

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

**MISSISSIPPI POWER COMPANY
PLANT VICTOR DANIEL
NORTH ASH MANAGEMENT UNIT**

January 31, 2018

Prepared for

Mississippi Power Company
Gulfport, Mississippi

By

Southern Company Services
Earth Science and Environmental Engineering



CERTIFICATION STATEMENT

This 2017 Annual Groundwater Monitoring and Corrective Action Report, Mississippi Power Company – Plant Daniel North Ash Management Unit has been prepared in compliance with the United States Environmental Protection Agency (EPA) coal combustion residual (CCR) rule (40 CFR 257 Subpart D) by a licensed professional geologist with Southern Company Services.



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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 at Plant Daniel North Ash Management Unit and satisfies the requirements of 40 CFR §257.90(e). Semi-annual monitoring and reporting for Plant Daniel is performed in accordance with the monitoring requirements §257.90 through §257.94.

1.1 Site Location and Description

Mississippi Power Company's (MPC)'s Plant Daniel is located within Section 35, Township 5 South, Range 6 West, Sections 37, 10, 15, East half of Section 9, Southwest ¼ of Section 2, NW ¼ and south half of Section 11, and the north half and NW ¼ of the SW ¼ of Section 14, all of Township 6 South, Range 6 West. Plant Daniel is situated immediately northwest of the intersection of Mississippi State Highways 63 and 613, between the Pascagoula River to the west and Highway 63 to the east. The site address is 13201 Highway 63 N, Escatawpa, Mississippi 39562. Figure 1, Site Location Map, depicts the location of Plant Daniel relative to site features and the surrounding area.

The North Ash Management Unit occupies approximately 38 acres along the northeast portion of the property. Figure 2, Site Plan and Well Location Map, depicts the general configuration of the North Ash Management Unit and the site monitoring well network.

1.2 Regional Geology & Hydrogeologic Setting

Jackson County lies in the Pascagoula River Drainage Basin in the Gulf Coastal Plain physiographic province. Topographically, the province is gently rolling to flat with local salt marshes. Rock outcrops are sedimentary in origin and range in age from late Miocene to Recent (Gandl, 1982). A dominant regional structural feature which affects the sediments of Miocene and younger age is the Gulf Coast geosyncline. The sediments dip toward the Gulf of Mexico. Where formations are near the surface, dips are from 15 to 35 feet/mile. Further from the outcrop, dips increase dramatically with depth. Fresh-water aquifers in the Pascagoula area are sand or sand and gravel beds of Miocene age or younger, generally less than 1,000 feet below the surface.

The surface geology of soils near Plant Daniel results from present-day weathering processes dictated by southern Mississippi's semi-tropical climate and the parent geologic materials. The soil profile formed from a wide variety of sediments of recent age, and from Pleistocene terrace deposits. The soils therefore contain sand, silt, clay, gravel and organics

Studies prepared by Southern Company Services, establish five geologic units underlying the immediate Plant Daniel property:

- Unit 1 is a sandy clay aquitard. The unit is discontinuous across the Plant Daniel site and extends from the surface to approximately 32 feet deep in some areas.
- Unit 2 is a sand aquifer, which extends to approximately 70 feet and is considered the uppermost aquifer for groundwater monitoring purposes.
- Unit 3 is a clay aquitard underlying Unit 2 with thicknesses ranging from 2.5 to 9.5 feet at Plant Daniel.
- Unit 4 is a sand and gravel aquifer with a thickness of 34 feet or greater.
- Unit 5 is a clay aquitard.

Fifteen principal aquifers underlie about 75 percent of the state of Mississippi. Two aquifers supply water to the Pascagoula area. These are the Pliocene-age Citronelle and the Miocene Aquifer System, which includes the Graham Ferry Aquifer. Plant Daniel is located in the Citronelle outcrop area.

The Citronelle Aquifers are the shallowest aquifers in the Pascagoula area. Although principally a sand and gravel formation, the Citronelle is characterized by occasional lenses and layers of clay which may cause semi-artesian conditions. Sediments become coarse near the irregular contact with the underlying Pascagoula or Graham Ferry Formation. Also, the Citronelle and overlying coastal deposits are generally considered one hydrogeologic unit. The Citronelle is primarily a water table aquifer with a saturated thickness of about 45 feet. Recharge is primarily by rainfall which moves vertically and down dip to recharge underlying aquifers and to sustain local streams (Wasson, 1978).

1.3 Groundwater Monitoring System

Pursuant to §257.91, Plant Daniel has installed a groundwater monitoring system to monitor groundwater within the uppermost aquifer (Unit 2). The certified groundwater monitoring system for the North Ash Management Unit is designed to monitor groundwater passing the waste boundary of the CCR unit within the uppermost aquifer. Wells were located to serve as upgradient or lateral and downgradient monitoring points based on groundwater flow direction as determined by Figure 3, Potentiometric Surface Contour Map – October 2017. Table 1, Monitoring Well Network Summary, presents details regarding the certified monitoring well network for the North Ash Management Unit.

Table 1
Monitoring Well Network Summary

Well ID	Purpose	Installation Date	Northing	Easting	Total Hole Depth (feet)	Top of Casing Elevation (feet MSL)	Ground Elevation (feet MSL)	Top of Screen Elevation (feet MSL)	Bottom of Screen Elevation (feet MSL)
MW-11	Upgradient	5/2/2006	384799.650	1068944.060	32	26.57	24.3	-0.72	-5.72
MW-14	Upgradient	7/24/2015	384049.963	1068917.138	47	24.67	22.0	-10.70	-15.70
MW-15	Downgradient	7/24/2015	383505.239	1068571.657	37	22.56	19.8	-11.50	-16.50
MW-16	Downgradient	7/24/2015	383594.869	1067846.541	28	17.15	14.2	-5.90	-10.90
MW-17	Downgradient	7/24/2015	384782.799	1067808.703	27	16.41	13.7	-6.70	-11.70
MW-18	Upgradient	7/24/2015	385292.217	1068774.681	47	29.95	27.4	-9.10	-14.10
MW-19	Downgradient	7/26/2016	384161.633	1067702.659	30	25.51	22.5	-2.10	-7.10

2.0 PRECEDING YEAR MONITORING ACTIVITIES

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 monitoring-related activities performed prior to 2017. All groundwater sampling was performed according to §257.93. Samples were collected from each well in the certified monitoring system shown on Figure 2.

Pursuant to §257.90(e)(3), Table 2, Groundwater Sampling Event Summary, presents a summary of groundwater sampling events completed for each well during 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 data, detection monitoring event, verification event) as well as the status of each well (i.e., detection).

Table 2. Historical Well Sampling Summary

Table 2. Historical Well Sampling Summary									
	Background								Detection
Event	B.1	B.2	B.3	B.4	B.5	B.6	B.7	B.8	D.1
Date	3/2016 & 9/2016	5/2016 & 11/2016	7/2016 & 1/2017	9/2016 & 2/2017	11/2016 & 3/2017	1/2017 & 4/2017	3/2017 & 5/2017	5/2017 & 6/2017	10/2017

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

2.1 Monitoring Well Installation and Maintenance

Monitoring well-related activities included installing a groundwater monitoring system for the North Ash Management Unit during May 2006, July 2015, and July 2016. In accordance with §257.91, a groundwater monitoring system has been installed that (1) consists of a sufficient number of wells, (2) installed at appropriate locations and depths to yield groundwater samples from the uppermost aquifer, and (3) meets the performance standards of §257.91(a).

2.2 Background Groundwater Monitoring

In accordance with §257.94(b), Plant Daniel collected 8 independent samples from each background and downgradient well and analyzed for the constituents listed in Appendix III and Appendix IV.

Background sampling was performed over the period March 2016 through June 2017. Pursuant to §257.90(e)(3), analytical data reports for each of the background sampling events are included as Appendix A, Analytical Results.

2.3 Initial Detection Groundwater Sampling

Following background monitoring (and prior to October 17, 2017), the initial detection monitoring event was completed by collecting an additional round of groundwater samples. Groundwater samples were collected from each monitoring well and analyzed for Appendix III constituents according to §257.94(a). Data reports for the initial detection monitoring event are included in Appendix A.

3.0 SAMPLE METHODOLOGY & ANALYSES

The following describes the methods used to complete groundwater monitoring at Plant Daniel.

3.1 Groundwater Elevation Measurement

Prior to each sampling event, groundwater elevations were recorded from monitoring wells for the North Ash Management Unit at Plant Daniel. Historic elevations are summarized on Table 3, Summary of Groundwater Elevations. Water level data was used to develop a potentiometric surface elevation contour map shown as Figure 3, Potentiometric Surface Contour Map – October 2017. As shown on Figure 3, the general direction of groundwater flow across the site is toward the southwest to the Pascagoula River. The groundwater flow pattern observed following the October 2017 detection monitoring event is consistent with previous observations.

**Table 3
 Summary of Groundwater Elevations**

Well ID	Top of Casing Elevation	Groundwater Elevations											
		(feet MSL)											
	(feet MSL)	3/21/16	5/16/16	7/11/16	9/12/16	11/16/16	1/16/17	2/10/17	3/20/17	4/14/17	5/22/17	6/26/17	10/16/2017
MW-11	26.57	16.06	14.10	13.19	13.28	12.25	14.08	--	13.45		13.55	--	15.17
MW-14	24.67	14.94	12.62	11.86	11.99	11.17	12.65	--	12.13		12.23	--	13.70
MW-15	22.56	13.75	10.85	10.28	10.40	9.75	10.97	--	10.56		10.63	--	11.44
MW-16	17.15	11.99	7.13	6.60	6.72	6.32	7.57	--	7.14		7.13	--	7.86
MW-17	16.41	12.76	9.32	8.75	8.67	8.21	9.29	--	8.79		8.78	--	9.48
MW-18	29.95	15.80	13.93	12.95	12.97	12.04	13.85	--	13.19		13.28	--	14.95
MW-19	25.51	--	--	--	6.15	5.76	7.17	6.75	6.70	7.58	6.62	11.99	7.29

3.2 Groundwater Gradient and Flow Velocity

The groundwater flow velocity at Plant Daniel was calculated using a derivation of Darcy's Law. Specifically,

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

Where:

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

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

i = Horizontal hydraulic gradient

n_e = Effective porosity

Table 4: Groundwater Flow Velocity Calculations – October 2017

Flow Path		Hydraulic Gradient (I) (feet/feet)	Average Hydraulic Conductivity (K) (feet/day)	Assumed Effective Porosity (n_e)	Calculated Groundwater Flow Velocity (feet/day)	Calculated Groundwater Flow Velocity (feet/year)
October 2017	A	0.0049	25.09	0.2	0.61	222.7
	B	0.0056	25.09	0.2	0.70	255.5

Groundwater flow at the site is to the southwest. Groundwater monitoring wells MW-14 and MW-16 were used as points for calculating Flow Path A and MW-11 and MW-19 were used to calculate Flow Path B. As shown in Table 4, Groundwater Flow Velocity Calculations – October 2017, horizontal hydraulic gradients range from 0.0049 ft/ft to 0.0056 ft/ft. Hydraulic conductivity was calculated to be $8.8 * 10^{-3}$ cm/s (25.09 ft/day). The average linear velocity (i.e., rate of horizontal groundwater movement) was calculated to range from 0.61 to 0.70 ft/day (222.7 to 255.5 ft/year).

3.3 Groundwater Sampling

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

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

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

3.4 Laboratory Analyses

Groundwater samples collected for background data included both Appendix III and Appendix IV parameters. Groundwater samples collected during the initial October 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.

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.

All laboratory analyses were performed by Test America, Inc. (TAL) of Pensacola, Florida. TAL is accredited by National Environmental Laboratory Accreditation Program (NELAP). TestAmerica maintains a NELAP certification for all parameters analyzed for this project. Groundwater analytical data and chain-of-custody records for the monitoring events are presented in Appendix A.

3.5 Quality Assurance and Quality Control

During each sampling event, quality assurance/quality control samples (field blanks) are collected at a rate of one sample per every 10 detection samples. QA/QC samples are analyzed for target constituents listed in the site groundwater monitoring plan. In addition, samplers prepared equipment blanks (where non-dedicated sampling equipment is used) and duplicate sample for quality control during each of the CCR sampling events. Data from these QA/QC samples is evaluated during data validation and kept in the site operating record. QA/QC analytical results are included as part of the laboratory analysis included in Appendix A.

Groundwater quality data in this report was independently validated in accordance with USEPA guidance (USEPA, 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 digestions 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 USEPA procedures as guidance (USEPA, 2017). Flagged data is identified in the statistical analysis reports described in the following section.

4.0 STATISTICAL ANALYSIS

The following describes statistical analysis of Appendix III groundwater monitoring data performed pursuant to §257.93(h).

4.1 Statistical Method

The Sanitas Groundwater statistical software was used to perform the statistical analyses. Sanitas is a decision support software package that incorporates the statistical tests required of Subtitle C and D facilities by USEPA regulations and guidance as recommended in the Unified Guidance (USEPA, 2009) document. Specific test information is provided below.

At Plant Daniel, intrawell prediction limits (PL) are used to compare the most recent sample to prediction limits constructed from carefully screened historical data from within the same well for each of the Appendix III parameters and determine whether any concentrations exceed background levels. The selected statistical method includes a 1-of-2 verification resample plan. When an initial statistically significant increase (SSI) or questionable result occurs, a second sample may be collected to verify the initial result or determine if the result was an outlier. When resampling is performed, an SSI is determined only if the resample verifies the initial exceedance (i.e. the resample also exceeds the PL). If resampling is not performed, the initial exceedance is a confirmed exceedance.

Parametric methods are utilized when historical data follow a normal or transformed-normal distribution. If the data cannot be normalized, or most of data are non-detects, a nonparametric test is utilized. The distribution of data is tested using the Shapiro-Wilk/Shapiro-Francia test for normality. After testing for normality and performing any adjustments as discussed below (EPA, 2009), data are analyzed using either parametric or non-parametric prediction limits.

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

- Statistical analyses are not required for analytes containing 100% non-detects (EPA Unified Guidance, 2009, Chapter 6).
- When data contain less than 15% non-detects in 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. This technique adjusts the mean and standard deviation of the historical concentrations to account for concentrations below the reporting limit.
- Nonparametric prediction limits are used on data containing greater than 50% non-detects.

4.2 Statistical Analyses Results

Analytical data from the initial detection monitoring event in October 2017 were statistically analyzed using intrawell comparisons, in accordance with the site's PE-certified statistical method, and as described in the preceding section. Based on the initial statistical analysis, apparent unverified exceedances of the statistical limits were observed. Verification samples were collected to confirm the initial exceedances according to the resampling plan in the PE-certified statistical analysis method. Independent verification resamples were collected on December 15, 2017, and the analytical data statistically re-evaluated. None of the initial exceedances were confirmed by the verification resampling and subsequent statistical re-analysis; therefore, there were no confirmed SSIs during the initial detection groundwater monitoring event. The statistical analysis and comparison to prediction limits are included as Appendix B, Statistical Analysis.

4.3 Appendix IV Background Data

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

5.0 MONITORING PROGRAM STATUS

Presently, Plant Daniel North Ash Management Unit is in detection monitoring. Statistical analysis of groundwater quality data has not identified any verified SSIs and the site will continue detection monitoring.

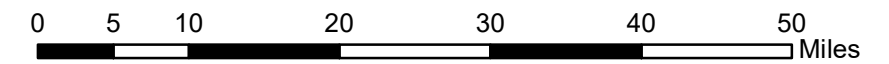
6.0 CONCLUSIONS & FUTURE ACTIONS

Statistical evaluations of the groundwater monitoring data for the Gypsum Storage Area identified initial apparent statistical exceedances of Appendix III groundwater monitoring parameters however, after conducting verification resampling, it was confirmed that statistical exceedances of Appendix III groundwater monitoring parameters did not exist. Therefore, the site remains in Detection Monitoring and will perform the next regularly scheduled semi-annual sampling event scheduled for April 2018.

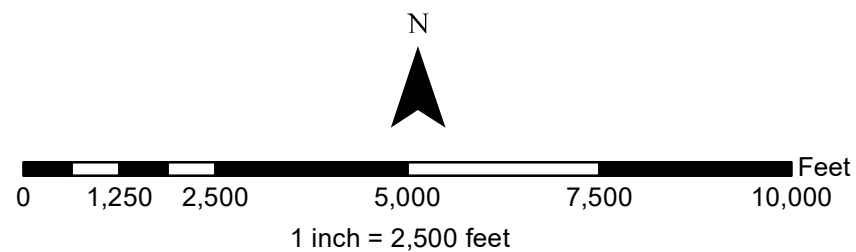
7.0 REFERENCES

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FIGURES



Legend	
	North Ash Management Unit (NAMU) Boundary
	Gypsum Storage Area (GSA) Boundary
	Ash Pond B Boundary
	Property Boundary (Approximate)



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

FOR





**PLANT DANIEL
NORTH ASH MANAGEMENT UNIT
FIGURE 1
SITE LOCATION MAP**

Mississippi Power Company


Drawing Number ES4057S1



Legend

-  Monitoring Well Location
-  North Ash Management Unit (NAMU) Boundary
-  Property Boundary (Approximate)
-  Topographic Contour

N



0 125 250 500 750 1,000 Feet

1 inch = 250 feet

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**PLANT DANIEL
NORTH ASH MANAGEMENT UNIT
FIGURE 2
SITE PLAN AND WELL LOCATION MAP**

**Southern Company Services
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FOR

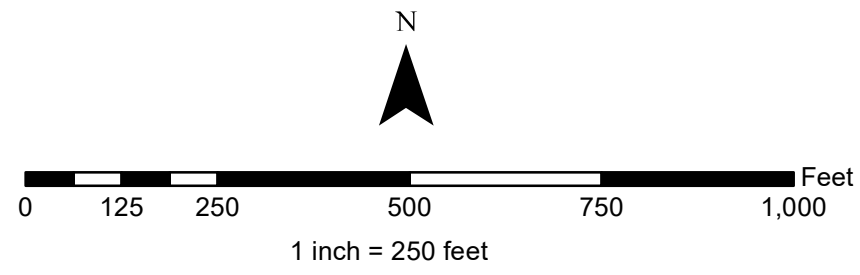
Mississippi Power Company

Drawing Number ES4057S2



Legend

- Monitoring Well Location
- Estimated Potentiometric Contour
- Approximate Groundwater Flow Direction
- North Ash Management Unit (NAMU) Boundary
- Property Boundary (Approximate)



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**PLANT DANIEL
NORTH ASH MANAGEMENT UNIT
FIGURE 3
POTENTIOMETRIC SURFACE
CONTOUR MAP - OCTOBER 2017**

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FOR

Mississippi Power Company

Drawing Number ES4057S3

APPENDIX - A

ANALYTICAL RESULTS

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: 400-119192-1

TestAmerica Sample Delivery Group: Mississippi

Client Project/Site: CCR -Plant Daniel

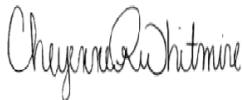
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:

4/25/2016 4:20:31 PM

Cheyenne Whitmire, Project Manager II

(850)474-1001

cheyenne.whitmire@testamericainc.com

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results through

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

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

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

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Case Narrative

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Job ID: 400-119192-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-119192-1

RAD

Method(s) PrecSep_0: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/DUP) associated with Ra228 batch(243092).

Method(s) PrecSep-21: Radium-226 Prep Batch 160-242272: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: MW-1 (400-119192-1), MW-2 (400-119192-2), MW-3 (400-119192-3), MW-4 (400-119192-4), MW-5 (400-119192-5), MW-6 (400-119192-6), MW-7 (400-119192-7), MW-8 (400-119192-8), MW-9 (400-119192-9), MW-10 (400-119192-10), MW-12 (400-119192-11), MW-13 (400-119192-12), MW-15 (400-119192-13), MW-16 (400-119192-14), MW-17 (400-119192-15), MW-18 (400-119192-16), EB-01 (400-119192-17), FB-01 (400-119192-18), DUP-01 (400-119192-19) and DUP-02 (400-119192-20). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead.

