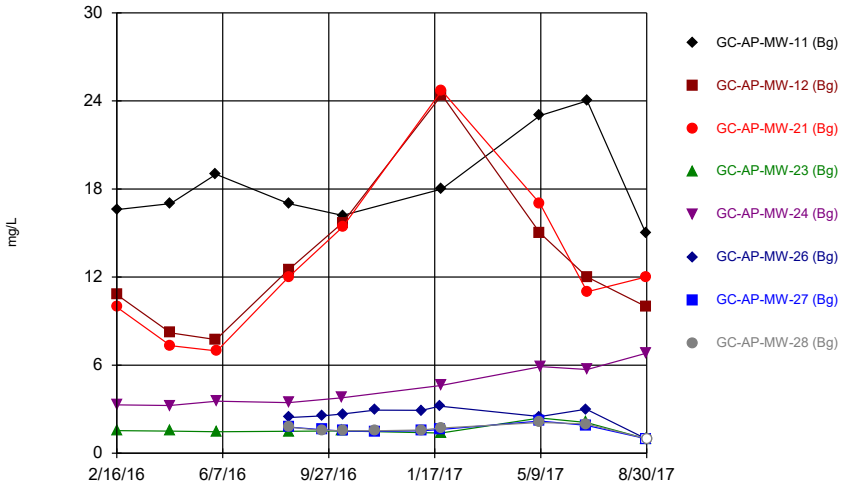
Time Series



Constituent: Calcium Analysis Run 12/14/2017 9:35 AM View: Time Series
Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG
Hollow symbols indicate censored values.

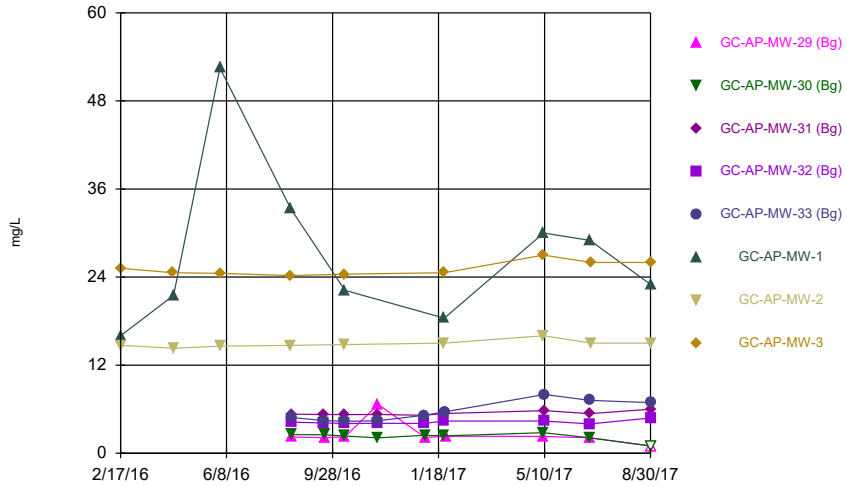
Time Series



Constituent: Chloride Analysis Run 12/14/2017 9:35 AM View: Time Series
Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG
Hollow symbols indicate censored values.

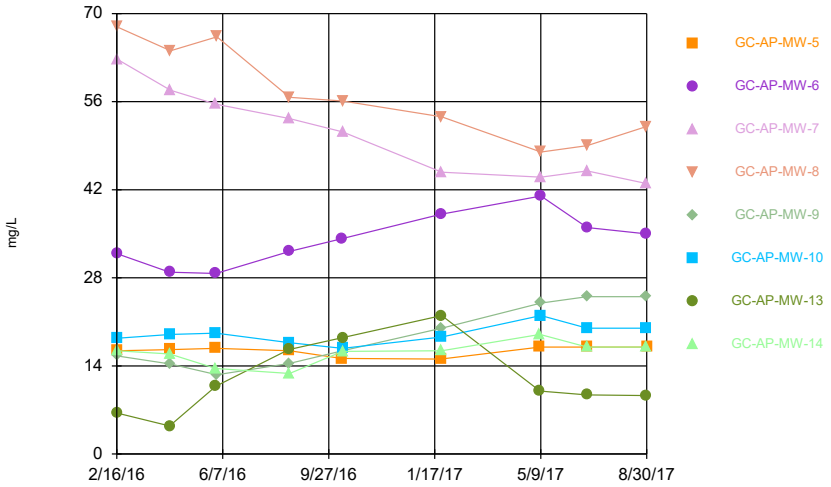
Time Series



Constituent: Chloride Analysis Run 12/14/2017 9:36 AM View: Time Series
Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