Metals

Method(s) 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 298973 and analytical batch 300530 were outside control limits for Lithium. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) 7470A: The method blank for prep batch 300994 contained Mercury above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-analysis of samples was not performed.

General Chemistry

Method(s) SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 299114 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) SM 4500 Cl- E: The sample duplicate precision for the following sample associated with analytical batch 299119 was outside control limits: (400-119192-A-8 DU). Non-homogeneity of the sample matrix is suspected. interference suspected The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision met acceptance criteria.

Method(s) SM 4500 Cl- E: The sample duplicate precision for the following sample associated with analytical batch 299259 was outside control limits: (400-119192-A-28 DU). Non-homogeneity of the sample matrix is suspected. interference suspected. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision met acceptance criteria.

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-1

Lab Sample ID: 400-119192-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.22		0.0025	0.00049	mg/L	5		6020	Total
Beryllium	0.00046	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Calcium	6.6		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0044		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Selenium	0.00065	J	0.0013	0.00024	mg/L	5		6020	Total Recoverable
Thallium	0.000090	J	0.00050	0.000085	mg/L	5		6020	Total Recoverable
Mercury	0.00013	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	60		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	11		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.040	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	4.0	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.97				SU	1		Field Sampling	Total/NA
Field Temperature	20.38				Centigrade	1		Field Sampling	Total/NA

Client Sample ID: MW-2

Lab Sample ID: 400-119192-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.044		0.0025	0.00049	mg/L	5		6020	Total
Calcium	0.87		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00084	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.00018	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	28		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	7.6		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.81				SU	1		Field Sampling	Total/NA
Field Temperature	19.82				Centigrade	1		Field Sampling	Total/NA

Client Sample ID: MW-3

Lab Sample ID: 400-119192-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.11		0.0025	0.00049	mg/L	5		6020	Total
Calcium	1.2		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0020	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lead	0.00038	J	0.0013	0.00035	mg/L	5		6020	Total Recoverable
Mercury	0.00017	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	22		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	11		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
Field pH	4.51				SU	1		Field Sampling	Total/NA
Field Temperature	20.74				Centigrade	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-4

Lab Sample ID: 400-119192-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.052		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.6		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0015	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.00017	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	26		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	7.7		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.87				SU	1		Field Sampling	Total/NA
Field Temperature	21.05				Centigrade	1		Field Sampling	Total/NA

Client Sample ID: MW-5

Lab Sample ID: 400-119192-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.066		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	2.1		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00096	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.00017	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	36		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	10		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.79				SU	1		Field Sampling	Total/NA
Field Temperature	20.71				Centigrade	1		Field Sampling	Total/NA

Client Sample ID: MW-6

Lab Sample ID: 400-119192-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.076		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.4		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0027		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.00017	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Chloride	8.3		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	2.9	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.68				SU	1		Field Sampling	Total/NA
Field Temperature	21.01				Centigrade	1		Field Sampling	Total/NA

Client Sample ID: MW-7

Lab Sample ID: 400-119192-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.16		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.00044	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Calcium	1.9		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0025		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.00017	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-7 (Continued)

Lab Sample ID: 400-119192-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	52		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	17		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.46				SU	1		Field Sampling	Total/NA
Field Temperature	20.34				Centigrade	1		Field Sampling	Total/NA

Client Sample ID: MW-8

Lab Sample ID: 400-119192-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.11		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	2.9		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0015	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.00017	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	42		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	9.7		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.97				SU	1		Field Sampling	Total/NA
Field Temperature	20.08				Centigrade	1		Field Sampling	Total/NA

Client Sample ID: MW-9

Lab Sample ID: 400-119192-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.043		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.94		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0011	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.00017	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	30		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	7.1		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.85				SU	1		Field Sampling	Total/NA
Field Temperature	19.71				Centigrade	1		Field Sampling	Total/NA

Client Sample ID: MW-10

Lab Sample ID: 400-119192-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.0011	J	0.0025	0.0010	mg/L	5		6020	Total Recoverable
Barium	0.041		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	2.7		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00064	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0038	J	0.0050	0.0032	mg/L	5		6020	Total Recoverable
Mercury	0.00016	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	26		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	5.2		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	5.34				SU	1		Field Sampling	Total/NA
Field Temperature	20.69				Centigrade	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-12

Lab Sample ID: 400-119192-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.13		0.0025	0.00049	mg/L	5		6020	Total
Beryllium	0.00038	J	0.0025	0.00034	mg/L	5		6020	Recoverable Total
Boron	0.034	J	0.050	0.021	mg/L	5		6020	Recoverable Total
Calcium	0.14	J	0.25	0.13	mg/L	5		6020	Recoverable Total
Cobalt	0.0028		0.0025	0.00040	mg/L	5		6020	Recoverable Total
Lithium	0.0054		0.0050	0.0032	mg/L	5		6020	Recoverable Total
Mercury	0.00017	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	64		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	13		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	12		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.23				SU	1		Field Sampling	Total/NA
Field Temperature	18.76				Centigrade	1		Field Sampling	Total/NA

Client Sample ID: MW-13

Lab Sample ID: 400-119192-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.11		0.0025	0.00049	mg/L	5		6020	Total
Boron	0.022	J	0.050	0.021	mg/L	5		6020	Recoverable Total
Calcium	16		0.25	0.13	mg/L	5		6020	Recoverable Total
Cobalt	0.00067	J	0.0025	0.00040	mg/L	5		6020	Recoverable Total
Lithium	0.010		0.0050	0.0032	mg/L	5		6020	Recoverable Total
Mercury	0.00022	B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	140		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	19		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.040	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	12		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	6.07				SU	1		Field Sampling	Total/NA
Field Temperature	19.89				Centigrade	1		Field Sampling	Total/NA

Client Sample ID: MW-15

Lab Sample ID: 400-119192-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.052		0.0025	0.00049	mg/L	5		6020	Total
Calcium	1.3		0.25	0.13	mg/L	5		6020	Recoverable Total
Cobalt	0.0012	J	0.0025	0.00040	mg/L	5		6020	Recoverable Total
Lithium	0.0039	J	0.0050	0.0032	mg/L	5		6020	Recoverable Total
Selenium	0.00030	J	0.0013	0.00024	mg/L	5		6020	Recoverable Total

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-15 (Continued)

Lab Sample ID: 400-119192-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.00017	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	34		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	8.4		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.77				SU	1		Field Sampling	Total/NA
Field Temperature	22.12				Centigrade	1		Field Sampling	Total/NA

Client Sample ID: MW-16

Lab Sample ID: 400-119192-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.029		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.61		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00091	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.00018	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	42		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	6.9		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.68				SU	1		Field Sampling	Total/NA
Field Temperature	21.03				Centigrade	1		Field Sampling	Total/NA

Client Sample ID: MW-17

Lab Sample ID: 400-119192-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00046	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.032		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.4		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00086	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.00017	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	32		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	7.3		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.89				SU	1		Field Sampling	Total/NA
Field Temperature	20.12				Centigrade	1		Field Sampling	Total/NA

Client Sample ID: MW-18

Lab Sample ID: 400-119192-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.060		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.93		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0014	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.00016	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	28		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	11		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	3.0	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.63				SU	1		Field Sampling	Total/NA
Field Temperature	21.44				Centigrade	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: EB-01

Lab Sample ID: 400-119192-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.00017	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA

Client Sample ID: FB-01

Lab Sample ID: 400-119192-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.00017	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA

Client Sample ID: DUP-01

Lab Sample ID: 400-119192-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.11		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	2.9		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0016	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.00016	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	38		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	8.9		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.97				SU	1		Field Sampling	Total/NA
Field Temperature	20.08				Centigrade	1		Field Sampling	Total/NA

Client Sample ID: DUP-02

Lab Sample ID: 400-119192-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.0011	J	0.0025	0.0010	mg/L	5		6020	Total Recoverable
Barium	0.050		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.2		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0012	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0034	J	0.0050	0.0032	mg/L	5		6020	Total Recoverable
Selenium	0.00033	J	0.0013	0.00024	mg/L	5		6020	Total Recoverable
Mercury	0.00017	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	36		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	7.9		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.77				SU	1		Field Sampling	Total/NA
Field Temperature	22.12				Centigrade	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
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
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
Field Sampling	Field Sampling	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

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

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

Sample Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-119192-1	MW-1	Water	03/22/16 12:21	03/23/16 09:05
400-119192-2	MW-2	Water	03/22/16 08:51	03/23/16 09:05
400-119192-3	MW-3	Water	03/22/16 08:55	03/23/16 09:05
400-119192-4	MW-4	Water	03/22/16 11:45	03/23/16 09:05
400-119192-5	MW-5	Water	03/22/16 13:05	03/23/16 09:05
400-119192-6	MW-6	Water	03/22/16 10:25	03/23/16 09:05
400-119192-7	MW-7	Water	03/21/16 15:25	03/23/16 09:05
400-119192-8	MW-8	Water	03/21/16 17:40	03/23/16 09:05
400-119192-9	MW-9	Water	03/21/16 18:45	03/23/16 09:05
400-119192-10	MW-10	Water	03/22/16 11:21	03/23/16 09:05
400-119192-11	MW-12	Water	03/22/16 15:46	03/23/16 09:05
400-119192-12	MW-13	Water	03/22/16 16:41	03/23/16 09:05
400-119192-13	MW-15	Water	03/22/16 14:45	03/23/16 09:05
400-119192-14	MW-16	Water	03/22/16 17:40	03/23/16 09:05
400-119192-15	MW-17	Water	03/22/16 17:05	03/23/16 09:05
400-119192-16	MW-18	Water	03/22/16 15:50	03/23/16 09:05
400-119192-17	EB-01	Water	03/22/16 14:49	03/23/16 09:05
400-119192-18	FB-01	Water	03/22/16 15:02	03/23/16 09:05
400-119192-19	DUP-01	Water	03/21/16 16:40	03/23/16 09:05
400-119192-20	DUP-02	Water	03/22/16 13:45	03/23/16 09:05

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-1
Date Collected: 03/22/16 12:21
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-1
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/25/16 12:00	04/05/16 20:26	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/25/16 12:00	04/05/16 20:26	5
Barium	0.22		0.0025	0.00049	mg/L		03/25/16 12:00	04/05/16 20:26	5
Beryllium	0.00046	J	0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 20:26	5
Boron	<0.021		0.050	0.021	mg/L		03/25/16 12:00	04/05/16 20:26	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 20:26	5
Calcium	6.6		0.25	0.13	mg/L		03/25/16 12:00	04/05/16 20:26	5
Chromium	<0.0011		0.0025	0.0011	mg/L		03/25/16 12:00	04/05/16 20:26	5
Cobalt	0.0044		0.0025	0.00040	mg/L		03/25/16 12:00	04/05/16 20:26	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/25/16 12:00	04/05/16 20:26	5
Lithium	<0.0032	F1	0.0050	0.0032	mg/L		03/25/16 12:00	04/05/16 20:26	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/25/16 12:00	04/05/16 20:26	5
Selenium	0.00065	J	0.0013	0.00024	mg/L		03/25/16 12:00	04/05/16 20:26	5
Thallium	0.000090	J	0.00050	0.000085	mg/L		03/25/16 12:00	04/05/16 20:26	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00013	J B	0.00020	0.000070	mg/L		04/08/16 16:02	04/11/16 10:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	60		5.0	3.4	mg/L			03/24/16 11:31	1
Chloride	11		2.0	0.60	mg/L			03/26/16 13:53	1
Fluoride	0.040	J	0.10	0.032	mg/L			04/11/16 17:46	1
Sulfate	4.0	J	5.0	1.4	mg/L			03/26/16 11:47	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	2.53		0.312	0.387	1.00	0.169	pCi/L	03/25/16 14:47	04/18/16 07:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	48.4		40 - 110					03/25/16 14:47	04/18/16 07:30	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	4.11		0.693	0.790	1.00	0.740	pCi/L	03/31/16 21:51	04/14/16 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	48.4		40 - 110					03/31/16 21:51	04/14/16 11:06	1
Y Carrier	88.6		40 - 110					03/31/16 21:51	04/14/16 11:06	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	6.64		0.760	0.879	5.00	0.740	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-1
Date Collected: 03/22/16 12:21
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-1
Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.97				SU			03/22/16 12:21	1
Field Temperature	20.38				Centigrade			03/22/16 12:21	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-2
Date Collected: 03/22/16 08:51
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-2
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/25/16 12:00	04/05/16 21:02	5
Barium	0.044		0.0025	0.00049	mg/L		03/25/16 12:00	04/05/16 21:02	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 21:02	5
Boron	<0.021		0.050	0.021	mg/L		03/25/16 12:00	04/05/16 21:02	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 21:02	5
Calcium	0.87		0.25	0.13	mg/L		03/25/16 12:00	04/05/16 21:02	5
Chromium	<0.0011		0.0025	0.0011	mg/L		03/25/16 12:00	04/05/16 21:02	5
Cobalt	0.00084	J	0.0025	0.00040	mg/L		03/25/16 12:00	04/05/16 21:02	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/25/16 12:00	04/05/16 21:02	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/25/16 12:00	04/05/16 21:02	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/25/16 12:00	04/05/16 21:02	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/25/16 12:00	04/05/16 21:02	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/25/16 12:00	04/05/16 21:02	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/25/16 12:00	04/06/16 15:12	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00018	J B	0.00020	0.000070	mg/L		04/08/16 16:02	04/11/16 10:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	28		5.0	3.4	mg/L			03/24/16 11:31	1
Chloride	7.6		2.0	0.60	mg/L			03/26/16 13:53	1
Fluoride	<0.032		0.10	0.032	mg/L			04/11/16 17:54	1
Sulfate	<1.4		5.0	1.4	mg/L			03/26/16 11:47	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.378		0.103	0.109	1.00	0.0963	pCi/L	03/25/16 14:47	04/18/16 07:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					03/25/16 14:47	04/18/16 07:30	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.450		0.261	0.265	1.00	0.397	pCi/L	03/31/16 21:51	04/14/16 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					03/31/16 21:51	04/14/16 11:06	1
Y Carrier	83.7		40 - 110					03/31/16 21:51	04/14/16 11:06	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
 SDG: Mississippi

Client Sample ID: MW-2
Date Collected: 03/22/16 08:51
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-2
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.828		0.281	0.286	5.00	0.397	pCi/L		04/20/16 19:30	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.81				SU			03/22/16 08:51	1
Field Temperature	19.82				Centigrade			03/22/16 08:51	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-3
Date Collected: 03/22/16 08:55
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-3
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/25/16 12:00	04/05/16 21:07	5
Barium	0.11		0.0025	0.00049	mg/L		03/25/16 12:00	04/05/16 21:07	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 21:07	5
Boron	<0.021		0.050	0.021	mg/L		03/25/16 12:00	04/05/16 21:07	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 21:07	5
Calcium	1.2		0.25	0.13	mg/L		03/25/16 12:00	04/05/16 21:07	5
Chromium	<0.0011		0.0025	0.0011	mg/L		03/25/16 12:00	04/05/16 21:07	5
Cobalt	0.0020	J	0.0025	0.00040	mg/L		03/25/16 12:00	04/05/16 21:07	5
Lead	0.00038	J	0.0013	0.00035	mg/L		03/25/16 12:00	04/05/16 21:07	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/25/16 12:00	04/05/16 21:07	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/25/16 12:00	04/05/16 21:07	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/25/16 12:00	04/05/16 21:07	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/25/16 12:00	04/05/16 21:07	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/25/16 12:00	04/06/16 15:16	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00017	J B	0.00020	0.000070	mg/L		04/08/16 16:02	04/11/16 11:51	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	22		5.0	3.4	mg/L			03/24/16 11:31	1
Chloride	11		2.0	0.60	mg/L			03/26/16 13:53	1
Fluoride	0.040	J	0.10	0.032	mg/L			04/11/16 18:01	1
Sulfate	<1.4		5.0	1.4	mg/L			03/26/16 11:47	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.953		0.151	0.173	1.00	0.0937	pCi/L	03/25/16 14:47	04/18/16 07:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.4		40 - 110					03/25/16 14:47	04/18/16 07:30	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.14		0.288	0.306	1.00	0.348	pCi/L	03/31/16 21:51	04/14/16 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.4		40 - 110					03/31/16 21:51	04/14/16 11:06	1
Y Carrier	83.4		40 - 110					03/31/16 21:51	04/14/16 11:06	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
 SDG: Mississippi

Client Sample ID: MW-3
Date Collected: 03/22/16 08:55
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-3
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.09		0.325	0.352	5.00	0.348	pCi/L		04/20/16 19:30	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.51				SU			03/22/16 08:55	1
Field Temperature	20.74				Centigrade			03/22/16 08:55	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-4
Date Collected: 03/22/16 11:45
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-4
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/25/16 12:00	04/05/16 21:11	5
Barium	0.052		0.0025	0.00049	mg/L		03/25/16 12:00	04/05/16 21:11	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 21:11	5
Boron	<0.021		0.050	0.021	mg/L		03/25/16 12:00	04/05/16 21:11	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 21:11	5
Calcium	1.6		0.25	0.13	mg/L		03/25/16 12:00	04/05/16 21:11	5
Chromium	<0.0011		0.0025	0.0011	mg/L		03/25/16 12:00	04/05/16 21:11	5
Cobalt	0.0015	J	0.0025	0.00040	mg/L		03/25/16 12:00	04/05/16 21:11	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/25/16 12:00	04/05/16 21:11	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/25/16 12:00	04/05/16 21:11	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/25/16 12:00	04/05/16 21:11	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/25/16 12:00	04/05/16 21:11	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/25/16 12:00	04/05/16 21:11	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/25/16 12:00	04/06/16 15:21	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00017	J B	0.00020	0.000070	mg/L		04/08/16 16:02	04/11/16 11:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	26		5.0	3.4	mg/L			03/24/16 11:31	1
Chloride	7.7		2.0	0.60	mg/L			03/26/16 13:53	1
Fluoride	<0.032		0.10	0.032	mg/L			04/11/16 18:04	1
Sulfate	<1.4		5.0	1.4	mg/L			03/26/16 11:47	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.407		0.107	0.114	1.00	0.101	pCi/L	03/25/16 14:47	04/18/16 07:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.9		40 - 110					03/25/16 14:47	04/18/16 07:30	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.721		0.279	0.287	1.00	0.395	pCi/L	03/31/16 21:51	04/14/16 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.9		40 - 110					03/31/16 21:51	04/14/16 11:06	1
Y Carrier	85.6		40 - 110					03/31/16 21:51	04/14/16 11:06	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
 SDG: Mississippi

Client Sample ID: MW-4
Date Collected: 03/22/16 11:45
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-4
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.13		0.299	0.308	5.00	0.395	pCi/L		04/20/16 19:30	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.87				SU			03/22/16 11:45	1
Field Temperature	21.05				Centigrade			03/22/16 11:45	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-5
Date Collected: 03/22/16 13:05
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-5
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/25/16 12:00	04/05/16 21:16	5
Barium	0.066		0.0025	0.00049	mg/L		03/25/16 12:00	04/05/16 21:16	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 21:16	5
Boron	<0.021		0.050	0.021	mg/L		03/25/16 12:00	04/05/16 21:16	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 21:16	5
Calcium	2.1		0.25	0.13	mg/L		03/25/16 12:00	04/05/16 21:16	5
Chromium	<0.0011		0.0025	0.0011	mg/L		03/25/16 12:00	04/05/16 21:16	5
Cobalt	0.00096	J	0.0025	0.00040	mg/L		03/25/16 12:00	04/05/16 21:16	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/25/16 12:00	04/05/16 21:16	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/25/16 12:00	04/05/16 21:16	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/25/16 12:00	04/05/16 21:16	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/25/16 12:00	04/05/16 21:16	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/25/16 12:00	04/05/16 21:16	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/25/16 12:00	04/06/16 15:25	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00017	J B	0.00020	0.000070	mg/L		04/08/16 16:02	04/11/16 11:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	36		5.0	3.4	mg/L			03/24/16 11:31	1
Chloride	10		2.0	0.60	mg/L			03/26/16 13:53	1
Fluoride	<0.032		0.10	0.032	mg/L			04/11/16 18:07	1
Sulfate	<1.4		5.0	1.4	mg/L			03/26/16 14:35	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.590		0.117	0.128	1.00	0.0709	pCi/L	03/25/16 14:47	04/18/16 07:30	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					03/25/16 14:47	04/18/16 07:30	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.838		0.272	0.283	1.00	0.364	pCi/L	03/31/16 21:51	04/14/16 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					03/31/16 21:51	04/14/16 11:06	1
Y Carrier	89.7		40 - 110					03/31/16 21:51	04/14/16 11:06	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
 SDG: Mississippi

Client Sample ID: MW-5
Date Collected: 03/22/16 13:05
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-5
Matrix: Water

Method: Ra226_Ra228 - Combined Radium-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		0.296	0.311	5.00	0.364	pCi/L		04/20/16 19:30	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.79				SU			03/22/16 13:05	1
Field Temperature	20.71				Centigrade			03/22/16 13:05	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-6
Date Collected: 03/22/16 10:25
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-6
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/25/16 12:00	04/05/16 21:20	5
Barium	0.076		0.0025	0.00049	mg/L		03/25/16 12:00	04/05/16 21:20	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 21:20	5
Boron	<0.021		0.050	0.021	mg/L		03/25/16 12:00	04/05/16 21:20	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 21:20	5
Calcium	1.4		0.25	0.13	mg/L		03/25/16 12:00	04/05/16 21:20	5
Chromium	<0.0011		0.0025	0.0011	mg/L		03/25/16 12:00	04/05/16 21:20	5
Cobalt	0.0027		0.0025	0.00040	mg/L		03/25/16 12:00	04/05/16 21:20	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/25/16 12:00	04/05/16 21:20	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/25/16 12:00	04/05/16 21:20	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/25/16 12:00	04/05/16 21:20	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/25/16 12:00	04/05/16 21:20	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/25/16 12:00	04/05/16 21:20	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/25/16 12:00	04/06/16 15:30	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00017	J B	0.00020	0.000070	mg/L		04/08/16 16:02	04/11/16 11:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			03/24/16 11:31	1
Chloride	8.3		2.0	0.60	mg/L			03/26/16 13:53	1
Fluoride	<0.032		0.10	0.032	mg/L			04/11/16 18:10	1
Sulfate	2.9	J	5.0	1.4	mg/L			03/26/16 14:35	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.549		0.114	0.124	1.00	0.0789	pCi/L	03/25/16 14:47	04/18/16 07:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.6		40 - 110					03/25/16 14:47	04/18/16 07:31	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.598		0.236	0.242	1.00	0.324	pCi/L	03/31/16 21:51	04/14/16 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.6		40 - 110					03/31/16 21:51	04/14/16 11:06	1
Y Carrier	82.2		40 - 110					03/31/16 21:51	04/14/16 11:06	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
 SDG: Mississippi

Client Sample ID: MW-6
Date Collected: 03/22/16 10:25
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-6
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.15		0.262	0.272	5.00	0.324	pCi/L		04/20/16 19:30	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.68				SU			03/22/16 10:25	1
Field Temperature	21.01				Centigrade			03/22/16 10:25	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-7
Date Collected: 03/21/16 15:25
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-7
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/25/16 12:00	04/05/16 21:25	5
Barium	0.16		0.0025	0.00049	mg/L		03/25/16 12:00	04/05/16 21:25	5
Beryllium	0.00044	J	0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 21:25	5
Boron	<0.021		0.050	0.021	mg/L		03/25/16 12:00	04/05/16 21:25	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 21:25	5
Calcium	1.9		0.25	0.13	mg/L		03/25/16 12:00	04/05/16 21:25	5
Chromium	<0.0011		0.0025	0.0011	mg/L		03/25/16 12:00	04/05/16 21:25	5
Cobalt	0.0025		0.0025	0.00040	mg/L		03/25/16 12:00	04/05/16 21:25	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/25/16 12:00	04/05/16 21:25	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/25/16 12:00	04/05/16 21:25	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/25/16 12:00	04/05/16 21:25	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/25/16 12:00	04/05/16 21:25	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/25/16 12:00	04/05/16 21:25	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/25/16 12:00	04/06/16 15:34	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00017	J B	0.00020	0.000070	mg/L		04/08/16 16:02	04/11/16 11:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	52		5.0	3.4	mg/L			03/24/16 11:31	1
Chloride	17		2.0	0.60	mg/L			03/26/16 13:53	1
Fluoride	<0.032		0.10	0.032	mg/L			04/11/16 18:14	1
Sulfate	<1.4		5.0	1.4	mg/L			03/26/16 14:35	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	1.16		0.164	0.194	1.00	0.0756	pCi/L	03/25/16 14:47	04/18/16 07:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					03/25/16 14:47	04/18/16 07:31	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.44		0.319	0.345	1.00	0.359	pCi/L	03/31/16 21:51	04/14/16 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					03/31/16 21:51	04/14/16 11:06	1
Y Carrier	81.1		40 - 110					03/31/16 21:51	04/14/16 11:06	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
 SDG: Mississippi

Client Sample ID: MW-7
Date Collected: 03/21/16 15:25
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-7
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.60		0.359	0.396	5.00	0.359	pCi/L		04/20/16 19:30	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.46				SU			03/21/16 15:25	1
Field Temperature	20.34				Centigrade			03/21/16 15:25	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-8
Date Collected: 03/21/16 17:40
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-8
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/25/16 12:00	04/05/16 21:29	5
Barium	0.11		0.0025	0.00049	mg/L		03/25/16 12:00	04/05/16 21:29	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 21:29	5
Boron	<0.021		0.050	0.021	mg/L		03/25/16 12:00	04/05/16 21:29	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 21:29	5
Calcium	2.9		0.25	0.13	mg/L		03/25/16 12:00	04/05/16 21:29	5
Chromium	<0.0011		0.0025	0.0011	mg/L		03/25/16 12:00	04/05/16 21:29	5
Cobalt	0.0015	J	0.0025	0.00040	mg/L		03/25/16 12:00	04/05/16 21:29	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/25/16 12:00	04/05/16 21:29	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/25/16 12:00	04/05/16 21:29	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/25/16 12:00	04/05/16 21:29	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/25/16 12:00	04/05/16 21:29	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/25/16 12:00	04/05/16 21:29	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/25/16 12:00	04/06/16 15:39	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00017	J B	0.00020	0.000070	mg/L		04/08/16 16:02	04/11/16 11:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	42		5.0	3.4	mg/L			03/24/16 11:31	1
Chloride	9.7		2.0	0.60	mg/L			03/26/16 13:53	1
Fluoride	<0.032		0.10	0.032	mg/L			04/11/16 18:17	1
Sulfate	<1.4		5.0	1.4	mg/L			03/26/16 14:35	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.744		0.144	0.159	1.00	0.126	pCi/L	03/25/16 14:47	04/18/16 07:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.9		40 - 110					03/25/16 14:47	04/18/16 07:31	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.31		0.302	0.325	1.00	0.349	pCi/L	03/31/16 21:51	04/14/16 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.9		40 - 110					03/31/16 21:51	04/14/16 11:06	1
Y Carrier	82.6		40 - 110					03/31/16 21:51	04/14/16 11:06	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
 SDG: Mississippi

Client Sample ID: MW-8
Date Collected: 03/21/16 17:40
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-8
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.05		0.334	0.362	5.00	0.349	pCi/L		04/20/16 19:30	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.97				SU			03/21/16 17:40	1
Field Temperature	20.08				Centigrade			03/21/16 17:40	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-9
Date Collected: 03/21/16 18:45
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-9
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/25/16 12:00	04/05/16 21:34	5
Barium	0.043		0.0025	0.00049	mg/L		03/25/16 12:00	04/05/16 21:34	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 21:34	5
Boron	<0.021		0.050	0.021	mg/L		03/25/16 12:00	04/05/16 21:34	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 21:34	5
Calcium	0.94		0.25	0.13	mg/L		03/25/16 12:00	04/05/16 21:34	5
Chromium	<0.0011		0.0025	0.0011	mg/L		03/25/16 12:00	04/05/16 21:34	5
Cobalt	0.0011	J	0.0025	0.00040	mg/L		03/25/16 12:00	04/05/16 21:34	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/25/16 12:00	04/05/16 21:34	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/25/16 12:00	04/05/16 21:34	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/25/16 12:00	04/05/16 21:34	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/25/16 12:00	04/05/16 21:34	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/25/16 12:00	04/05/16 21:34	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/25/16 12:00	04/06/16 15:43	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00017	J B	0.00020	0.000070	mg/L		04/08/16 16:02	04/11/16 11:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	30		5.0	3.4	mg/L			03/24/16 11:31	1
Chloride	7.1		2.0	0.60	mg/L			03/26/16 13:56	1
Fluoride	<0.032		0.10	0.032	mg/L			04/11/16 18:20	1
Sulfate	<1.4		5.0	1.4	mg/L			03/26/16 14:35	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.362		0.0983	0.104	1.00	0.0907	pCi/L	03/25/16 14:47	04/18/16 07:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.6		40 - 110					03/25/16 14:47	04/18/16 07:31	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.304	U	0.246	0.247	1.00	0.391	pCi/L	03/31/16 21:51	04/14/16 11:06	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.6		40 - 110					03/31/16 21:51	04/14/16 11:06	1
Y Carrier	81.9		40 - 110					03/31/16 21:51	04/14/16 11:06	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
 SDG: Mississippi

Client Sample ID: MW-9
Date Collected: 03/21/16 18:45
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-9
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.666		0.264	0.268	5.00	0.391	pCi/L		04/20/16 19:30	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.85				SU			03/21/16 18:45	1
Field Temperature	19.71				Centigrade			03/21/16 18:45	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-10
Date Collected: 03/22/16 11:21
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-10
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0011	J	0.0025	0.0010	mg/L		03/25/16 12:00	04/05/16 21:52	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/25/16 12:00	04/05/16 21:52	5
Barium	0.041		0.0025	0.00049	mg/L		03/25/16 12:00	04/05/16 21:52	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 21:52	5
Boron	<0.021		0.050	0.021	mg/L		03/25/16 12:00	04/05/16 21:52	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 21:52	5
Calcium	2.7		0.25	0.13	mg/L		03/25/16 12:00	04/05/16 21:52	5
Chromium	<0.0011		0.0025	0.0011	mg/L		03/25/16 12:00	04/05/16 21:52	5
Cobalt	0.00064	J	0.0025	0.00040	mg/L		03/25/16 12:00	04/05/16 21:52	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/25/16 12:00	04/05/16 21:52	5
Lithium	0.0038	J	0.0050	0.0032	mg/L		03/25/16 12:00	04/05/16 21:52	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/25/16 12:00	04/05/16 21:52	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/25/16 12:00	04/05/16 21:52	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/25/16 12:00	04/05/16 21:52	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00016	J B	0.00020	0.000070	mg/L		04/08/16 16:02	04/11/16 12:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	26		5.0	3.4	mg/L			03/24/16 11:31	1
Chloride	5.2		2.0	0.60	mg/L			03/26/16 13:56	1
Fluoride	<0.032		0.10	0.032	mg/L			04/12/16 11:03	1
Sulfate	<1.4		5.0	1.4	mg/L			03/26/16 14:35	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.278		0.0850	0.0886	1.00	0.0713	pCi/L	03/25/16 14:47	04/18/16 07:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.1		40 - 110					03/25/16 14:47	04/18/16 07:31	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.221	U	0.230	0.231	1.00	0.375	pCi/L	03/31/16 21:51	04/14/16 11:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.1		40 - 110					03/31/16 21:51	04/14/16 11:07	1
Y Carrier	79.3		40 - 110					03/31/16 21:51	04/14/16 11:07	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	0.498		0.245	0.247	5.00	0.375	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-10
Date Collected: 03/22/16 11:21
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-10
Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.34				SU			03/22/16 11:21	1
Field Temperature	20.69				Centigrade			03/22/16 11:21	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-12
Date Collected: 03/22/16 15:46
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-11
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/25/16 12:00	04/05/16 21:56	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/25/16 12:00	04/05/16 21:56	5
Barium	0.13		0.0025	0.00049	mg/L		03/25/16 12:00	04/05/16 21:56	5
Beryllium	0.00038	J	0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 21:56	5
Boron	0.034	J	0.050	0.021	mg/L		03/25/16 12:00	04/05/16 21:56	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 21:56	5
Calcium	0.14	J	0.25	0.13	mg/L		03/25/16 12:00	04/05/16 21:56	5
Chromium	<0.0011		0.0025	0.0011	mg/L		03/25/16 12:00	04/05/16 21:56	5
Cobalt	0.0028		0.0025	0.00040	mg/L		03/25/16 12:00	04/05/16 21:56	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/25/16 12:00	04/05/16 21:56	5
Lithium	0.0054		0.0050	0.0032	mg/L		03/25/16 12:00	04/05/16 21:56	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/25/16 12:00	04/05/16 21:56	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/25/16 12:00	04/05/16 21:56	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/25/16 12:00	04/05/16 21:56	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00017	J B	0.00020	0.000070	mg/L		04/08/16 16:02	04/11/16 12:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	64		5.0	3.4	mg/L			03/24/16 12:37	1
Chloride	13		2.0	0.60	mg/L			03/26/16 13:56	1
Fluoride	0.19		0.10	0.032	mg/L			04/12/16 11:10	1
Sulfate	12		5.0	1.4	mg/L			03/26/16 14:35	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.867		0.141	0.161	1.00	0.0780	pCi/L	03/25/16 14:47	04/18/16 07:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.1		40 - 110					03/25/16 14:47	04/18/16 07:31	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.983		0.282	0.296	1.00	0.349	pCi/L	03/31/16 21:51	04/14/16 11:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.1		40 - 110					03/31/16 21:51	04/14/16 11:07	1
Y Carrier	77.8		40 - 110					03/31/16 21:51	04/14/16 11:07	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	1.85		0.315	0.337	5.00	0.349	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-12
Date Collected: 03/22/16 15:46
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-11
Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.23				SU			03/22/16 15:46	1
Field Temperature	18.76				Centigrade			03/22/16 15:46	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-13
Date Collected: 03/22/16 16:41
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-12
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/25/16 12:00	04/05/16 22:01	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/25/16 12:00	04/05/16 22:01	5
Barium	0.11		0.0025	0.00049	mg/L		03/25/16 12:00	04/05/16 22:01	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 22:01	5
Boron	0.022	J	0.050	0.021	mg/L		03/25/16 12:00	04/05/16 22:01	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 22:01	5
Calcium	16		0.25	0.13	mg/L		03/25/16 12:00	04/05/16 22:01	5
Chromium	<0.0011		0.0025	0.0011	mg/L		03/25/16 12:00	04/05/16 22:01	5
Cobalt	0.00067	J	0.0025	0.00040	mg/L		03/25/16 12:00	04/05/16 22:01	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/25/16 12:00	04/05/16 22:01	5
Lithium	0.010		0.0050	0.0032	mg/L		03/25/16 12:00	04/05/16 22:01	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/25/16 12:00	04/05/16 22:01	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/25/16 12:00	04/05/16 22:01	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/25/16 12:00	04/05/16 22:01	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00022	B	0.00020	0.000070	mg/L		04/08/16 16:02	04/11/16 12:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	140		5.0	3.4	mg/L			03/24/16 12:37	1
Chloride	19		2.0	0.60	mg/L			03/26/16 13:56	1
Fluoride	0.040	J	0.10	0.032	mg/L			04/12/16 11:12	1
Sulfate	12		5.0	1.4	mg/L			03/26/16 14:35	1

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		0.0766	0.0792	1.00	0.0710	pCi/L	03/25/16 14:47	04/18/16 07:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.0		40 - 110					03/25/16 14:47	04/18/16 07:31	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0350	U	0.204	0.204	1.00	0.362	pCi/L	03/31/16 21:51	04/14/16 11:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.0		40 - 110					03/31/16 21:51	04/14/16 11:07	1
Y Carrier	77.4		40 - 110					03/31/16 21:51	04/14/16 11:07	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	0.258	U	0.218	0.219	5.00	0.362	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-13
Date Collected: 03/22/16 16:41
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-12
Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.07				SU			03/22/16 16:41	1
Field Temperature	19.89				Centigrade			03/22/16 16:41	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-15
Date Collected: 03/22/16 14:45
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-13
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/25/16 12:00	04/05/16 22:05	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/25/16 12:00	04/05/16 22:05	5
Barium	0.052		0.0025	0.00049	mg/L		03/25/16 12:00	04/05/16 22:05	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 22:05	5
Boron	<0.021		0.050	0.021	mg/L		03/25/16 12:00	04/05/16 22:05	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 22:05	5
Calcium	1.3		0.25	0.13	mg/L		03/25/16 12:00	04/05/16 22:05	5
Chromium	<0.0011		0.0025	0.0011	mg/L		03/25/16 12:00	04/05/16 22:05	5
Cobalt	0.0012	J	0.0025	0.00040	mg/L		03/25/16 12:00	04/05/16 22:05	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/25/16 12:00	04/05/16 22:05	5
Lithium	0.0039	J	0.0050	0.0032	mg/L		03/25/16 12:00	04/05/16 22:05	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/25/16 12:00	04/05/16 22:05	5
Selenium	0.00030	J	0.0013	0.00024	mg/L		03/25/16 12:00	04/05/16 22:05	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/25/16 12:00	04/05/16 22:05	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00017	J B	0.00020	0.000070	mg/L		04/08/16 16:02	04/11/16 12:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	34		5.0	3.4	mg/L			03/24/16 12:37	1
Chloride	8.4		2.0	0.60	mg/L			03/26/16 13:56	1
Fluoride	<0.032		0.10	0.032	mg/L			04/12/16 11:15	1
Sulfate	<1.4		5.0	1.4	mg/L			03/26/16 14:42	1

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		0.0900	0.0940	1.00	0.0840	pCi/L	03/25/16 14:47	04/18/16 07:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.7		40 - 110					03/25/16 14:47	04/18/16 07:31	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.316	U	0.228	0.230	1.00	0.354	pCi/L	03/31/16 21:51	04/14/16 11:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.7		40 - 110					03/31/16 21:51	04/14/16 11:07	1
Y Carrier	78.9		40 - 110					03/31/16 21:51	04/14/16 11:07	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	0.616		0.245	0.248	5.00	0.354	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
 SDG: Mississippi