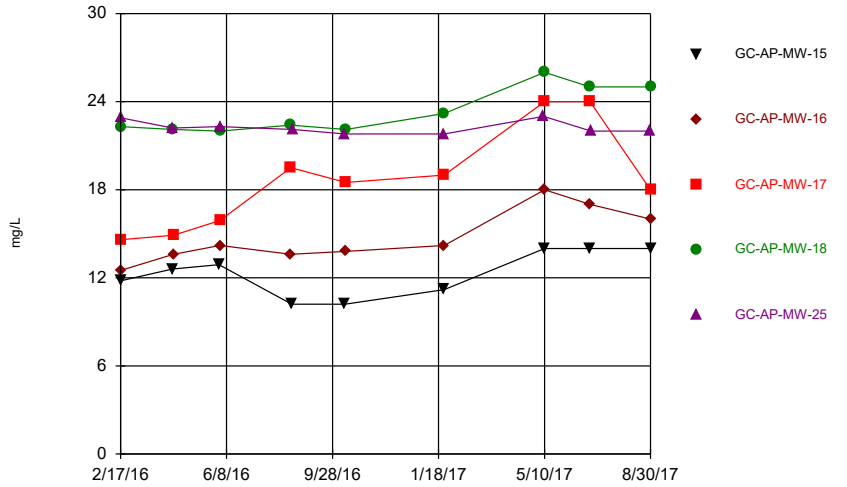
Time Series



Constituent: Chloride Analysis Run 12/14/2017 9:36 AM View: Time Series
Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

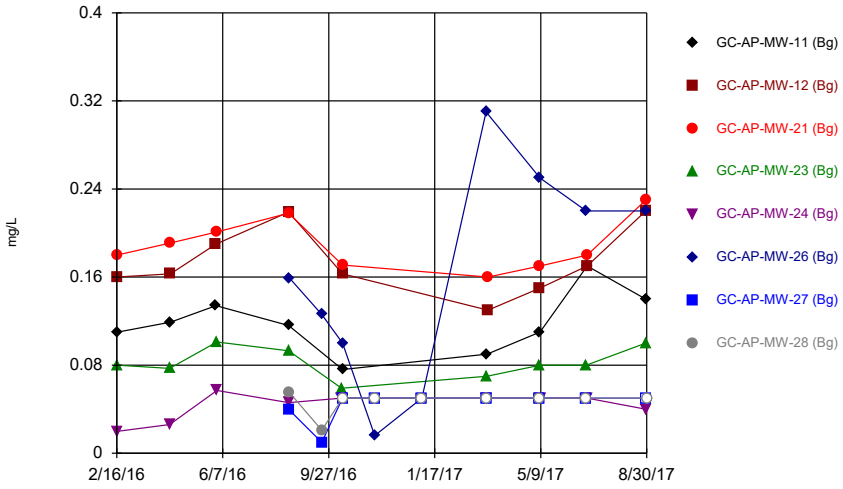
Time Series



Constituent: Chloride Analysis Run 12/14/2017 9:36 AM View: Time Series
Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG
Hollow symbols indicate censored values.