Client Sample ID: MW-15
Date Collected: 03/22/16 14:45
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-13
Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.77				SU			03/22/16 14:45	1
Field Temperature	22.12				Centigrade			03/22/16 14:45	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-16
Date Collected: 03/22/16 17:40
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-14
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/25/16 12:00	04/05/16 22:10	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/25/16 12:00	04/05/16 22:10	5
Barium	0.029		0.0025	0.00049	mg/L		03/25/16 12:00	04/05/16 22:10	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 22:10	5
Boron	<0.021		0.050	0.021	mg/L		03/25/16 12:00	04/05/16 22:10	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 22:10	5
Calcium	0.61		0.25	0.13	mg/L		03/25/16 12:00	04/05/16 22:10	5
Chromium	<0.0011		0.0025	0.0011	mg/L		03/25/16 12:00	04/05/16 22:10	5
Cobalt	0.00091	J	0.0025	0.00040	mg/L		03/25/16 12:00	04/05/16 22:10	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/25/16 12:00	04/05/16 22:10	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/25/16 12:00	04/05/16 22:10	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/25/16 12:00	04/05/16 22:10	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/25/16 12:00	04/05/16 22:10	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/25/16 12:00	04/05/16 22:10	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00018	J B	0.00020	0.000070	mg/L		04/08/16 16:02	04/11/16 12:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	42		5.0	3.4	mg/L			03/24/16 12:37	1
Chloride	6.9		2.0	0.60	mg/L			03/26/16 13:56	1
Fluoride	<0.032		0.10	0.032	mg/L			04/12/16 11:18	1
Sulfate	<1.4		5.0	1.4	mg/L			03/26/16 14:42	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.171		0.0761	0.0776	1.00	0.0870	pCi/L	03/25/16 14:47	04/18/16 07:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.9		40 - 110					03/25/16 14:47	04/18/16 07:32	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.242	U	0.260	0.261	1.00	0.426	pCi/L	03/31/16 21:51	04/14/16 11:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.9		40 - 110					03/31/16 21:51	04/14/16 11:07	1
Y Carrier	81.9		40 - 110					03/31/16 21:51	04/14/16 11:07	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	0.413	U	0.271	0.273	5.00	0.426	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-16
Date Collected: 03/22/16 17:40
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-14
Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.68				SU			03/22/16 17:40	1
Field Temperature	21.03				Centigrade			03/22/16 17:40	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-17
Date Collected: 03/22/16 17:05
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-15
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/25/16 12:00	04/05/16 22:14	5
Arsenic	0.00046	J	0.0013	0.00046	mg/L		03/25/16 12:00	04/05/16 22:14	5
Barium	0.032		0.0025	0.00049	mg/L		03/25/16 12:00	04/05/16 22:14	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 22:14	5
Boron	<0.021		0.050	0.021	mg/L		03/25/16 12:00	04/05/16 22:14	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 22:14	5
Calcium	1.4		0.25	0.13	mg/L		03/25/16 12:00	04/05/16 22:14	5
Chromium	<0.0011		0.0025	0.0011	mg/L		03/25/16 12:00	04/05/16 22:14	5
Cobalt	0.00086	J	0.0025	0.00040	mg/L		03/25/16 12:00	04/05/16 22:14	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/25/16 12:00	04/05/16 22:14	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/25/16 12:00	04/05/16 22:14	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/25/16 12:00	04/05/16 22:14	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/25/16 12:00	04/05/16 22:14	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/25/16 12:00	04/05/16 22:14	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00017	J B	0.00020	0.000070	mg/L		04/08/16 16:02	04/11/16 12:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	32		5.0	3.4	mg/L			03/24/16 12:37	1
Chloride	7.3		2.0	0.60	mg/L			03/26/16 13:56	1
Fluoride	<0.032		0.10	0.032	mg/L			04/12/16 11:21	1
Sulfate	<1.4		5.0	1.4	mg/L			03/26/16 14:42	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.230		0.0833	0.0858	1.00	0.0858	pCi/L	03/25/16 14:47	04/18/16 16:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					03/25/16 14:47	04/18/16 16:50	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.176	U	0.220	0.221	1.00	0.365	pCi/L	03/31/16 21:51	04/14/16 11:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					03/31/16 21:51	04/14/16 11:07	1
Y Carrier	80.4		40 - 110					03/31/16 21:51	04/14/16 11:07	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	0.406		0.235	0.237	5.00	0.365	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-17
Date Collected: 03/22/16 17:05
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-15
Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.89				SU			03/22/16 17:05	1
Field Temperature	20.12				Centigrade			03/22/16 17:05	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-18
Date Collected: 03/22/16 15:50
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-16
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/25/16 12:00	04/05/16 22:19	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/25/16 12:00	04/05/16 22:19	5
Barium	0.060		0.0025	0.00049	mg/L		03/25/16 12:00	04/05/16 22:19	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 22:19	5
Boron	<0.021		0.050	0.021	mg/L		03/25/16 12:00	04/05/16 22:19	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 22:19	5
Calcium	0.93		0.25	0.13	mg/L		03/25/16 12:00	04/05/16 22:19	5
Chromium	<0.0011		0.0025	0.0011	mg/L		03/25/16 12:00	04/05/16 22:19	5
Cobalt	0.0014	J	0.0025	0.00040	mg/L		03/25/16 12:00	04/05/16 22:19	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/25/16 12:00	04/05/16 22:19	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/25/16 12:00	04/05/16 22:19	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/25/16 12:00	04/05/16 22:19	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/25/16 12:00	04/05/16 22:19	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/25/16 12:00	04/05/16 22:19	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00016	J B	0.00020	0.000070	mg/L		04/08/16 16:02	04/11/16 12:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	28		5.0	3.4	mg/L			03/24/16 12:37	1
Chloride	11		2.0	0.60	mg/L			03/26/16 13:56	1
Fluoride	<0.032		0.10	0.032	mg/L			04/12/16 11:25	1
Sulfate	3.0	J	5.0	1.4	mg/L			03/26/16 14:42	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.430		0.117	0.123	1.00	0.125	pCi/L	03/25/16 14:47	04/18/16 16:50	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.3		40 - 110					03/25/16 14:47	04/18/16 16:50	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.393		0.250	0.253	1.00	0.385	pCi/L	03/31/16 21:51	04/14/16 11:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.3		40 - 110					03/31/16 21:51	04/14/16 11:07	1
Y Carrier	81.5		40 - 110					03/31/16 21:51	04/14/16 11:07	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	0.823		0.276	0.281	5.00	0.385	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-18
Date Collected: 03/22/16 15:50
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-16
Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.63				SU			03/22/16 15:50	1
Field Temperature	21.44				Centigrade			03/22/16 15:50	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: EB-01
Date Collected: 03/22/16 14:49
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-17
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/25/16 12:00	04/05/16 22:23	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/25/16 12:00	04/05/16 22:23	5
Barium	<0.00049		0.0025	0.00049	mg/L		03/25/16 12:00	04/05/16 22:23	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 22:23	5
Boron	<0.021		0.050	0.021	mg/L		03/25/16 12:00	04/05/16 22:23	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 22:23	5
Calcium	<0.13		0.25	0.13	mg/L		03/25/16 12:00	04/05/16 22:23	5
Chromium	<0.0011		0.0025	0.0011	mg/L		03/25/16 12:00	04/05/16 22:23	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		03/25/16 12:00	04/05/16 22:23	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/25/16 12:00	04/05/16 22:23	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/25/16 12:00	04/05/16 22:23	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/25/16 12:00	04/05/16 22:23	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/25/16 12:00	04/05/16 22:23	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/25/16 12:00	04/05/16 22:23	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00017	J B	0.00020	0.000070	mg/L		04/08/16 16:02	04/11/16 12:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			03/24/16 12:37	1
Chloride	<0.60		2.0	0.60	mg/L			03/26/16 13:56	1
Fluoride	<0.032		0.10	0.032	mg/L			04/12/16 11:27	1
Sulfate	<1.4		5.0	1.4	mg/L			03/26/16 14:42	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.00102	U	0.0387	0.0387	1.00	0.0794	pCi/L	03/25/16 14:47	04/18/16 16:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					03/25/16 14:47	04/18/16 16:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.129	U	0.219	0.220	1.00	0.371	pCi/L	03/31/16 21:51	04/14/16 11:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					03/31/16 21:51	04/14/16 11:07	1
Y Carrier	78.9		40 - 110					03/31/16 21:51	04/14/16 11:07	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	0.128	U	0.223	0.223	5.00	0.371	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: FB-01
Date Collected: 03/22/16 15:02
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-18
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/25/16 12:00	04/05/16 22:28	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/25/16 12:00	04/05/16 22:28	5
Barium	<0.00049		0.0025	0.00049	mg/L		03/25/16 12:00	04/05/16 22:28	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 22:28	5
Boron	<0.021		0.050	0.021	mg/L		03/25/16 12:00	04/05/16 22:28	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 22:28	5
Calcium	<0.13		0.25	0.13	mg/L		03/25/16 12:00	04/05/16 22:28	5
Chromium	<0.0011		0.0025	0.0011	mg/L		03/25/16 12:00	04/05/16 22:28	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		03/25/16 12:00	04/05/16 22:28	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/25/16 12:00	04/05/16 22:28	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/25/16 12:00	04/05/16 22:28	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/25/16 12:00	04/05/16 22:28	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/25/16 12:00	04/05/16 22:28	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/25/16 12:00	04/05/16 22:28	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00017	J B	0.00020	0.000070	mg/L		04/08/16 16:02	04/11/16 12:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			03/24/16 12:37	1
Chloride	<0.60		2.0	0.60	mg/L			03/26/16 14:01	1
Fluoride	<0.032		0.10	0.032	mg/L			04/12/16 11:40	1
Sulfate	<1.4		5.0	1.4	mg/L			03/26/16 14:42	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0315	U	0.0444	0.0445	1.00	0.0753	pCi/L	03/25/16 14:47	04/18/16 16:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.4		40 - 110					03/25/16 14:47	04/18/16 16:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.370		0.220	0.223	1.00	0.332	pCi/L	03/31/16 21:51	04/14/16 11:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.4		40 - 110					03/31/16 21:51	04/14/16 11:07	1
Y Carrier	81.9		40 - 110					03/31/16 21:51	04/14/16 11:07	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	0.402		0.225	0.227	5.00	0.332	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: DUP-01
Date Collected: 03/21/16 16:40
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-19
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/25/16 12:00	04/05/16 22:32	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/25/16 12:00	04/05/16 22:32	5
Barium	0.11		0.0025	0.00049	mg/L		03/25/16 12:00	04/05/16 22:32	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 22:32	5
Boron	<0.021		0.050	0.021	mg/L		03/25/16 12:00	04/05/16 22:32	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 22:32	5
Calcium	2.9		0.25	0.13	mg/L		03/25/16 12:00	04/05/16 22:32	5
Chromium	<0.0011		0.0025	0.0011	mg/L		03/25/16 12:00	04/05/16 22:32	5
Cobalt	0.0016	J	0.0025	0.00040	mg/L		03/25/16 12:00	04/05/16 22:32	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/25/16 12:00	04/05/16 22:32	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/25/16 12:00	04/05/16 22:32	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/25/16 12:00	04/05/16 22:32	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/25/16 12:00	04/05/16 22:32	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/25/16 12:00	04/05/16 22:32	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00016	J B	0.00020	0.000070	mg/L		04/08/16 16:02	04/11/16 12:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	38		5.0	3.4	mg/L			03/24/16 11:31	1
Chloride	8.9		2.0	0.60	mg/L			03/28/16 12:05	1
Fluoride	<0.032		0.10	0.032	mg/L			04/12/16 11:44	1
Sulfate	<1.4		5.0	1.4	mg/L			03/26/16 14:42	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.703		0.138	0.152	1.00	0.0954	pCi/L	03/25/16 14:47	04/18/16 17:04	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.6		40 - 110					03/25/16 14:47	04/18/16 17:04	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.04		0.330	0.344	1.00	0.427	pCi/L	03/31/16 21:51	04/14/16 11:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.6		40 - 110					03/31/16 21:51	04/14/16 11:07	1
Y Carrier	81.1		40 - 110					03/31/16 21:51	04/14/16 11:07	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	1.74		0.358	0.376	5.00	0.427	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: DUP-01
Date Collected: 03/21/16 16:40
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-19
Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.97				SU			03/21/16 16:40	1
Field Temperature	20.08				Centigrade			03/21/16 16:40	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: DUP-02
Date Collected: 03/22/16 13:45
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-20
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0011	J	0.0025	0.0010	mg/L		03/25/16 12:00	04/05/16 22:50	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/25/16 12:00	04/05/16 22:50	5
Barium	0.050		0.0025	0.00049	mg/L		03/25/16 12:00	04/05/16 22:50	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 22:50	5
Boron	<0.021		0.050	0.021	mg/L		03/25/16 12:00	04/05/16 22:50	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 22:50	5
Calcium	1.2		0.25	0.13	mg/L		03/25/16 12:00	04/05/16 22:50	5
Chromium	<0.0011		0.0025	0.0011	mg/L		03/25/16 12:00	04/05/16 22:50	5
Cobalt	0.0012	J	0.0025	0.00040	mg/L		03/25/16 12:00	04/05/16 22:50	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/25/16 12:00	04/05/16 22:50	5
Lithium	0.0034	J	0.0050	0.0032	mg/L		03/25/16 12:00	04/05/16 22:50	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/25/16 12:00	04/05/16 22:50	5
Selenium	0.00033	J	0.0013	0.00024	mg/L		03/25/16 12:00	04/05/16 22:50	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/25/16 12:00	04/05/16 22:50	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00017	J B	0.00020	0.000070	mg/L		04/08/16 16:02	04/11/16 12:21	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	36		5.0	3.4	mg/L			03/24/16 12:37	1
Chloride	7.9		2.0	0.60	mg/L			03/28/16 12:05	1
Fluoride	<0.032		0.10	0.032	mg/L			04/12/16 12:05	1
Sulfate	<1.4		5.0	1.4	mg/L			03/26/16 14:42	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.304		0.0851	0.0894	1.00	0.0692	pCi/L	03/25/16 14:47	04/18/16 17:05	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.4		40 - 110					03/25/16 14:47	04/18/16 17:05	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.549		0.248	0.253	1.00	0.357	pCi/L	03/31/16 21:51	04/14/16 11:12	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.4		40 - 110					03/31/16 21:51	04/14/16 11:12	1
Y Carrier	82.2		40 - 110					03/31/16 21:51	04/14/16 11:12	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	0.854		0.262	0.269	5.00	0.357	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: DUP-02
Date Collected: 03/22/16 13:45
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-20
Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.77				SU			03/22/16 13:45	1
Field Temperature	22.12				Centigrade			03/22/16 13:45	1

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Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Qualifiers

Metals

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.
B	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.

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.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
F1	MS and/or MSD Recovery is outside acceptance limits.

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

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-1
Date Collected: 03/22/16 12:21
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300530	04/05/16 20:26	RJB	TAL PEN
Total/NA	Prep	7470A			300994	04/08/16 16:02	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301157	04/11/16 10:57	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	298721	03/24/16 11:31	TET	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	299119	03/26/16 13:53	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301246	04/11/16 17:46	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299114	03/26/16 11:47	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242272	03/25/16 14:47	MRB	TAL SL
Total/NA	Analysis	9315		1	246401	04/18/16 07:30	ALS	TAL SL
Total/NA	Prep	PrecSep_0			243092	03/31/16 21:51	CMC	TAL SL
Total/NA	Analysis	9320		1	245939	04/14/16 11:06	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/22/16 12:21	BWS	TAL PEN

Client Sample ID: MW-2
Date Collected: 03/22/16 08:51
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300530	04/05/16 21:02	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	300704	04/06/16 15:12	RJB	TAL PEN
Total/NA	Prep	7470A			300994	04/08/16 16:02	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301157	04/11/16 10:58	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	298721	03/24/16 11:31	TET	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	299119	03/26/16 13:53	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301246	04/11/16 17:54	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299114	03/26/16 11:47	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242272	03/25/16 14:47	MRB	TAL SL
Total/NA	Analysis	9315		1	246401	04/18/16 07:30	ALS	TAL SL
Total/NA	Prep	PrecSep_0			243092	03/31/16 21:51	CMC	TAL SL
Total/NA	Analysis	9320		1	245939	04/14/16 11:06	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/22/16 08:51	BWS	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-3
Date Collected: 03/22/16 08:55
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300530	04/05/16 21:07	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	300704	04/06/16 15:16	RJB	TAL PEN
Total/NA	Prep	7470A			300994	04/08/16 16:02	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301157	04/11/16 11:51	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	298721	03/24/16 11:31	TET	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	299119	03/26/16 13:53	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301246	04/11/16 18:01	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299114	03/26/16 11:47	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242272	03/25/16 14:47	MRB	TAL SL
Total/NA	Analysis	9315		1	246401	04/18/16 07:30	ALS	TAL SL
Total/NA	Prep	PrecSep_0			243092	03/31/16 21:51	CMC	TAL SL
Total/NA	Analysis	9320		1	245939	04/14/16 11:06	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/22/16 08:55	BWS	TAL PEN

Client Sample ID: MW-4
Date Collected: 03/22/16 11:45
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300530	04/05/16 21:11	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	300704	04/06/16 15:21	RJB	TAL PEN
Total/NA	Prep	7470A			300994	04/08/16 16:02	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301157	04/11/16 11:53	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	298721	03/24/16 11:31	TET	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	299119	03/26/16 13:53	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301246	04/11/16 18:04	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299114	03/26/16 11:47	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242272	03/25/16 14:47	MRB	TAL SL
Total/NA	Analysis	9315		1	246401	04/18/16 07:30	ALS	TAL SL
Total/NA	Prep	PrecSep_0			243092	03/31/16 21:51	CMC	TAL SL
Total/NA	Analysis	9320		1	245939	04/14/16 11:06	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/22/16 11:45	BWS	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-5
Date Collected: 03/22/16 13:05
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300530	04/05/16 21:16	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	300704	04/06/16 15:25	RJB	TAL PEN
Total/NA	Prep	7470A			300994	04/08/16 16:02	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301157	04/11/16 11:54	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	298721	03/24/16 11:31	TET	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	299119	03/26/16 13:53	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301246	04/11/16 18:07	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299120	03/26/16 14:35	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242272	03/25/16 14:47	MRB	TAL SL
Total/NA	Analysis	9315		1	246401	04/18/16 07:30	ALS	TAL SL
Total/NA	Prep	PrecSep_0			243092	03/31/16 21:51	CMC	TAL SL
Total/NA	Analysis	9320		1	245939	04/14/16 11:06	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/22/16 13:05	BWS	TAL PEN

Client Sample ID: MW-6
Date Collected: 03/22/16 10:25
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300530	04/05/16 21:20	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	300704	04/06/16 15:30	RJB	TAL PEN
Total/NA	Prep	7470A			300994	04/08/16 16:02	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301157	04/11/16 11:55	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	298721	03/24/16 11:31	TET	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	299119	03/26/16 13:53	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301246	04/11/16 18:10	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299120	03/26/16 14:35	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242272	03/25/16 14:47	MRB	TAL SL
Total/NA	Analysis	9315		1	246401	04/18/16 07:31	ALS	TAL SL
Total/NA	Prep	PrecSep_0			243092	03/31/16 21:51	CMC	TAL SL
Total/NA	Analysis	9320		1	245939	04/14/16 11:06	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/22/16 10:25	BWS	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-7
Date Collected: 03/21/16 15:25
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300530	04/05/16 21:25	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	300704	04/06/16 15:34	RJB	TAL PEN
Total/NA	Prep	7470A			300994	04/08/16 16:02	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301157	04/11/16 11:56	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	298721	03/24/16 11:31	TET	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	299119	03/26/16 13:53	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301246	04/11/16 18:14	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299120	03/26/16 14:35	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242272	03/25/16 14:47	MRB	TAL SL
Total/NA	Analysis	9315		1	246401	04/18/16 07:31	ALS	TAL SL
Total/NA	Prep	PrecSep_0			243092	03/31/16 21:51	CMC	TAL SL
Total/NA	Analysis	9320		1	245939	04/14/16 11:06	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/21/16 15:25	BWS	TAL PEN

Client Sample ID: MW-8
Date Collected: 03/21/16 17:40
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300530	04/05/16 21:29	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	300704	04/06/16 15:39	RJB	TAL PEN
Total/NA	Prep	7470A			300994	04/08/16 16:02	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301157	04/11/16 11:57	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	298721	03/24/16 11:31	TET	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	299119	03/26/16 13:53	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301246	04/11/16 18:17	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299120	03/26/16 14:35	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242272	03/25/16 14:47	MRB	TAL SL
Total/NA	Analysis	9315		1	246401	04/18/16 07:31	ALS	TAL SL
Total/NA	Prep	PrecSep_0			243092	03/31/16 21:51	CMC	TAL SL
Total/NA	Analysis	9320		1	245939	04/14/16 11:06	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/21/16 17:40	BWS	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-9
Date Collected: 03/21/16 18:45
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300530	04/05/16 21:34	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	300704	04/06/16 15:43	RJB	TAL PEN
Total/NA	Prep	7470A			300994	04/08/16 16:02	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301157	04/11/16 11:59	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	298721	03/24/16 11:31	TET	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	299119	03/26/16 13:56	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301246	04/11/16 18:20	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299120	03/26/16 14:35	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242272	03/25/16 14:47	MRB	TAL SL
Total/NA	Analysis	9315		1	246401	04/18/16 07:31	ALS	TAL SL
Total/NA	Prep	PrecSep_0			243092	03/31/16 21:51	CMC	TAL SL
Total/NA	Analysis	9320		1	245939	04/14/16 11:06	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/21/16 18:45	BWS	TAL PEN

Client Sample ID: MW-10
Date Collected: 03/22/16 11:21
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300530	04/05/16 21:52	RJB	TAL PEN
Total/NA	Prep	7470A			300994	04/08/16 16:02	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301157	04/11/16 12:00	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	298721	03/24/16 11:31	TET	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	299119	03/26/16 13:56	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301346	04/12/16 11:03	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299120	03/26/16 14:35	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242272	03/25/16 14:47	MRB	TAL SL
Total/NA	Analysis	9315		1	246401	04/18/16 07:31	ALS	TAL SL
Total/NA	Prep	PrecSep_0			243092	03/31/16 21:51	CMC	TAL SL
Total/NA	Analysis	9320		1	245939	04/14/16 11:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/22/16 11:21	BWS	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-12

Lab Sample ID: 400-119192-11

Date Collected: 03/22/16 15:46

Matrix: Water

Date Received: 03/23/16 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300530	04/05/16 21:56	RJB	TAL PEN
Total/NA	Prep	7470A			300994	04/08/16 16:02	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301157	04/11/16 12:01	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	298732	03/24/16 12:37	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	299119	03/26/16 13:56	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301346	04/12/16 11:10	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299120	03/26/16 14:35	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242272	03/25/16 14:47	MRB	TAL SL
Total/NA	Analysis	9315		1	246401	04/18/16 07:31	ALS	TAL SL
Total/NA	Prep	PrecSep_0			243092	03/31/16 21:51	CMC	TAL SL
Total/NA	Analysis	9320		1	245939	04/14/16 11:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/22/16 15:46	BWS	TAL PEN

Client Sample ID: MW-13

Lab Sample ID: 400-119192-12

Date Collected: 03/22/16 16:41

Matrix: Water

Date Received: 03/23/16 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300530	04/05/16 22:01	RJB	TAL PEN
Total/NA	Prep	7470A			300994	04/08/16 16:02	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301157	04/11/16 12:02	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	298732	03/24/16 12:37	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	299119	03/26/16 13:56	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301346	04/12/16 11:12	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299120	03/26/16 14:35	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242272	03/25/16 14:47	MRB	TAL SL
Total/NA	Analysis	9315		1	246401	04/18/16 07:31	ALS	TAL SL
Total/NA	Prep	PrecSep_0			243092	03/31/16 21:51	CMC	TAL SL
Total/NA	Analysis	9320		1	245939	04/14/16 11:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/22/16 16:41	BWS	TAL PEN

Client Sample ID: MW-15

Lab Sample ID: 400-119192-13

Date Collected: 03/22/16 14:45

Matrix: Water

Date Received: 03/23/16 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300530	04/05/16 22:05	RJB	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-15
Date Collected: 03/22/16 14:45
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-13
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			300994	04/08/16 16:02	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301157	04/11/16 12:12	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	298732	03/24/16 12:37	TET	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	299119	03/26/16 13:56	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301346	04/12/16 11:15	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299120	03/26/16 14:42	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242272	03/25/16 14:47	MRB	TAL SL
Total/NA	Analysis	9315		1	246401	04/18/16 07:31	ALS	TAL SL
Total/NA	Prep	PrecSep_0			243092	03/31/16 21:51	CMC	TAL SL
Total/NA	Analysis	9320		1	245939	04/14/16 11:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/22/16 14:45	BWS	TAL PEN

Client Sample ID: MW-16
Date Collected: 03/22/16 17:40
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300530	04/05/16 22:10	RJB	TAL PEN
Total/NA	Prep	7470A			300994	04/08/16 16:02	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301157	04/11/16 12:13	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	298732	03/24/16 12:37	TET	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	299119	03/26/16 13:56	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301346	04/12/16 11:18	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299120	03/26/16 14:42	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242272	03/25/16 14:47	MRB	TAL SL
Total/NA	Analysis	9315		1	246401	04/18/16 07:32	ALS	TAL SL
Total/NA	Prep	PrecSep_0			243092	03/31/16 21:51	CMC	TAL SL
Total/NA	Analysis	9320		1	245939	04/14/16 11:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/22/16 17:40	BWS	TAL PEN

Client Sample ID: MW-17
Date Collected: 03/22/16 17:05
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300530	04/05/16 22:14	RJB	TAL PEN
Total/NA	Prep	7470A			300994	04/08/16 16:02	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301157	04/11/16 12:15	JAP	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: MW-17

Lab Sample ID: 400-119192-15

Date Collected: 03/22/16 17:05

Matrix: Water

Date Received: 03/23/16 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	298732	03/24/16 12:37	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	299119	03/26/16 13:56	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301346	04/12/16 11:21	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299120	03/26/16 14:42	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242272	03/25/16 14:47	MRB	TAL SL
Total/NA	Analysis	9315		1	246440	04/18/16 16:50	ALD	TAL SL
Total/NA	Prep	PrecSep_0			243092	03/31/16 21:51	CMC	TAL SL
Total/NA	Analysis	9320		1	245939	04/14/16 11:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/22/16 17:05	BWS	TAL PEN

Client Sample ID: MW-18

Lab Sample ID: 400-119192-16

Date Collected: 03/22/16 15:50

Matrix: Water

Date Received: 03/23/16 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300530	04/05/16 22:19	RJB	TAL PEN
Total/NA	Prep	7470A			300994	04/08/16 16:02	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301157	04/11/16 12:16	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	298732	03/24/16 12:37	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	299119	03/26/16 13:56	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301346	04/12/16 11:25	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299120	03/26/16 14:42	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242272	03/25/16 14:47	MRB	TAL SL
Total/NA	Analysis	9315		1	246440	04/18/16 16:50	ALD	TAL SL
Total/NA	Prep	PrecSep_0			243092	03/31/16 21:51	CMC	TAL SL
Total/NA	Analysis	9320		1	245939	04/14/16 11:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/22/16 15:50	BWS	TAL PEN

Client Sample ID: EB-01

Lab Sample ID: 400-119192-17

Date Collected: 03/22/16 14:49

Matrix: Water

Date Received: 03/23/16 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300530	04/05/16 22:23	RJB	TAL PEN
Total/NA	Prep	7470A			300994	04/08/16 16:02	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301157	04/11/16 12:17	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	298732	03/24/16 12:37	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	299119	03/26/16 13:56	LSS	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: EB-01
Date Collected: 03/22/16 14:49
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-17
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	301346	04/12/16 11:27	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299120	03/26/16 14:42	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242272	03/25/16 14:47	MRB	TAL SL
Total/NA	Analysis	9315		1	246440	04/18/16 16:51	ALD	TAL SL
Total/NA	Prep	PrecSep_0			243092	03/31/16 21:51	CMC	TAL SL
Total/NA	Analysis	9320		1	245939	04/14/16 11:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL

Client Sample ID: FB-01
Date Collected: 03/22/16 15:02
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-18
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300530	04/05/16 22:28	RJB	TAL PEN
Total/NA	Prep	7470A			300994	04/08/16 16:02	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301157	04/11/16 12:18	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	298732	03/24/16 12:37	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	299119	03/26/16 14:01	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301346	04/12/16 11:40	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299120	03/26/16 14:42	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242272	03/25/16 14:47	MRB	TAL SL
Total/NA	Analysis	9315		1	246440	04/18/16 16:51	ALD	TAL SL
Total/NA	Prep	PrecSep_0			243092	03/31/16 21:51	CMC	TAL SL
Total/NA	Analysis	9320		1	245939	04/14/16 11:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL

Client Sample ID: DUP-01
Date Collected: 03/21/16 16:40
Date Received: 03/23/16 09:05

Lab Sample ID: 400-119192-19
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300530	04/05/16 22:32	RJB	TAL PEN
Total/NA	Prep	7470A			300994	04/08/16 16:02	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301157	04/11/16 12:19	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	298721	03/24/16 11:31	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	299259	03/28/16 12:05	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301346	04/12/16 11:44	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299120	03/26/16 14:42	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242272	03/25/16 14:47	MRB	TAL SL
Total/NA	Analysis	9315		1	246401	04/18/16 17:04	ALS	TAL SL

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Client Sample ID: DUP-01

Lab Sample ID: 400-119192-19

Date Collected: 03/21/16 16:40

Matrix: Water

Date Received: 03/23/16 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			243092	03/31/16 21:51	CMC	TAL SL
Total/NA	Analysis	9320		1	245939	04/14/16 11:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/21/16 16:40	BWS	TAL PEN

Client Sample ID: DUP-02

Lab Sample ID: 400-119192-20

Date Collected: 03/22/16 13:45

Matrix: Water

Date Received: 03/23/16 09:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			298973	03/25/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300530	04/05/16 22:50	RJB	TAL PEN
Total/NA	Prep	7470A			300994	04/08/16 16:02	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301157	04/11/16 12:21	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	298732	03/24/16 12:37	TET	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	299259	03/28/16 12:05	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301346	04/12/16 12:05	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299120	03/26/16 14:42	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242272	03/25/16 14:47	MRB	TAL SL
Total/NA	Analysis	9315		1	246401	04/18/16 17:05	ALS	TAL SL
Total/NA	Prep	PrecSep_0			243092	03/31/16 21:51	CMC	TAL SL
Total/NA	Analysis	9320		1	245932	04/14/16 11:12	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/22/16 13:45	BWS	TAL PEN

Laboratory References:

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

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

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Metals

Prep Batch: 298973

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-1	MW-1	Total Recoverable	Water	3005A	
400-119192-1 MS	MW-1	Total Recoverable	Water	3005A	
400-119192-1 MSD	MW-1	Total Recoverable	Water	3005A	
400-119192-2 - RA	MW-2	Total Recoverable	Water	3005A	
400-119192-2	MW-2	Total Recoverable	Water	3005A	
400-119192-3 - RA	MW-3	Total Recoverable	Water	3005A	
400-119192-3	MW-3	Total Recoverable	Water	3005A	
400-119192-4 - RA	MW-4	Total Recoverable	Water	3005A	
400-119192-4	MW-4	Total Recoverable	Water	3005A	
400-119192-5	MW-5	Total Recoverable	Water	3005A	
400-119192-5 - RA	MW-5	Total Recoverable	Water	3005A	
400-119192-6 - RA	MW-6	Total Recoverable	Water	3005A	
400-119192-6	MW-6	Total Recoverable	Water	3005A	
400-119192-7 - RA	MW-7	Total Recoverable	Water	3005A	
400-119192-7	MW-7	Total Recoverable	Water	3005A	
400-119192-8	MW-8	Total Recoverable	Water	3005A	
400-119192-8 - RA	MW-8	Total Recoverable	Water	3005A	
400-119192-9 - RA	MW-9	Total Recoverable	Water	3005A	
400-119192-9	MW-9	Total Recoverable	Water	3005A	
400-119192-10	MW-10	Total Recoverable	Water	3005A	
400-119192-11	MW-12	Total Recoverable	Water	3005A	
400-119192-12	MW-13	Total Recoverable	Water	3005A	
400-119192-13	MW-15	Total Recoverable	Water	3005A	
400-119192-14	MW-16	Total Recoverable	Water	3005A	
400-119192-15	MW-17	Total Recoverable	Water	3005A	
400-119192-16	MW-18	Total Recoverable	Water	3005A	
400-119192-17	EB-01	Total Recoverable	Water	3005A	
400-119192-18	FB-01	Total Recoverable	Water	3005A	
400-119192-19	DUP-01	Total Recoverable	Water	3005A	
400-119192-20	DUP-02	Total Recoverable	Water	3005A	
LCS 400-298973/2-A ^1	Lab Control Sample	Total Recoverable	Water	3005A	
MB 400-298973/1-A ^5	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 300530

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-1	MW-1	Total Recoverable	Water	6020	298973
400-119192-1 MS	MW-1	Total Recoverable	Water	6020	298973
400-119192-1 MSD	MW-1	Total Recoverable	Water	6020	298973
400-119192-2	MW-2	Total Recoverable	Water	6020	298973
400-119192-3	MW-3	Total Recoverable	Water	6020	298973
400-119192-4	MW-4	Total Recoverable	Water	6020	298973
400-119192-5	MW-5	Total Recoverable	Water	6020	298973
400-119192-6	MW-6	Total Recoverable	Water	6020	298973
400-119192-7	MW-7	Total Recoverable	Water	6020	298973
400-119192-8	MW-8	Total Recoverable	Water	6020	298973
400-119192-9	MW-9	Total Recoverable	Water	6020	298973
400-119192-10	MW-10	Total Recoverable	Water	6020	298973
400-119192-11	MW-12	Total Recoverable	Water	6020	298973
400-119192-12	MW-13	Total Recoverable	Water	6020	298973
400-119192-13	MW-15	Total Recoverable	Water	6020	298973
400-119192-14	MW-16	Total Recoverable	Water	6020	298973

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Metals (Continued)

Analysis Batch: 300530 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-15	MW-17	Total Recoverable	Water	6020	298973
400-119192-16	MW-18	Total Recoverable	Water	6020	298973
400-119192-17	EB-01	Total Recoverable	Water	6020	298973
400-119192-18	FB-01	Total Recoverable	Water	6020	298973
400-119192-19	DUP-01	Total Recoverable	Water	6020	298973
400-119192-20	DUP-02	Total Recoverable	Water	6020	298973
LCS 400-298973/2-A ^1	Lab Control Sample	Total Recoverable	Water	6020	298973
MB 400-298973/1-A ^5	Method Blank	Total Recoverable	Water	6020	298973
MRL 400-300530/21	Lab Control Sample	Total/NA	Water	6020	

Analysis Batch: 300704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-2 - RA	MW-2	Total Recoverable	Water	6020	298973
400-119192-3 - RA	MW-3	Total Recoverable	Water	6020	298973
400-119192-4 - RA	MW-4	Total Recoverable	Water	6020	298973
400-119192-5 - RA	MW-5	Total Recoverable	Water	6020	298973
400-119192-6 - RA	MW-6	Total Recoverable	Water	6020	298973
400-119192-7 - RA	MW-7	Total Recoverable	Water	6020	298973
400-119192-8 - RA	MW-8	Total Recoverable	Water	6020	298973
400-119192-9 - RA	MW-9	Total Recoverable	Water	6020	298973
MRL 400-300704/21	Lab Control Sample	Total/NA	Water	6020	

Prep Batch: 300994

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-1	MW-1	Total/NA	Water	7470A	
400-119192-2	MW-2	Total/NA	Water	7470A	
400-119192-2 MS	MW-2	Total/NA	Water	7470A	
400-119192-2 MSD	MW-2	Total/NA	Water	7470A	
400-119192-3	MW-3	Total/NA	Water	7470A	
400-119192-4	MW-4	Total/NA	Water	7470A	
400-119192-5	MW-5	Total/NA	Water	7470A	
400-119192-6	MW-6	Total/NA	Water	7470A	
400-119192-7	MW-7	Total/NA	Water	7470A	
400-119192-8	MW-8	Total/NA	Water	7470A	
400-119192-9	MW-9	Total/NA	Water	7470A	
400-119192-10	MW-10	Total/NA	Water	7470A	
400-119192-11	MW-12	Total/NA	Water	7470A	
400-119192-12	MW-13	Total/NA	Water	7470A	
400-119192-13	MW-15	Total/NA	Water	7470A	
400-119192-14	MW-16	Total/NA	Water	7470A	
400-119192-15	MW-17	Total/NA	Water	7470A	
400-119192-16	MW-18	Total/NA	Water	7470A	
400-119192-17	EB-01	Total/NA	Water	7470A	
400-119192-18	FB-01	Total/NA	Water	7470A	
400-119192-19	DUP-01	Total/NA	Water	7470A	
400-119192-20	DUP-02	Total/NA	Water	7470A	
LCS 400-300994/15-A	Lab Control Sample	Total/NA	Water	7470A	
MB 400-300994/14-A	Method Blank	Total/NA	Water	7470A	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Metals (Continued)

Analysis Batch: 301157

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-1	MW-1	Total/NA	Water	7470A	300994
400-119192-2	MW-2	Total/NA	Water	7470A	300994
400-119192-2 MS	MW-2	Total/NA	Water	7470A	300994
400-119192-2 MSD	MW-2	Total/NA	Water	7470A	300994
400-119192-3	MW-3	Total/NA	Water	7470A	300994
400-119192-4	MW-4	Total/NA	Water	7470A	300994
400-119192-5	MW-5	Total/NA	Water	7470A	300994
400-119192-6	MW-6	Total/NA	Water	7470A	300994
400-119192-7	MW-7	Total/NA	Water	7470A	300994
400-119192-8	MW-8	Total/NA	Water	7470A	300994
400-119192-9	MW-9	Total/NA	Water	7470A	300994
400-119192-10	MW-10	Total/NA	Water	7470A	300994
400-119192-11	MW-12	Total/NA	Water	7470A	300994
400-119192-12	MW-13	Total/NA	Water	7470A	300994
400-119192-13	MW-15	Total/NA	Water	7470A	300994
400-119192-14	MW-16	Total/NA	Water	7470A	300994
400-119192-15	MW-17	Total/NA	Water	7470A	300994
400-119192-16	MW-18	Total/NA	Water	7470A	300994
400-119192-17	EB-01	Total/NA	Water	7470A	300994
400-119192-18	FB-01	Total/NA	Water	7470A	300994
400-119192-19	DUP-01	Total/NA	Water	7470A	300994
400-119192-20	DUP-02	Total/NA	Water	7470A	300994
LCS 400-300994/15-A	Lab Control Sample	Total/NA	Water	7470A	300994
MB 400-300994/14-A	Method Blank	Total/NA	Water	7470A	300994

General Chemistry

Analysis Batch: 298721

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-1	MW-1	Total/NA	Water	SM 2540C	
400-119192-2	MW-2	Total/NA	Water	SM 2540C	
400-119192-2 DU	MW-2	Total/NA	Water	SM 2540C	
400-119192-3	MW-3	Total/NA	Water	SM 2540C	
400-119192-4	MW-4	Total/NA	Water	SM 2540C	
400-119192-5	MW-5	Total/NA	Water	SM 2540C	
400-119192-6	MW-6	Total/NA	Water	SM 2540C	
400-119192-7	MW-7	Total/NA	Water	SM 2540C	
400-119192-8	MW-8	Total/NA	Water	SM 2540C	
400-119192-9	MW-9	Total/NA	Water	SM 2540C	
400-119192-10	MW-10	Total/NA	Water	SM 2540C	
400-119192-19	DUP-01	Total/NA	Water	SM 2540C	
LCS 400-298721/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 400-298721/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 298732

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-11	MW-12	Total/NA	Water	SM 2540C	
400-119192-11 DU	MW-12	Total/NA	Water	SM 2540C	
400-119192-12	MW-13	Total/NA	Water	SM 2540C	
400-119192-13	MW-15	Total/NA	Water	SM 2540C	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

General Chemistry (Continued)

Analysis Batch: 298732 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-14	MW-16	Total/NA	Water	SM 2540C	
400-119192-15	MW-17	Total/NA	Water	SM 2540C	
400-119192-16	MW-18	Total/NA	Water	SM 2540C	
400-119192-17	EB-01	Total/NA	Water	SM 2540C	
400-119192-18	FB-01	Total/NA	Water	SM 2540C	
400-119192-20	DUP-02	Total/NA	Water	SM 2540C	
LCS 400-298732/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 400-298732/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 299114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-1	MW-1	Total/NA	Water	SM 4500 SO4 E	
400-119192-2	MW-2	Total/NA	Water	SM 4500 SO4 E	
400-119192-3	MW-3	Total/NA	Water	SM 4500 SO4 E	
400-119192-4	MW-4	Total/NA	Water	SM 4500 SO4 E	
400-119266-F-5 DU	Duplicate	Total/NA	Water	SM 4500 SO4 E	
400-119343-E-2 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-119343-E-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	
LCS 400-299114/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MB 400-299114/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 299119