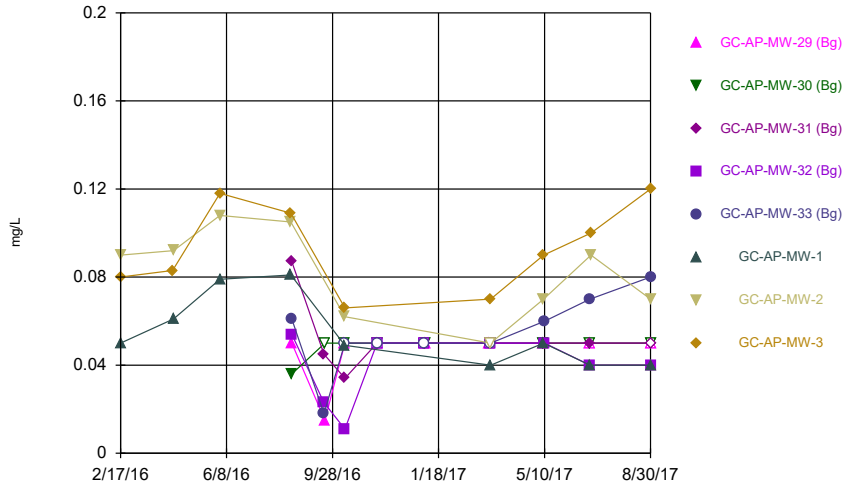
Time Series



Constituent: Fluoride Analysis Run 12/14/2017 9:36 AM View: Time Series
Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG
Hollow symbols indicate censored values.

Time Series



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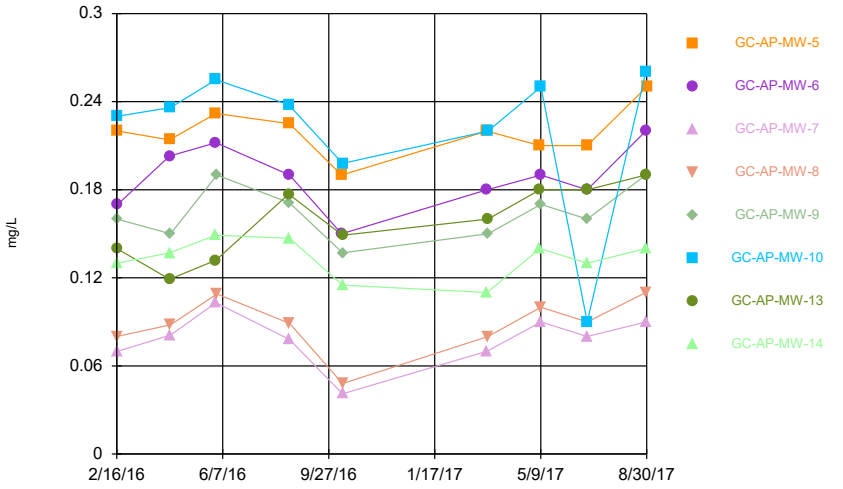
Time Series



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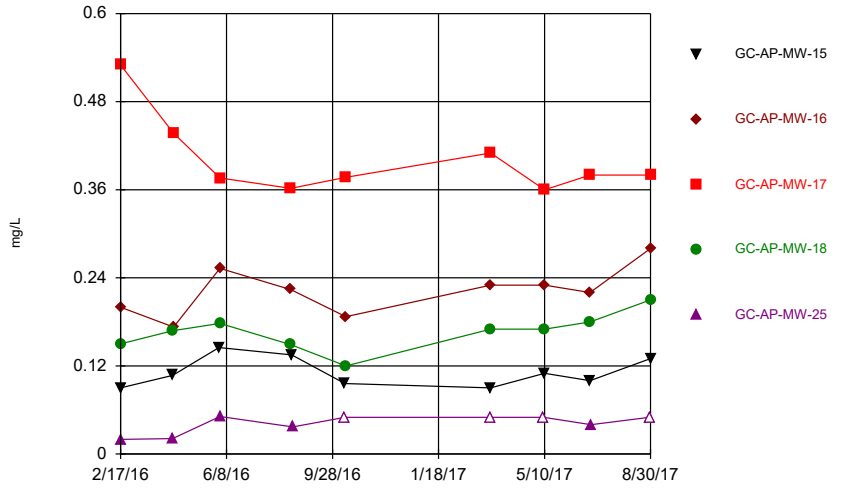
Time Series