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-1	MW-1	Total/NA	Water	SM 4500 Cl- E	
400-119192-2	MW-2	Total/NA	Water	SM 4500 Cl- E	
400-119192-2 MS	MW-2	Total/NA	Water	SM 4500 Cl- E	
400-119192-2 MSD	MW-2	Total/NA	Water	SM 4500 Cl- E	
400-119192-3	MW-3	Total/NA	Water	SM 4500 Cl- E	
400-119192-4	MW-4	Total/NA	Water	SM 4500 Cl- E	
400-119192-5	MW-5	Total/NA	Water	SM 4500 Cl- E	
400-119192-6	MW-6	Total/NA	Water	SM 4500 Cl- E	
400-119192-7	MW-7	Total/NA	Water	SM 4500 Cl- E	
400-119192-8	MW-8	Total/NA	Water	SM 4500 Cl- E	
400-119192-8 DU	MW-8	Total/NA	Water	SM 4500 Cl- E	
400-119192-9	MW-9	Total/NA	Water	SM 4500 Cl- E	
400-119192-10	MW-10	Total/NA	Water	SM 4500 Cl- E	
400-119192-11	MW-12	Total/NA	Water	SM 4500 Cl- E	
400-119192-12	MW-13	Total/NA	Water	SM 4500 Cl- E	
400-119192-13	MW-15	Total/NA	Water	SM 4500 Cl- E	
400-119192-14	MW-16	Total/NA	Water	SM 4500 Cl- E	
400-119192-15	MW-17	Total/NA	Water	SM 4500 Cl- E	
400-119192-16	MW-18	Total/NA	Water	SM 4500 Cl- E	
400-119192-17	EB-01	Total/NA	Water	SM 4500 Cl- E	
400-119192-18	FB-01	Total/NA	Water	SM 4500 Cl- E	
LCS 400-299119/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MB 400-299119/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 299120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-5	MW-5	Total/NA	Water	SM 4500 SO4 E	
400-119192-6	MW-6	Total/NA	Water	SM 4500 SO4 E	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

General Chemistry (Continued)

Analysis Batch: 299120 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-7	MW-7	Total/NA	Water	SM 4500 SO4 E	
400-119192-7 MS	MW-7	Total/NA	Water	SM 4500 SO4 E	
400-119192-7 MSD	MW-7	Total/NA	Water	SM 4500 SO4 E	
400-119192-8	MW-8	Total/NA	Water	SM 4500 SO4 E	
400-119192-9	MW-9	Total/NA	Water	SM 4500 SO4 E	
400-119192-10	MW-10	Total/NA	Water	SM 4500 SO4 E	
400-119192-11	MW-12	Total/NA	Water	SM 4500 SO4 E	
400-119192-12	MW-13	Total/NA	Water	SM 4500 SO4 E	
400-119192-13	MW-15	Total/NA	Water	SM 4500 SO4 E	
400-119192-14	MW-16	Total/NA	Water	SM 4500 SO4 E	
400-119192-14 DU	MW-16	Total/NA	Water	SM 4500 SO4 E	
400-119192-15	MW-17	Total/NA	Water	SM 4500 SO4 E	
400-119192-16	MW-18	Total/NA	Water	SM 4500 SO4 E	
400-119192-17	EB-01	Total/NA	Water	SM 4500 SO4 E	
400-119192-18	FB-01	Total/NA	Water	SM 4500 SO4 E	
400-119192-19	DUP-01	Total/NA	Water	SM 4500 SO4 E	
400-119192-20	DUP-02	Total/NA	Water	SM 4500 SO4 E	
LCS 400-299120/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MB 400-299120/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 299259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-19	DUP-01	Total/NA	Water	SM 4500 CI- E	
400-119192-20	DUP-02	Total/NA	Water	SM 4500 CI- E	
400-119192-A-23 MS	Matrix Spike	Total/NA	Water	SM 4500 CI- E	
400-119192-A-23 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CI- E	
400-119192-A-28 DU	Duplicate	Total/NA	Water	SM 4500 CI- E	
LCS 400-299259/7	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
MB 400-299259/6	Method Blank	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 301246

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-1	MW-1	Total/NA	Water	SM 4500 F C	
400-119192-2	MW-2	Total/NA	Water	SM 4500 F C	
400-119192-2 DU	MW-2	Total/NA	Water	SM 4500 F C	
400-119192-3	MW-3	Total/NA	Water	SM 4500 F C	
400-119192-4	MW-4	Total/NA	Water	SM 4500 F C	
400-119192-5	MW-5	Total/NA	Water	SM 4500 F C	
400-119192-6	MW-6	Total/NA	Water	SM 4500 F C	
400-119192-7	MW-7	Total/NA	Water	SM 4500 F C	
400-119192-8	MW-8	Total/NA	Water	SM 4500 F C	
400-119192-9	MW-9	Total/NA	Water	SM 4500 F C	
400-119928-A-1 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-119928-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
LCS 400-301246/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
MB 400-301246/3	Method Blank	Total/NA	Water	SM 4500 F C	

Analysis Batch: 301346

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-10	MW-10	Total/NA	Water	SM 4500 F C	
400-119192-10 MS	MW-10	Total/NA	Water	SM 4500 F C	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

General Chemistry (Continued)

Analysis Batch: 301346 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-10 MSD	MW-10	Total/NA	Water	SM 4500 F C	
400-119192-11	MW-12	Total/NA	Water	SM 4500 F C	
400-119192-12	MW-13	Total/NA	Water	SM 4500 F C	
400-119192-13	MW-15	Total/NA	Water	SM 4500 F C	
400-119192-14	MW-16	Total/NA	Water	SM 4500 F C	
400-119192-15	MW-17	Total/NA	Water	SM 4500 F C	
400-119192-16	MW-18	Total/NA	Water	SM 4500 F C	
400-119192-17	EB-01	Total/NA	Water	SM 4500 F C	
400-119192-18	FB-01	Total/NA	Water	SM 4500 F C	
400-119192-19	DUP-01	Total/NA	Water	SM 4500 F C	
400-119192-20	DUP-02	Total/NA	Water	SM 4500 F C	
400-119192-A-21 DU	Duplicate	Total/NA	Water	SM 4500 F C	
LCS 400-301346/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
MB 400-301346/3	Method Blank	Total/NA	Water	SM 4500 F C	

Rad

Prep Batch: 242272

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-1	MW-1	Total/NA	Water	PrecSep-21	
400-119192-2	MW-2	Total/NA	Water	PrecSep-21	
400-119192-3	MW-3	Total/NA	Water	PrecSep-21	
400-119192-4	MW-4	Total/NA	Water	PrecSep-21	
400-119192-5	MW-5	Total/NA	Water	PrecSep-21	
400-119192-6	MW-6	Total/NA	Water	PrecSep-21	
400-119192-7	MW-7	Total/NA	Water	PrecSep-21	
400-119192-8	MW-8	Total/NA	Water	PrecSep-21	
400-119192-9	MW-9	Total/NA	Water	PrecSep-21	
400-119192-10	MW-10	Total/NA	Water	PrecSep-21	
400-119192-11	MW-12	Total/NA	Water	PrecSep-21	
400-119192-12	MW-13	Total/NA	Water	PrecSep-21	
400-119192-13	MW-15	Total/NA	Water	PrecSep-21	
400-119192-14	MW-16	Total/NA	Water	PrecSep-21	
400-119192-15	MW-17	Total/NA	Water	PrecSep-21	
400-119192-16	MW-18	Total/NA	Water	PrecSep-21	
400-119192-17	EB-01	Total/NA	Water	PrecSep-21	
400-119192-18	FB-01	Total/NA	Water	PrecSep-21	
400-119192-19	DUP-01	Total/NA	Water	PrecSep-21	
400-119192-20	DUP-02	Total/NA	Water	PrecSep-21	
LCS 160-242272/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-242272/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	
MB 160-242272/1-A	Method Blank	Total/NA	Water	PrecSep-21	

Prep Batch: 243092

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-1	MW-1	Total/NA	Water	PrecSep_0	
400-119192-2	MW-2	Total/NA	Water	PrecSep_0	
400-119192-3	MW-3	Total/NA	Water	PrecSep_0	
400-119192-4	MW-4	Total/NA	Water	PrecSep_0	
400-119192-5	MW-5	Total/NA	Water	PrecSep_0	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
 SDG: Mississippi

Rad (Continued)

Prep Batch: 243092 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-6	MW-6	Total/NA	Water	PrecSep_0	
400-119192-7	MW-7	Total/NA	Water	PrecSep_0	
400-119192-8	MW-8	Total/NA	Water	PrecSep_0	
400-119192-9	MW-9	Total/NA	Water	PrecSep_0	
400-119192-10	MW-10	Total/NA	Water	PrecSep_0	
400-119192-11	MW-12	Total/NA	Water	PrecSep_0	
400-119192-12	MW-13	Total/NA	Water	PrecSep_0	
400-119192-13	MW-15	Total/NA	Water	PrecSep_0	
400-119192-14	MW-16	Total/NA	Water	PrecSep_0	
400-119192-15	MW-17	Total/NA	Water	PrecSep_0	
400-119192-16	MW-18	Total/NA	Water	PrecSep_0	
400-119192-17	EB-01	Total/NA	Water	PrecSep_0	
400-119192-18	FB-01	Total/NA	Water	PrecSep_0	
400-119192-19	DUP-01	Total/NA	Water	PrecSep_0	
400-119192-20	DUP-02	Total/NA	Water	PrecSep_0	
LCS 160-243092/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-243092/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	
MB 160-243092/1-A	Method Blank	Total/NA	Water	PrecSep_0	

Field Service / Mobile Lab

Analysis Batch: 302937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-1	MW-1	Total/NA	Water	Field Sampling	
400-119192-2	MW-2	Total/NA	Water	Field Sampling	
400-119192-3	MW-3	Total/NA	Water	Field Sampling	
400-119192-4	MW-4	Total/NA	Water	Field Sampling	
400-119192-5	MW-5	Total/NA	Water	Field Sampling	
400-119192-6	MW-6	Total/NA	Water	Field Sampling	
400-119192-7	MW-7	Total/NA	Water	Field Sampling	
400-119192-8	MW-8	Total/NA	Water	Field Sampling	
400-119192-9	MW-9	Total/NA	Water	Field Sampling	
400-119192-10	MW-10	Total/NA	Water	Field Sampling	
400-119192-11	MW-12	Total/NA	Water	Field Sampling	
400-119192-12	MW-13	Total/NA	Water	Field Sampling	
400-119192-13	MW-15	Total/NA	Water	Field Sampling	
400-119192-14	MW-16	Total/NA	Water	Field Sampling	
400-119192-15	MW-17	Total/NA	Water	Field Sampling	
400-119192-16	MW-18	Total/NA	Water	Field Sampling	
400-119192-19	DUP-01	Total/NA	Water	Field Sampling	
400-119192-20	DUP-02	Total/NA	Water	Field Sampling	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MRL 400-300530/21
Matrix: Water
Analysis Batch: 300530

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.500	0.418	J	ug/L		84	50 - 150
Arsenic	0.250	<0.33		ug/L		95	50 - 150
Barium	0.500	0.488	J	ug/L		98	50 - 150
Beryllium	0.250	0.218	J	ug/L		87	50 - 150
Boron	5.00	<18		ug/L		81	50 - 150
Cadmium	0.250	0.253	J	ug/L		101	50 - 150
Calcium	50.0	<130		ug/L		108	50 - 150
Chromium	0.500	0.506	J	ug/L		101	50 - 150
Cobalt	0.500	0.465	J	ug/L		93	50 - 150
Lead	0.250	0.379	J ^	ug/L		152	50 - 150
Lithium	0.500	<1.6		ug/L		133	50 - 150
Molybdenum	0.500	0.453	J	ug/L		91	50 - 150
Selenium	0.250	<0.23		ug/L		87	50 - 150
Thallium	0.100	0.0940	J	ug/L		94	50 - 150

Lab Sample ID: MRL 400-300704/21
Matrix: Water
Analysis Batch: 300704

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.500	0.409	J	ug/L		82	50 - 150
Arsenic	0.250	<0.33		ug/L		106	50 - 150
Barium	0.500	0.460	J	ug/L		92	50 - 150
Beryllium	0.250	0.254	J	ug/L		102	50 - 150
Boron	5.00	<18		ug/L		87	50 - 150
Cadmium	0.250	0.267	J	ug/L		107	50 - 150
Calcium	50.0	<130		ug/L		107	50 - 150
Chromium	0.500	0.475	J	ug/L		95	50 - 150
Cobalt	0.500	0.512	J	ug/L		102	50 - 150
Lead	0.250	<0.33		ug/L		97	50 - 150
Lithium	0.500	<1.6		ug/L		142	50 - 150
Molybdenum	0.500	0.496	J	ug/L		99	50 - 150
Selenium	0.250	<0.23		ug/L		88	50 - 150
Thallium	0.100	0.101	J	ug/L		101	50 - 150

Lab Sample ID: MB 400-298973/1-A ^5
Matrix: Water
Analysis Batch: 300530

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 298973

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/25/16 12:00	04/05/16 20:17	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/25/16 12:00	04/05/16 20:17	5
Barium	<0.00049		0.0025	0.00049	mg/L		03/25/16 12:00	04/05/16 20:17	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 20:17	5
Boron	<0.021		0.050	0.021	mg/L		03/25/16 12:00	04/05/16 20:17	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/25/16 12:00	04/05/16 20:17	5
Calcium	<0.13		0.25	0.13	mg/L		03/25/16 12:00	04/05/16 20:17	5
Chromium	<0.0011		0.0025	0.0011	mg/L		03/25/16 12:00	04/05/16 20:17	5

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 400-298973/1-A ^5
Matrix: Water
Analysis Batch: 300530

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 298973

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Cobalt	<0.00040		0.0025	0.00040	mg/L		03/25/16 12:00	04/05/16 20:17	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/25/16 12:00	04/05/16 20:17	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/25/16 12:00	04/05/16 20:17	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/25/16 12:00	04/05/16 20:17	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/25/16 12:00	04/05/16 20:17	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/25/16 12:00	04/05/16 20:17	5

Lab Sample ID: LCS 400-298973/2-A ^1
Matrix: Water
Analysis Batch: 300530

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 298973

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0519		mg/L		104	80 - 120
Arsenic	0.0500	0.0501		mg/L		100	80 - 120
Barium	0.0500	0.0474		mg/L		95	80 - 120
Beryllium	0.0500	0.0467		mg/L		93	80 - 120
Boron	0.100	0.0993		mg/L		99	80 - 120
Cadmium	0.0500	0.0500		mg/L		100	80 - 120
Calcium	5.00	5.10		mg/L		102	80 - 120
Chromium	0.0500	0.0462		mg/L		92	80 - 120
Cobalt	0.0500	0.0493		mg/L		99	80 - 120
Lead	0.0500	0.0476		mg/L		95	80 - 120
Lithium	0.0500	0.0508		mg/L		102	80 - 120
Molybdenum	0.0500	0.0488		mg/L		98	80 - 120
Selenium	0.0500	0.0508		mg/L		102	80 - 120
Thallium	0.0100	0.00984		mg/L		98	80 - 120

Lab Sample ID: 400-119192-1 MS
Matrix: Water
Analysis Batch: 300530

Client Sample ID: MW-1
Prep Type: Total Recoverable
Prep Batch: 298973

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0010		0.0500	0.0487		mg/L		97	75 - 125
Arsenic	<0.00046		0.0500	0.0503		mg/L		101	75 - 125
Barium	0.22		0.0500	0.261	4	mg/L		92	75 - 125
Beryllium	0.00046	J	0.0500	0.0487		mg/L		96	75 - 125
Boron	<0.021		0.100	0.113		mg/L		113	75 - 125
Cadmium	<0.00034		0.0500	0.0521		mg/L		104	75 - 125
Calcium	6.6		5.00	11.5		mg/L		98	75 - 125
Chromium	<0.0011		0.0500	0.0477		mg/L		95	75 - 125
Cobalt	0.0044		0.0500	0.0546		mg/L		100	75 - 125
Lead	<0.00035		0.0500	0.0469		mg/L		94	75 - 125
Lithium	<0.0032	F1	0.0500	0.0678	F1	mg/L		136	75 - 125
Molybdenum	<0.00085		0.0500	0.0482		mg/L		96	75 - 125
Selenium	0.00065	J	0.0500	0.0500		mg/L		99	75 - 125
Thallium	0.000090	J	0.0100	0.0102		mg/L		101	75 - 125

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 400-119192-1 MSD

Matrix: Water

Analysis Batch: 300530

Client Sample ID: MW-1

Prep Type: Total Recoverable

Prep Batch: 298973

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec.		RPD	Limit
				Result	Qualifier				Limits	RPD		
Antimony	<0.0010		0.0500	0.0484		mg/L		97	75 - 125	1	20	
Arsenic	<0.00046		0.0500	0.0514		mg/L		103	75 - 125	2	20	
Barium	0.22		0.0500	0.261	4	mg/L		91	75 - 125	0	20	
Beryllium	0.00046	J	0.0500	0.0489		mg/L		97	75 - 125	1	20	
Boron	<0.021		0.100	0.113		mg/L		113	75 - 125	0	20	
Cadmium	<0.00034		0.0500	0.0526		mg/L		105	75 - 125	1	20	
Calcium	6.6		5.00	11.7		mg/L		101	75 - 125	1	20	
Chromium	<0.0011		0.0500	0.0473		mg/L		95	75 - 125	1	20	
Cobalt	0.0044		0.0500	0.0538		mg/L		99	75 - 125	1	20	
Lead	<0.00035		0.0500	0.0469		mg/L		94	75 - 125	0	20	
Lithium	<0.0032	F1	0.0500	0.0691	F1	mg/L		138	75 - 125	2	20	
Molybdenum	<0.00085		0.0500	0.0495		mg/L		99	75 - 125	3	20	
Selenium	0.00065	J	0.0500	0.0512		mg/L		101	75 - 125	2	20	
Thallium	0.000090	J	0.0100	0.0102		mg/L		101	75 - 125	0	20	

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-300994/14-A

Matrix: Water

Analysis Batch: 301157

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 300994

Analyte	MB MB		RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	0.000192	J	0.00020	0.000070	mg/L		04/08/16 16:01	04/11/16 10:55	1

Lab Sample ID: LCS 400-300994/15-A

Matrix: Water

Analysis Batch: 301157

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 300994

Analyte	Spike Added	LCS LCS		Unit	D	%Rec	Limits
		Result	Qualifier				
Mercury	0.00101	0.00102		mg/L		102	80 - 120

Lab Sample ID: 400-119192-2 MS

Matrix: Water

Analysis Batch: 301157

Client Sample ID: MW-2

Prep Type: Total/NA

Prep Batch: 300994

Analyte	Sample Result	Sample Qualifier	Spike Added	MS MS		Unit	D	%Rec	Limits
				Result	Qualifier				
Mercury	0.00018	J B	0.00201	0.00185		mg/L		83	80 - 120

Lab Sample ID: 400-119192-2 MSD

Matrix: Water

Analysis Batch: 301157

Client Sample ID: MW-2

Prep Type: Total/NA

Prep Batch: 300994

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD MSD		Unit	D	%Rec	%Rec.		RPD	Limit
				Result	Qualifier				Limits	RPD		
Mercury	0.00018	J B	0.00201	0.00197		mg/L		89	80 - 120	6	20	

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 400-298721/1
Matrix: Water
Analysis Batch: 298721

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			03/24/16 11:31	1

Lab Sample ID: LCS 400-298721/2
Matrix: Water
Analysis Batch: 298721

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	254		mg/L		87	78 - 122

Lab Sample ID: 400-119192-2 DU
Matrix: Water
Analysis Batch: 298721

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	28		28.0		mg/L		0	5

Lab Sample ID: MB 400-298732/1
Matrix: Water
Analysis Batch: 298732

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			03/24/16 12:37	1

Lab Sample ID: LCS 400-298732/2
Matrix: Water
Analysis Batch: 298732

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	294		mg/L		100	78 - 122

Lab Sample ID: 400-119192-11 DU
Matrix: Water
Analysis Batch: 298732

Client Sample ID: MW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	64		64.0		mg/L		0	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-299119/6
Matrix: Water
Analysis Batch: 299119

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			03/26/16 13:28	1

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: LCS 400-299119/7
Matrix: Water
Analysis Batch: 299119

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	31.7		mg/L		106	90 - 110

Lab Sample ID: 400-119192-2 MS
Matrix: Water
Analysis Batch: 299119

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	7.6		10.0	18.1		mg/L		105	73 - 120

Lab Sample ID: 400-119192-2 MSD
Matrix: Water
Analysis Batch: 299119

Client Sample ID: MW-2
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	7.6		10.0	18.2		mg/L		106	73 - 120	1	8

Lab Sample ID: 400-119192-8 DU
Matrix: Water
Analysis Batch: 299119

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

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	9.7		8.83	F5	mg/L		9	8

Lab Sample ID: MB 400-299259/6
Matrix: Water
Analysis Batch: 299259

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			03/28/16 10:59	1

Lab Sample ID: LCS 400-299259/7
Matrix: Water
Analysis Batch: 299259

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	31.5		mg/L		105	90 - 110

Lab Sample ID: 400-119192-A-23 MS
Matrix: Water
Analysis Batch: 299259

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<0.60		10.0	10.4		mg/L		104	73 - 120

Lab Sample ID: 400-119192-A-23 MSD
Matrix: Water
Analysis Batch: 299259

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<0.60		10.0	10.3		mg/L		103	73 - 120	1	8

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Lab Sample ID: 400-119192-A-28 DU
Matrix: Water
Analysis Batch: 299259

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	6.5		5.94	F5	mg/L		9	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-301246/3
Matrix: Water
Analysis Batch: 301246

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			04/11/16 17:18	1

Lab Sample ID: LCS 400-301246/4
Matrix: Water
Analysis Batch: 301246

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	4.00	4.02		mg/L		101	90 - 110

Lab Sample ID: 400-119928-A-1 MS
Matrix: Water
Analysis Batch: 301246

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	0.89		1.00	1.90		mg/L		101	75 - 125

Lab Sample ID: 400-119928-A-1 MSD
Matrix: Water
Analysis Batch: 301246

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	0.89		1.00	1.90		mg/L		101	75 - 125	0	4

Lab Sample ID: 400-119192-2 DU
Matrix: Water
Analysis Batch: 301246

Client Sample ID: MW-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 400-301346/3
Matrix: Water
Analysis Batch: 301346

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			04/12/16 10:55	1

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: LCS 400-301346/4
Matrix: Water
Analysis Batch: 301346

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	4.19		mg/L		105	90 - 110

Lab Sample ID: 400-119192-10 MS
Matrix: Water
Analysis Batch: 301346

Client Sample ID: MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	<0.032		1.00	1.01		mg/L		101	75 - 125

Lab Sample ID: 400-119192-10 MSD
Matrix: Water
Analysis Batch: 301346

Client Sample ID: MW-10
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	<0.032		1.00	0.990		mg/L		99	75 - 125	2	4

Lab Sample ID: 400-119192-A-21 DU
Matrix: Water
Analysis Batch: 301346

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	DU Result	DU Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	<0.032			<0.032		mg/L				NC	4

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-299114/6
Matrix: Water
Analysis Batch: 299114

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.4		5.0	1.4	mg/L			03/26/16 09:46	1

Lab Sample ID: LCS 400-299114/7
Matrix: Water
Analysis Batch: 299114

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: 400-119343-E-2 MS
Matrix: Water
Analysis Batch: 299114

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	<1.4	F1	10.0	13.4	F1	mg/L		134	77 - 128

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: 400-119343-E-2 MSD
Matrix: Water
Analysis Batch: 299114

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	<1.4	F1	10.0	13.1	F1	mg/L		131	77 - 128	2	5

Lab Sample ID: 400-119266-F-5 DU
Matrix: Water
Analysis Batch: 299114

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	<1.4		<1.4		mg/L		NC	5

Lab Sample ID: MB 400-299120/6
Matrix: Water
Analysis Batch: 299120

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.4		5.0	1.4	mg/L			03/26/16 13:30	1

Lab Sample ID: LCS 400-299120/7
Matrix: Water
Analysis Batch: 299120

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	14.9		mg/L		99	90 - 110

Lab Sample ID: 400-119192-7 MS
Matrix: Water
Analysis Batch: 299120

Client Sample ID: MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	<1.4		10.0	9.97		mg/L		100	77 - 128

Lab Sample ID: 400-119192-7 MSD
Matrix: Water
Analysis Batch: 299120

Client Sample ID: MW-7
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	<1.4		10.0	9.98		mg/L		100	77 - 128	0	5

Lab Sample ID: 400-119192-14 DU
Matrix: Water
Analysis Batch: 299120

Client Sample ID: MW-16
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	<1.4		<1.4		mg/L		NC	5

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-242272/1-A
Matrix: Water
Analysis Batch: 246401

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 242272

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.001940	U	0.0552	0.0552	1.00	0.105	pCi/L	03/25/16 14:46	04/18/16 07:30	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	105		40 - 110					03/25/16 14:46	04/18/16 07:30	1

Lab Sample ID: LCS 160-242272/2-A
Matrix: Water
Analysis Batch: 246401

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 242272

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	11.2	13.83		1.35	1.00	0.0956	pCi/L	124	68 - 137
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	103		40 - 110						

Lab Sample ID: LCSD 160-242272/3-A
Matrix: Water
Analysis Batch: 246401

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 242272

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	11.2	13.12		1.29	1.00	0.0997	pCi/L	118	68 - 137	0.27	1
Carrier	LCSD %Yield	LCSD Qualifier	Limits								
Ba Carrier	100		40 - 110								

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-243092/1-A
Matrix: Water
Analysis Batch: 245939

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 243092

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.04134	U	0.188	0.188	1.00	0.330	pCi/L	03/31/16 21:51	04/14/16 11:05	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	105		40 - 110					03/31/16 21:51	04/14/16 11:05	1
Y Carrier	85.6		40 - 110					03/31/16 21:51	04/14/16 11:05	1

QC Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
 SDG: Mississippi

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

Lab Sample ID: LCS 160-243092/2-A
Matrix: Water
Analysis Batch: 245939

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 243092

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	15.3	17.55		1.82	1.00	0.373	pCi/L	115	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	103		40 - 110
Y Carrier	85.2		40 - 110


Lab Sample ID: LCSD 160-243092/3-A
Matrix: Water
Analysis Batch: 245939

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 243092

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	15.3	18.55		1.91	1.00	0.352	pCi/L	121	56 - 140	0.27	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	100		40 - 110
Y Carrier	84.5		40 - 110

Chain of Custody Record

Client Information		Lab Pmt: Whitmire, Cheyenne R		Carrier Tracking No(s):		COC No: 400-53995-23825.1	
Client Contact: Mr. Cale Sellers		Phone: 850-336-0192		E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 1 of 4	
Company: Southern Company		Due Date Requested:		Analysis Requested		Job #: 400-119192 COC	
Address: PO BOX 2641 GSC8		TAT Requested (days):				Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SSO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph +5 Z - other (specify)	
City: Birmingham		PO #: Purchase Order not required		9316_Ra226_9320_Ra228 5M4600_Cl_E - Chloride, 5M4600_SO4_E - Sulfate, 4500_F_C 6020_7470A		Total Number of Containers:	
State, Zip: AL, 35291		WO #:		Perform MS/MD (Yes or No)		Special Instructions/Note:	
Phone: 205-992-7762(Tel)		Project #: 40006621		Field Filtered Sample (Yes or No)		Special Instructions/Note:	
Email: CBSSELLER@SOUTHERNCO.COM		Site: Mississippi		Matrix (W=water, S=solid, O=waste/soil, B=Trace, A=Air)		Special Instructions/Note:	
Project Name: CCR -Plant Daniel		SSOW #:		Sample Type (C=Comp, G=grab)		Special Instructions/Note:	
Sample Identification		Sample Date		Sample Time		Preservation Codes:	
MW-1		3-22-16	1221	G	Water	X	X
MW-2		3-22-16	0851	G	Water	X	X
MW-3		3-22-16	0855	G	Water	X	X
MW-4		3-22-16	1145	G	Water	X	X
MW-5		3-22-16	1305	G	Water	X	X
MW-6		3-22-16	1025	G	Water	X	X
MW-7		3-21-16	1585	G	Water	X	X
MW-8		3-21-16	1740	G	Water	X	X
MW-9		3-21-16	1845	G	Water	X	X
MW-10		3-22-16	1121	G	Water	X	X
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months		Special Instructions/QC Requirements:		Special Instructions/Note:	
Empty Kit Relinquished by:		Date:		Method of Shipment:		Special Instructions/Note:	
Relinquished by: <i>[Signature]</i>		Date/Time: 3-22-16 2115		Company: AHEM		Date/Time: 3-22-16	
Relinquished by: <i>[Signature]</i>		Date/Time: 3-23-16 9:05AM		Company:		Date/Time: 3/23/16 0905	
Relinquished by: <i>[Signature]</i>		Date/Time:		Company:		Date/Time:	
Custody Seal No.:		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		Cooler Temperature(s) °C and Other Remarks:	

0.5%, 0.16%, 0.19%, 0.3%

Chain of Custody Record

Client Information Southern Company PO BOX 2641 GSC8 Birmingham State: AL, Zip: 35291 Phone: 205-992-7762(Tel) Email: CBSSELLER@SOUTHERNCO.COM Project Name: CCR -Plant Daniel Site: Mississippi		Lab PM: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com		Carner Tracking No(s): 400-53995-23825.2 Page: Page 2 of 4 Job #:	
Due Date Requested: TAT Requested (days): PO #: Purchase Order not required WO #: Project #: 40006621 SOW#:		Analysis Requested			
Sample Information Sample ID: MW-12 MW-13 MW-14 MW-15 MW-16 MW-17 MW-18		Sample Date 3-22-16 3-22-16 3-22-16 3-22-16 3-22-16 3-22-16		Sample Time 1546 1641 1445 1740 1705 1550	
Matrix (W-water, S-solid, O-owestofill, BT=TISSUE, A=AIR) Water Water Water Water Water Water Water Water Water Water Water		Sample Type (C=Comp, G=grab) G G G G G G G G G G G		Preservation Code: F G G G G G G G G G G	
Field Filtered Sample (Yes or No) N N N N N N N N N N N N		9316_Ra226, 9320_Ra228 SM4500_CL_E - Chloride, SM4500_SO4_E - Sulfate, 4500_F_C Fluoride, 2540C - Total Dissolved Solids 6020_7470A		Total Number of Containers X 3 3 3 3 3 3 3 3 3 3 3	
Special Instructions/Note: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 X - EDTA L - EDA Other:		Special Instructions/Note: X 3 3 3 3 3 3 3 3 3 3			
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					
Deliverable Requested: I, II, III, IV, Other (specify)					
Empty Kit Relinquished by:		Date:		Method of Shipment:	
Relinquished by: <i>[Signature]</i>		Date/Time: 3-22-16 11:17		Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Relinquished by: <i>[Signature]</i>		Date/Time: 3-23-16 9:05AM		Received by: <i>[Signature]</i>	
Relinquished by: <i>[Signature]</i>		Date/Time:		Received by: <i>[Signature]</i>	
Relinquished by: <i>[Signature]</i>		Date/Time:		Received by: <i>[Signature]</i>	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:	



Chain of Custody Record

Client Information Supplier: <i>Shane B. Craig</i> Phone: <i>850-536-0199</i>		Lab PM: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com		Carrier Tracking No(s): COC No: 400-53995-23825.3 Page: Page 3 of 4 Job #:						
Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State/Zip: AL, 35291 Phone: 205-992-7762(Tel) Email: CBSSELLER@SOUTHERNCO.COM Project Name: CCR - Plant Daniel Site: Mississippi		Analysis Requested Due Date Requested: TAT Requested (days): PO #: Purchase Order not required WO #: Project #: 40006621 SSO#: Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> 931 E. Ra226, 9320, Ra228 SM4500_C1 E - Chloride, SM4500_S04 E - Sulfate, 4500_F.C -Fluoride, 2840C - Total Dissolved Solids 6020, 7470A		Preservation Codes: A - HCl B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 X - EDTA Z - other (specify)						
Sample Identification Sample Date Sample Time Sample Type (C=Comp, G=Grab) Matrix (W=water, S=solid, O=wastewater, BT=tissue, A=air)		Preservation Code: Total Number of Containers		Special Instructions/Note: Special Instructions/QC Requirements:						
EB-01	3-22-16	1449	G	Water	X	X	X	3		
FB-01	3-22-16	1502	G	Water	X	X	X	3		
DUP-01	3-21-16	1648	G	Water	X	X	X	3		
EB-02	RDH 3-22-16			Water						
FB-02	RDH 3-22-16			Water						
DUP-02	3-22-16	1345	G	Water	X	X	X	3		
EB-03				Water						
FB-03				Water						
DUP-03	RDH 3-22-16			Water						
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months						
Empty Kit Relinquished by:		Date:		Method of Shipment:						
Relinquished by: <i>[Signature]</i>		Date/Time: 3-22-16 2:15		Company: RDH						
Relinquished by: <i>[Signature]</i>		Date/Time: 3-23-16 9:05 AM		Company:						
Relinquished by: <i>[Signature]</i>		Date/Time:		Company:						
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:						



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-119192-1

SDG Number: Mississippi

Login Number: 119192

List Number: 1

Creator: Perez, Trina M

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.5°C,0.6°C,0.9°C,0.0°C,0.3°C IR-6; 0.0°C, 0.0°C, 3.1°C, IR-2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

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	06-30-16
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	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	05-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-16
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16
Michigan	State Program	5	9912	06-30-16
New Jersey	NELAP	2	FL006	06-30-16
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	06-30-16
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-13-00193	07-01-16
Virginia	NELAP	3	460166	06-14-16
West Virginia DEP	State Program	3	136	06-30-16

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	06-30-16
California	State Program	9	2886	03-31-18
Connecticut	State Program	1	PH-0241	03-31-17
Florida	NELAP	4	E87689	06-30-16
Illinois	NELAP	5	003757	11-30-16
Iowa	State Program	7	373	12-01-16
Kansas	NELAP	7	E-10236	05-31-16
Kentucky (DW)	State Program	4	90125	12-31-16
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-16 *
Louisiana (DW)	NELAP	6	LA160008	12-31-16
Maryland	State Program	3	310	09-30-16
Missouri	State Program	7	780	06-30-16
Nevada	State Program	9	MO000542016-1	07-31-16
New Jersey	NELAP	2	MO002	06-30-16
New York	NELAP	2	11616	03-31-17
North Dakota	State Program	8	R207	06-30-16
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-16

* Certification renewal pending - certification considered valid.

Certification Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-1
SDG: Mississippi

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
Pennsylvania	NELAP	3	68-00540	02-28-17 *
South Carolina	State Program	4	85002001	06-30-16
Texas	NELAP	6	T104704193-15-9	07-31-16
USDA	Federal		P330-07-00122	01-09-17
Utah	NELAP	8	MO000542015-7	07-31-16
Virginia	NELAP	3	460230	06-14-16
Washington	State Program	10	C592	08-30-16
West Virginia DEP	State Program	3	381	08-31-16

* Certification renewal pending - certification considered valid.



TestAmerica

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: 400-119192-2

TestAmerica Sample Delivery Group: Mississippi

Client Project/Site: CCR -Plant Daniel

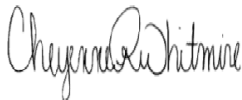
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:

4/25/2016 4:27:49 PM

Cheyenne Whitmire, Project Manager II

(850)474-1001

cheyenne.whitmire@testamericainc.com

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

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

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

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Case Narrative

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Job ID: 400-119192-2

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-119192-2

Metals

Method(s) 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 300390 and analytical batch 300704 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) 6020: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for preparation batch 300391 and analytical batch 300704 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) 7470A: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for prep batch 300991 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) 7470A: The method blank for prep batch 300991 contained Mercury above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-analysis of samples was not performed.

General Chemistry

Method(s) SM 4500 Cl- E: The sample duplicate precision for the following sample associated with analytical batch 299259 was outside control limits: (400-119192-A-28 DU). Non-homogeneity of the sample matrix is suspected. interference suspected. The associated laboratory control sample / laboratory control sample duplicate (LCS/LCSD) precision met acceptance criteria.

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: MW-14

Lab Sample ID: 400-119192-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.082		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	5.9		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0013	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0041	J	0.0050	0.0032	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	48		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	8.8		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	5.40				SU	1		Field Sampling	Total/NA
Field Temperature	20.13				Centigrade	1		Field Sampling	Total/NA

Client Sample ID: MW-11

Lab Sample ID: 400-119192-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.071		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.00034	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Calcium	1.9		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0054		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0040	J	0.0050	0.0032	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	40		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	13		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	1.8	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.80				SU	1		Field Sampling	Total/NA
Field Temperature	20.47				Centigrade	1		Field Sampling	Total/NA

Client Sample ID: EB-02

Lab Sample ID: 400-119192-23

No Detections.