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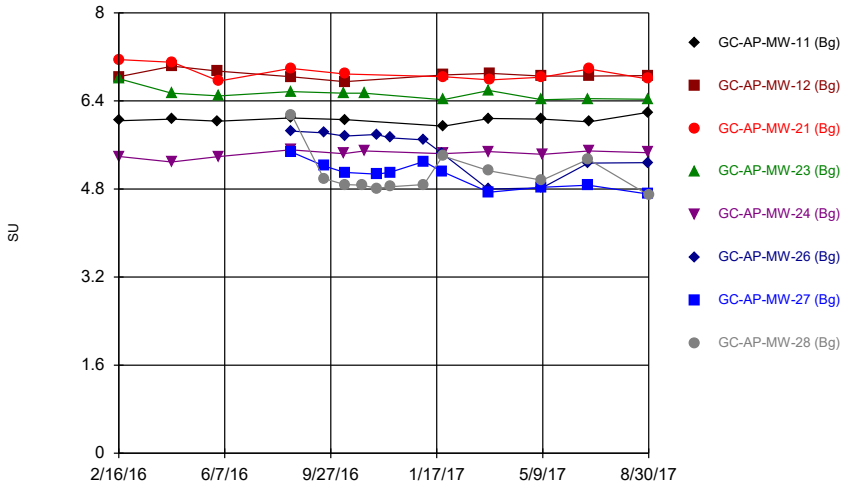
Time Series



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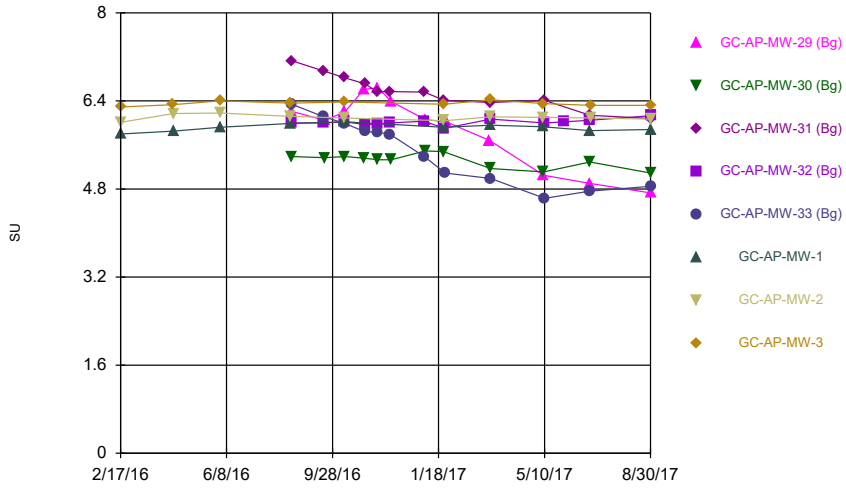
Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

Time Series



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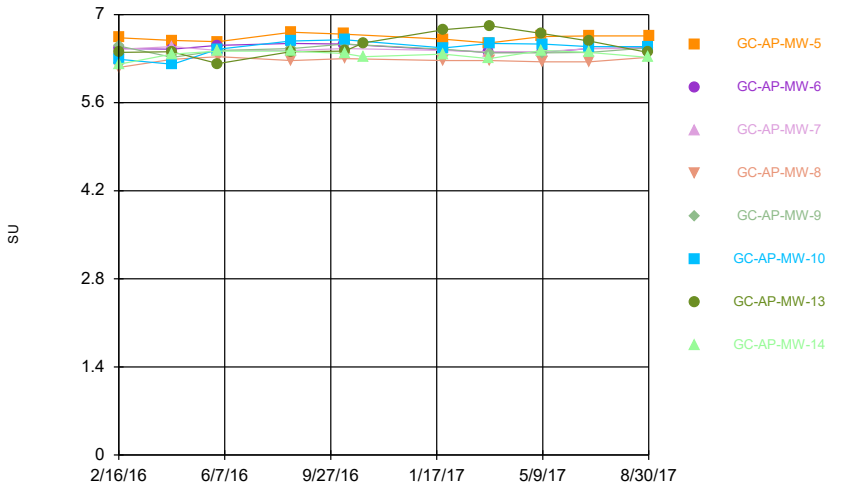
Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG

Time Series



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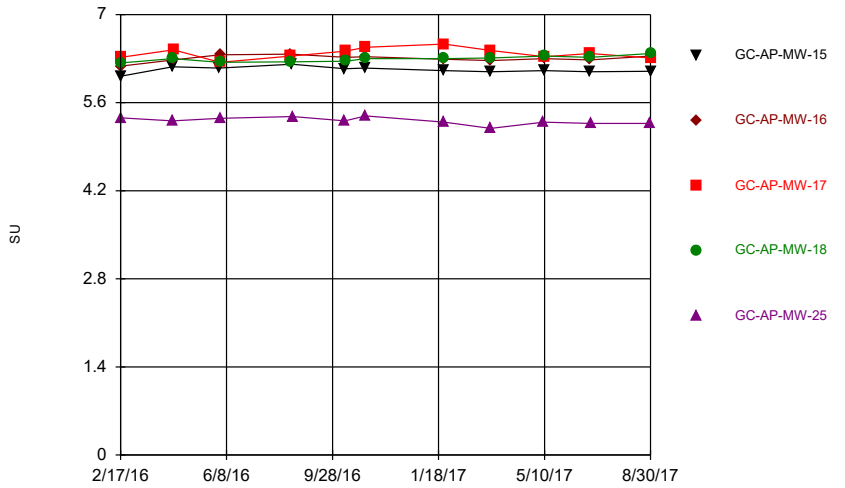
Time Series



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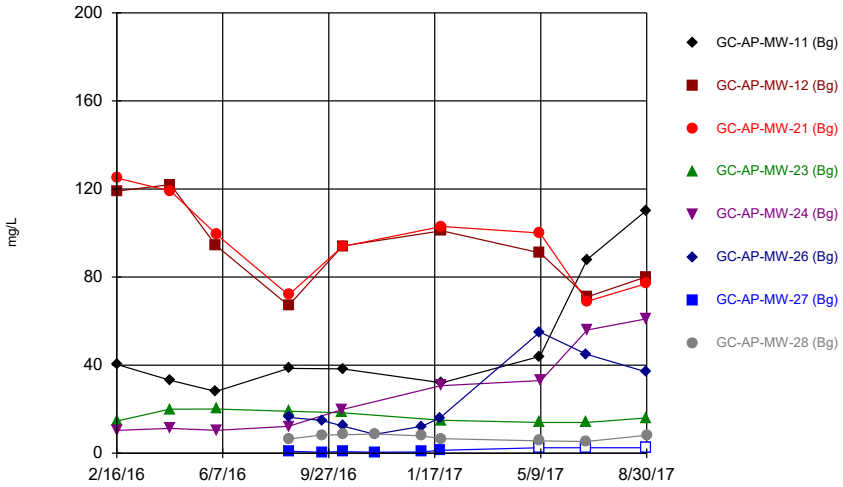
Time Series



Constituent: Sulfate Analysis Run 12/14/2017 9:36 AM View: Time Series
Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG
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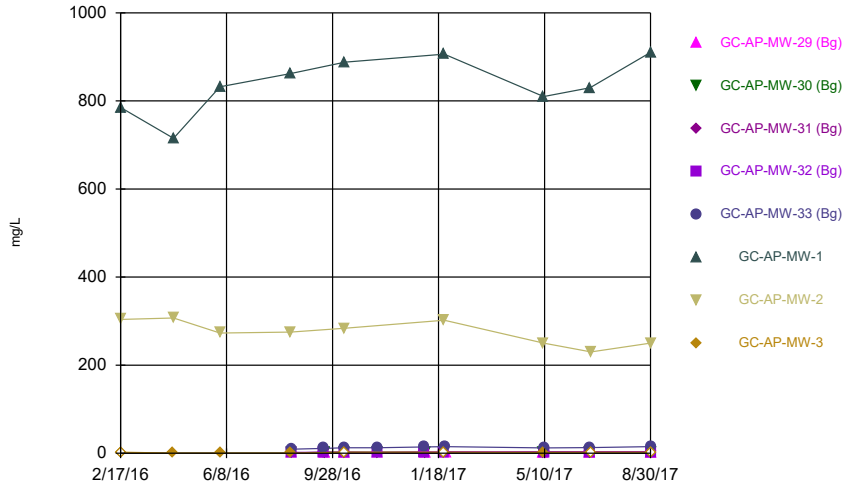
Time Series



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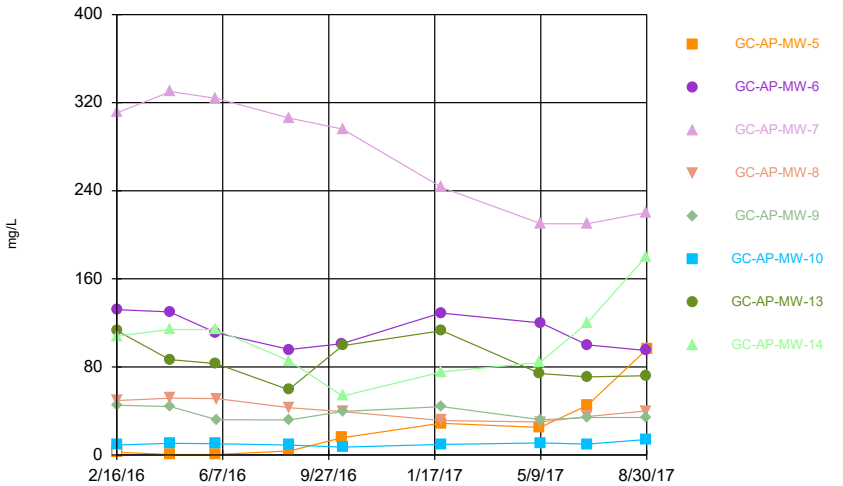

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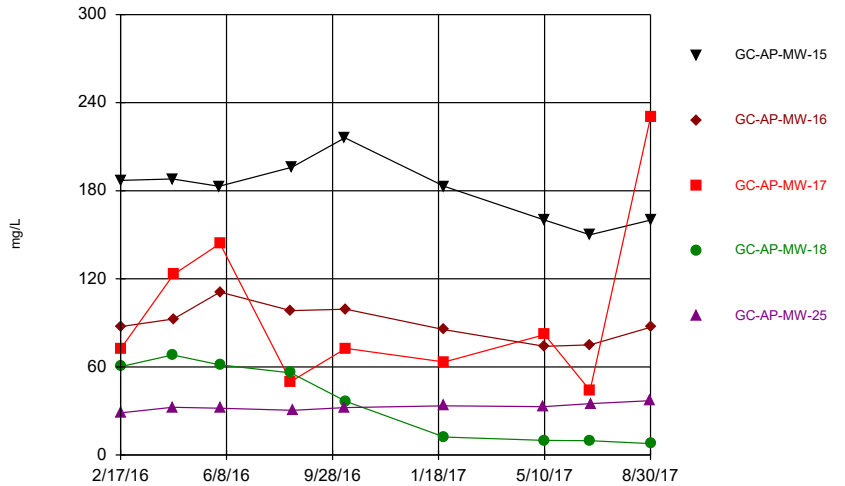
Time Series



Constituent: Sulfate Analysis Run 12/14/2017 9:36 AM View: Time Series
Greene County Client: Southern Company Data: Greene County AP

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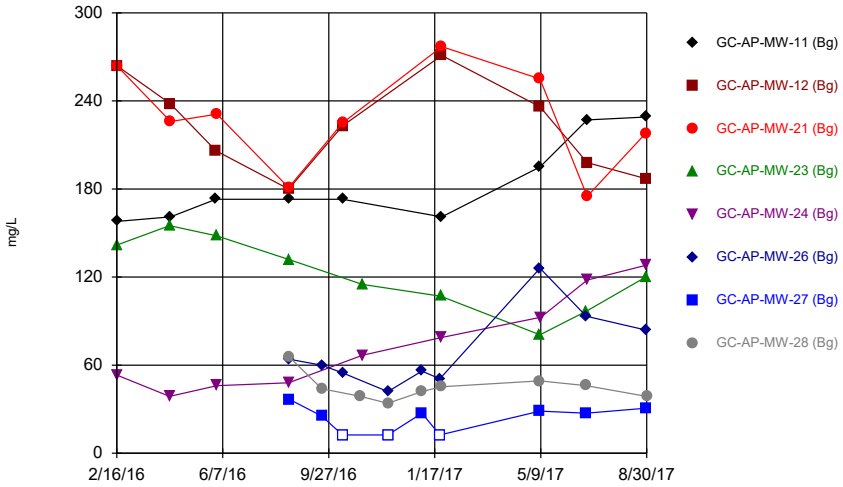
Time Series



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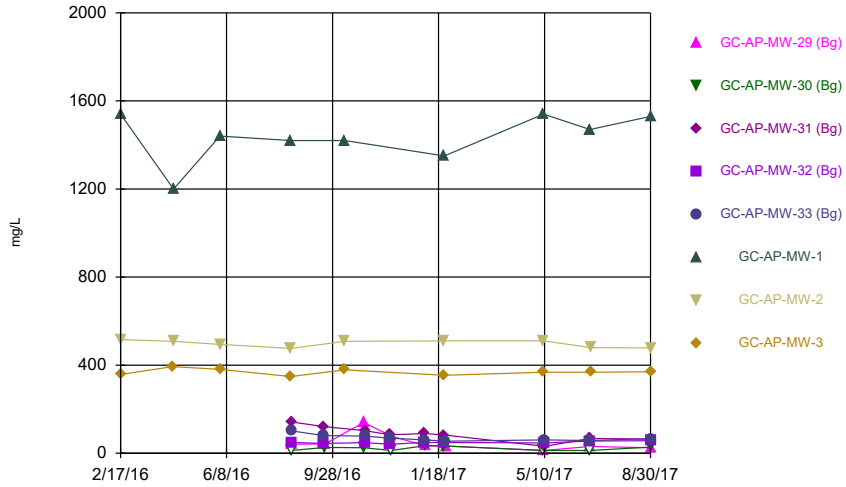
Greene County Client: Southern Company Data: Greene County AP

Sanitas™ v.9.5.32 Sanitas software licensed to Southern Company. UG
Hollow symbols indicate censored values.

Time Series



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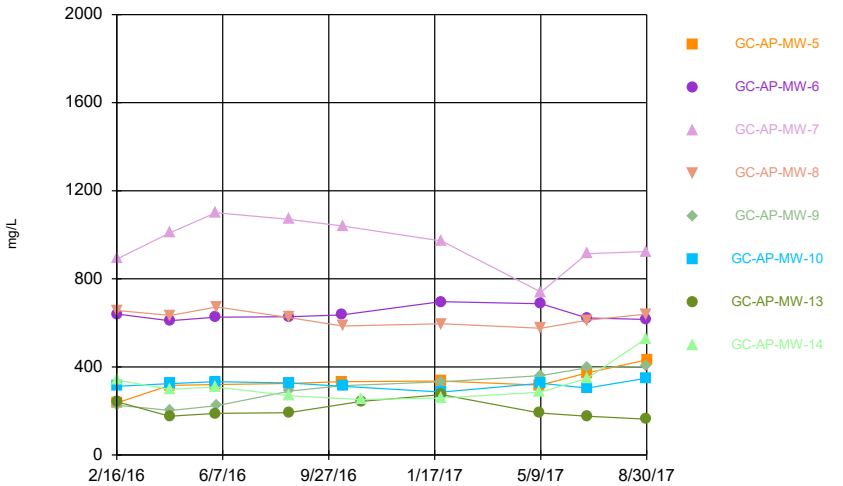
Time Series



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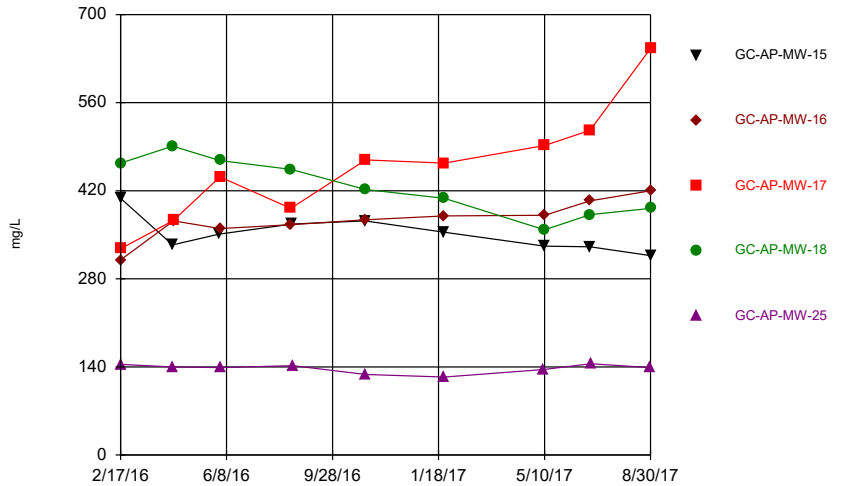
Time Series



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