Client Sample ID: FB-02

Lab Sample ID: 400-119192-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.000073	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA

Client Sample ID: EB-03

Lab Sample ID: 400-119192-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.000073	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA

Client Sample ID: FB-03

Lab Sample ID: 400-119192-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.035		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.8		0.25	0.13	mg/L	5		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: FB-03 (Continued)

Lab Sample ID: 400-119192-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.0010	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.000071	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA

Client Sample ID: DUP-03

Lab Sample ID: 400-119192-27

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00070	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.010		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Boron	0.036	J	0.050	0.021	mg/L	5		6020	Total Recoverable
Calcium	3.7		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0013	J	0.0025	0.0011	mg/L	5		6020	Total Recoverable
Cobalt	0.00091	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lead	0.00035	J	0.0013	0.00035	mg/L	5		6020	Total Recoverable
Lithium	0.043		0.0050	0.0032	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	42		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	8.2		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	2.4	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	5.38				SU	1		Field Sampling	Total/NA
Field Temperature	23.16				Centigrade	1		Field Sampling	Total/NA

Client Sample ID: BAW-1

Lab Sample ID: 400-119192-28

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.00084	J	0.0025	0.00049	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	20		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	6.5		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	5.12				SU	1		Field Sampling	Total/NA
Field Temperature	23.97				Centigrade	1		Field Sampling	Total/NA

Client Sample ID: BAW-2

Lab Sample ID: 400-119192-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.027		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	2.6		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00048	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Molybdenum	0.0019	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
Selenium	0.00041	J	0.0013	0.00024	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	30		5.0	3.4	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: BAW-2 (Continued)

Lab Sample ID: 400-119192-29

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	5.1		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	5.52				SU	1		Field Sampling	Total/NA
Field Temperature	24.76				Centigrade	1		Field Sampling	Total/NA

Client Sample ID: BAW-3

Lab Sample ID: 400-119192-30

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.013		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Cadmium	0.00041	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Calcium	1.1		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0055		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Selenium	0.00033	J	0.0013	0.00024	mg/L	5		6020	Total Recoverable
Mercury	0.000084	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	30		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	7.3		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	5.05				SU	1		Field Sampling	Total/NA
Field Temperature	25.14				Centigrade	1		Field Sampling	Total/NA

Client Sample ID: BAW-4

Lab Sample ID: 400-119192-31

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00087	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.011		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Boron	0.037	J	0.050	0.021	mg/L	5		6020	Total Recoverable
Calcium	3.7		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0015	J	0.0025	0.0011	mg/L	5		6020	Total Recoverable
Cobalt	0.00094	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lead	0.00039	J	0.0013	0.00035	mg/L	5		6020	Total Recoverable
Lithium	0.044		0.0050	0.0032	mg/L	5		6020	Total Recoverable
Mercury	0.000073	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	46		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	7.6		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.040	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	2.3	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	5.38				SU	1		Field Sampling	Total/NA
Field Temperature	23.16				Centigrade	1		Field Sampling	Total/NA

Client Sample ID: BAW-5

Lab Sample ID: 400-119192-32

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: BAW-5 (Continued)

Lab Sample ID: 400-119192-32

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0033		0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.044		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Boron	0.22		0.050	0.021	mg/L	5		6020	Total Recoverable
Calcium	18		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0012	J	0.0025	0.0011	mg/L	5		6020	Total Recoverable
Lithium	0.17		0.0050	0.0032	mg/L	5		6020	Total Recoverable
Molybdenum	0.0026	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
Mercury	0.000074	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	88		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	9.0		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	4.5	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	6.64				SU	1		Field Sampling	Total/NA
Field Temperature	22.98				Centigrade	1		Field Sampling	Total/NA

Client Sample ID: BAW-7

Lab Sample ID: 400-119192-33

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.013		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.65		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0011	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.000071	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	22		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	6.5		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.89				SU	1		Field Sampling	Total/NA
Field Temperature	23.99				Centigrade	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
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
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
Field Sampling	Field Sampling	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

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

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

Sample Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-119192-21	MW-14	Water	03/23/16 07:45	03/24/16 08:50
400-119192-22	MW-11	Water	03/23/16 09:45	03/24/16 08:50
400-119192-23	EB-02	Water	03/23/16 07:00	03/24/16 08:50
400-119192-24	FB-02	Water	03/23/16 07:10	03/24/16 08:50
400-119192-25	EB-03	Water	03/23/16 15:57	03/24/16 08:50
400-119192-26	FB-03	Water	03/23/16 16:07	03/24/16 08:50
400-119192-27	DUP-03	Water	03/23/16 16:45	03/24/16 08:50
400-119192-28	BAW-1	Water	03/23/16 11:20	03/24/16 08:50
400-119192-29	BAW-2	Water	03/23/16 13:55	03/24/16 08:50
400-119192-30	BAW-3	Water	03/23/16 15:15	03/24/16 08:50
400-119192-31	BAW-4	Water	03/23/16 17:45	03/24/16 08:50
400-119192-32	BAW-5	Water	03/23/16 18:35	03/24/16 08:50
400-119192-33	BAW-7	Water	03/23/16 12:40	03/24/16 08:50

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: MW-14
Date Collected: 03/23/16 07:45
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-21
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		04/05/16 12:00	04/06/16 14:05	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/05/16 12:00	04/06/16 14:05	5
Barium	0.082		0.0025	0.00049	mg/L		04/05/16 12:00	04/06/16 14:05	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 14:05	5
Boron	<0.021		0.050	0.021	mg/L		04/05/16 12:00	04/06/16 14:05	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 14:05	5
Calcium	5.9		0.25	0.13	mg/L		04/05/16 12:00	04/06/16 14:05	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/05/16 12:00	04/06/16 14:05	5
Cobalt	0.0013	J	0.0025	0.00040	mg/L		04/05/16 12:00	04/06/16 14:05	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/05/16 12:00	04/06/16 14:05	5
Lithium	0.0041	J	0.0050	0.0032	mg/L		04/05/16 12:00	04/06/16 14:05	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/05/16 12:00	04/06/16 14:05	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/05/16 12:00	04/06/16 14:05	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/05/16 12:00	04/06/16 14:05	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070	F1	0.00020	0.000070	mg/L		04/11/16 09:35	04/12/16 14:38	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	48		5.0	3.4	mg/L			03/25/16 17:03	1
Chloride	8.8		2.0	0.60	mg/L			03/28/16 12:05	1
Fluoride	<0.032		0.10	0.032	mg/L			04/12/16 11:35	1
Sulfate	<1.4		5.0	1.4	mg/L			03/26/16 14:43	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.377		0.126	0.131	1.00	0.120	pCi/L	03/29/16 12:59	04/20/16 06:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					03/29/16 12:59	04/20/16 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	0.310	U	0.212	0.214	1.00	0.325	pCi/L	03/29/16 13:28	04/18/16 11:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.0		40 - 110					03/29/16 13:28	04/18/16 11:46	1
Y Carrier	87.1		40 - 110					03/29/16 13:28	04/18/16 11:46	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.687		0.247	0.251	5.00	0.325	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: MW-14
Date Collected: 03/23/16 07:45
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-21
Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.40				SU			03/23/16 07:45	1
Field Temperature	20.13				Centigrade			03/23/16 07:45	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: MW-11
Date Collected: 03/23/16 09:45
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-22
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		04/05/16 12:00	04/06/16 14:09	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/05/16 12:00	04/06/16 14:09	5
Barium	0.071		0.0025	0.00049	mg/L		04/05/16 12:00	04/06/16 14:09	5
Beryllium	0.00034	J	0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 14:09	5
Boron	<0.021		0.050	0.021	mg/L		04/05/16 12:00	04/06/16 14:09	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 14:09	5
Calcium	1.9		0.25	0.13	mg/L		04/05/16 12:00	04/06/16 14:09	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/05/16 12:00	04/06/16 14:09	5
Cobalt	0.0054		0.0025	0.00040	mg/L		04/05/16 12:00	04/06/16 14:09	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/05/16 12:00	04/06/16 14:09	5
Lithium	0.0040	J	0.0050	0.0032	mg/L		04/05/16 12:00	04/06/16 14:09	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/05/16 12:00	04/06/16 14:09	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/05/16 12:00	04/06/16 14:09	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/05/16 12:00	04/06/16 14:09	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		04/11/16 09:35	04/12/16 14:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	40		5.0	3.4	mg/L			03/25/16 17:03	1
Chloride	13		2.0	0.60	mg/L			03/28/16 12:05	1
Fluoride	<0.032		0.10	0.032	mg/L			04/12/16 12:08	1
Sulfate	1.8	J	5.0	1.4	mg/L			03/26/16 14:43	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.301		0.116	0.119	1.00	0.121	pCi/L	03/29/16 12:59	04/20/16 06:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					03/29/16 12:59	04/20/16 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	0.304	U	0.275	0.277	1.00	0.444	pCi/L	03/29/16 13:28	04/18/16 11:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					03/29/16 13:28	04/18/16 11:46	1
Y Carrier	89.0		40 - 110					03/29/16 13:28	04/18/16 11:46	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.606		0.299	0.301	5.00	0.444	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: MW-11
Date Collected: 03/23/16 09:45
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-22
Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.80				SU			03/23/16 09:45	1
Field Temperature	20.47				Centigrade			03/23/16 09:45	1

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- 14

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: EB-02
Date Collected: 03/23/16 07:00
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-23
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		04/05/16 12:00	04/06/16 14:14	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/05/16 12:00	04/06/16 14:14	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/05/16 12:00	04/06/16 14:14	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 14:14	5
Boron	<0.021		0.050	0.021	mg/L		04/05/16 12:00	04/06/16 14:14	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 14:14	5
Calcium	<0.13		0.25	0.13	mg/L		04/05/16 12:00	04/06/16 14:14	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/05/16 12:00	04/06/16 14:14	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/05/16 12:00	04/06/16 14:14	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/05/16 12:00	04/06/16 14:14	5
Lithium	<0.0032		0.0050	0.0032	mg/L		04/05/16 12:00	04/06/16 14:14	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/05/16 12:00	04/06/16 14:14	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/05/16 12:00	04/06/16 14:14	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/05/16 12:00	04/06/16 14:14	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		04/11/16 09:35	04/12/16 14:45	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			03/25/16 17:03	1
Chloride	<0.60		2.0	0.60	mg/L			03/28/16 12:05	1
Fluoride	<0.032		0.10	0.032	mg/L			04/12/16 12:11	1
Sulfate	<1.4		5.0	1.4	mg/L			03/26/16 14:43	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.00670	U	0.0584	0.0584	1.00	0.124	pCi/L	03/29/16 12:59	04/20/16 06:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					03/29/16 12:59	04/20/16 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	-0.00424	U	0.202	0.202	1.00	0.366	pCi/L	03/29/16 13:28	04/18/16 11:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					03/29/16 13:28	04/18/16 11:46	1
Y Carrier	87.9		40 - 110					03/29/16 13:28	04/18/16 11:46	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0109	U	0.211	0.211	5.00	0.366	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: FB-02
Date Collected: 03/23/16 07:10
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-24
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		04/05/16 12:00	04/06/16 14:18	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/05/16 12:00	04/06/16 14:18	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/05/16 12:00	04/06/16 14:18	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 14:18	5
Boron	<0.021		0.050	0.021	mg/L		04/05/16 12:00	04/06/16 14:18	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 14:18	5
Calcium	<0.13		0.25	0.13	mg/L		04/05/16 12:00	04/06/16 14:18	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/05/16 12:00	04/06/16 14:18	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/05/16 12:00	04/06/16 14:18	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/05/16 12:00	04/06/16 14:18	5
Lithium	<0.0032		0.0050	0.0032	mg/L		04/05/16 12:00	04/06/16 14:18	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/05/16 12:00	04/06/16 14:18	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/05/16 12:00	04/06/16 14:18	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/05/16 12:00	04/06/16 14:18	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000073	J B	0.00020	0.000070	mg/L		04/11/16 09:35	04/12/16 14:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			03/25/16 17:03	1
Chloride	<0.60		2.0	0.60	mg/L			03/28/16 12:05	1
Fluoride	<0.032		0.10	0.032	mg/L			04/12/16 12:14	1
Sulfate	<1.4		5.0	1.4	mg/L			03/26/16 14:43	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0632	U	0.109	0.109	1.00	0.187	pCi/L	03/29/16 12:59	04/20/16 06:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					03/29/16 12:59	04/20/16 06:57	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.130	U	0.203	0.203	1.00	0.342	pCi/L	03/29/16 13:28	04/18/16 11:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					03/29/16 13:28	04/18/16 11:46	1
Y Carrier	85.6		40 - 110					03/29/16 13:28	04/18/16 11:46	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.193	U	0.230	0.230	5.00	0.342	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: EB-03
Date Collected: 03/23/16 15:57
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-25
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		04/05/16 12:00	04/06/16 14:22	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/05/16 12:00	04/06/16 14:22	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/05/16 12:00	04/06/16 14:22	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 14:22	5
Boron	<0.021		0.050	0.021	mg/L		04/05/16 12:00	04/06/16 14:22	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 14:22	5
Calcium	<0.13		0.25	0.13	mg/L		04/05/16 12:00	04/06/16 14:22	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/05/16 12:00	04/06/16 14:22	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/05/16 12:00	04/06/16 14:22	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/05/16 12:00	04/06/16 14:22	5
Lithium	<0.0032		0.0050	0.0032	mg/L		04/05/16 12:00	04/06/16 14:22	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/05/16 12:00	04/06/16 14:22	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/05/16 12:00	04/06/16 14:22	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/05/16 12:00	04/06/16 14:22	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000073	J B	0.00020	0.000070	mg/L		04/11/16 09:35	04/12/16 14:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			03/25/16 17:03	1
Chloride	<0.60		2.0	0.60	mg/L			03/28/16 12:05	1
Fluoride	<0.032		0.10	0.032	mg/L			04/12/16 12:18	1
Sulfate	<1.4		5.0	1.4	mg/L			03/28/16 13:23	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.00173	U	0.0566	0.0566	1.00	0.118	pCi/L	03/29/16 12:59	04/20/16 06:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		40 - 110					03/29/16 12:59	04/20/16 06:57	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.236	U	0.240	0.241	1.00	0.389	pCi/L	03/29/16 13:28	04/18/16 11:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.5		40 - 110					03/29/16 13:28	04/18/16 11:46	1
Y Carrier	80.7		40 - 110					03/29/16 13:28	04/18/16 11:46	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.237	U	0.246	0.247	5.00	0.389	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: FB-03
Date Collected: 03/23/16 16:07
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-26
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		04/05/16 12:00	04/06/16 14:27	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/05/16 12:00	04/06/16 14:27	5
Barium	0.035		0.0025	0.00049	mg/L		04/05/16 12:00	04/06/16 14:27	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 14:27	5
Boron	<0.021		0.050	0.021	mg/L		04/05/16 12:00	04/06/16 14:27	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 14:27	5
Calcium	1.8		0.25	0.13	mg/L		04/05/16 12:00	04/06/16 14:27	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/05/16 12:00	04/06/16 14:27	5
Cobalt	0.0010	J	0.0025	0.00040	mg/L		04/05/16 12:00	04/06/16 14:27	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/05/16 12:00	04/06/16 14:27	5
Lithium	<0.0032		0.0050	0.0032	mg/L		04/05/16 12:00	04/06/16 14:27	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/05/16 12:00	04/06/16 14:27	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/05/16 12:00	04/06/16 14:27	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/05/16 12:00	04/06/16 14:27	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000071	J B	0.00020	0.000070	mg/L		04/11/16 09:35	04/12/16 14:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			03/25/16 17:03	1
Chloride	<0.60		2.0	0.60	mg/L			03/28/16 12:05	1
Fluoride	<0.032		0.10	0.032	mg/L			04/12/16 12:52	1
Sulfate	<1.4		5.0	1.4	mg/L			03/28/16 13:23	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0245	U	0.100	0.100	1.00	0.184	pCi/L	03/29/16 12:59	04/20/16 06:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.2		40 - 110					03/29/16 12:59	04/20/16 06:57	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.116	U	0.253	0.254	1.00	0.435	pCi/L	03/29/16 13:28	04/18/16 11:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.2		40 - 110					03/29/16 13:28	04/18/16 11:46	1
Y Carrier	82.6		40 - 110					03/29/16 13:28	04/18/16 11:46	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.140	U	0.273	0.273	5.00	0.435	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: DUP-03
Date Collected: 03/23/16 16:45
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-27
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		04/05/16 12:00	04/06/16 14:32	5
Arsenic	0.00070	J	0.0013	0.00046	mg/L		04/05/16 12:00	04/06/16 14:32	5
Barium	0.010		0.0025	0.00049	mg/L		04/05/16 12:00	04/06/16 14:32	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 14:32	5
Boron	0.036	J	0.050	0.021	mg/L		04/05/16 12:00	04/06/16 14:32	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 14:32	5
Calcium	3.7		0.25	0.13	mg/L		04/05/16 12:00	04/06/16 14:32	5
Chromium	0.0013	J	0.0025	0.0011	mg/L		04/05/16 12:00	04/06/16 14:32	5
Cobalt	0.00091	J	0.0025	0.00040	mg/L		04/05/16 12:00	04/06/16 14:32	5
Lead	0.00035	J	0.0013	0.00035	mg/L		04/05/16 12:00	04/06/16 14:32	5
Lithium	0.043		0.0050	0.0032	mg/L		04/05/16 12:00	04/06/16 14:32	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/05/16 12:00	04/06/16 14:32	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/05/16 12:00	04/06/16 14:32	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/05/16 12:00	04/06/16 14:32	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		04/11/16 09:35	04/12/16 14:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	42		5.0	3.4	mg/L			03/25/16 17:03	1
Chloride	8.2		2.0	0.60	mg/L			03/28/16 12:05	1
Fluoride	0.040	J	0.10	0.032	mg/L			04/12/16 12:54	1
Sulfate	2.4	J	5.0	1.4	mg/L			03/28/16 13:23	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0105	U	0.0976	0.0976	1.00	0.184	pCi/L	03/29/16 12:59	04/20/16 06:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.3		40 - 110					03/29/16 12:59	04/20/16 06:57	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0687	U	0.228	0.228	1.00	0.424	pCi/L	03/29/16 13:28	04/18/16 11:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.3		40 - 110					03/29/16 13:28	04/18/16 11:46	1
Y Carrier	80.4		40 - 110					03/29/16 13:28	04/18/16 11:46	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0582	U	0.248	0.248	5.00	0.424	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: DUP-03
Date Collected: 03/23/16 16:45
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-27
Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.38				SU			03/23/16 16:45	1
Field Temperature	23.16				Centigrade			03/23/16 16:45	1

- 1
- 2
- 3
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- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: BAW-1
Date Collected: 03/23/16 11:20
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-28
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		04/05/16 12:00	04/06/16 14:36	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/05/16 12:00	04/06/16 14:36	5
Barium	0.00084	J	0.0025	0.00049	mg/L		04/05/16 12:00	04/06/16 14:36	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 14:36	5
Boron	<0.021		0.050	0.021	mg/L		04/05/16 12:00	04/06/16 14:36	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 14:36	5
Calcium	<0.13		0.25	0.13	mg/L		04/05/16 12:00	04/06/16 14:36	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/05/16 12:00	04/06/16 14:36	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/05/16 12:00	04/06/16 14:36	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/05/16 12:00	04/06/16 14:36	5
Lithium	<0.0032		0.0050	0.0032	mg/L		04/05/16 12:00	04/06/16 14:36	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/05/16 12:00	04/06/16 14:36	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/05/16 12:00	04/06/16 14:36	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/05/16 12:00	04/06/16 14:36	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		04/11/16 09:35	04/12/16 15:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	20		5.0	3.4	mg/L			03/25/16 17:03	1
Chloride	6.5		2.0	0.60	mg/L			03/28/16 12:05	1
Fluoride	<0.032		0.10	0.032	mg/L			04/12/16 12:45	1
Sulfate	<1.4		5.0	1.4	mg/L			03/28/16 13:23	1

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		0.113	0.115	1.00	0.154	pCi/L	03/29/16 12:59	04/20/16 06:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.7		40 - 110					03/29/16 12:59	04/20/16 06:57	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.113	U	0.222	0.222	1.00	0.420	pCi/L	03/29/16 13:28	04/18/16 11:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.7		40 - 110					03/29/16 13:28	04/18/16 11:46	1
Y Carrier	81.9		40 - 110					03/29/16 13:28	04/18/16 11:46	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0869	U	0.249	0.250	5.00	0.420	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: BAW-1
Date Collected: 03/23/16 11:20
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-28
Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.12				SU			03/23/16 11:20	1
Field Temperature	23.97				Centigrade			03/23/16 11:20	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: BAW-2
Date Collected: 03/23/16 13:55
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-29
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		04/05/16 12:00	04/06/16 17:21	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/05/16 12:00	04/06/16 17:21	5
Barium	0.027		0.0025	0.00049	mg/L		04/05/16 12:00	04/06/16 17:21	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 17:21	5
Boron	<0.021		0.050	0.021	mg/L		04/05/16 12:00	04/06/16 17:21	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 17:21	5
Calcium	2.6		0.25	0.13	mg/L		04/05/16 12:00	04/06/16 17:21	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/05/16 12:00	04/06/16 17:21	5
Cobalt	0.00048	J	0.0025	0.00040	mg/L		04/05/16 12:00	04/06/16 17:21	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/05/16 12:00	04/06/16 17:21	5
Lithium	<0.0032		0.0050	0.0032	mg/L		04/05/16 12:00	04/06/16 17:21	5
Molybdenum	0.0019	J	0.015	0.00085	mg/L		04/05/16 12:00	04/06/16 17:21	5
Selenium	0.00041	J	0.0013	0.00024	mg/L		04/05/16 12:00	04/06/16 17:21	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/05/16 12:00	04/06/16 17:21	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		04/11/16 09:35	04/12/16 15:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	30		5.0	3.4	mg/L			03/25/16 17:03	1
Chloride	5.1		2.0	0.60	mg/L			03/28/16 12:07	1
Fluoride	<0.032		0.10	0.032	mg/L			04/12/16 12:56	1
Sulfate	<1.4		5.0	1.4	mg/L			03/28/16 13:23	1

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		0.122	0.124	1.00	0.169	pCi/L	03/29/16 12:59	04/20/16 06:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.5		40 - 110					03/29/16 12:59	04/20/16 06:57	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0626	U	0.262	0.262	1.00	0.456	pCi/L	03/29/16 13:28	04/18/16 11:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.5		40 - 110					03/29/16 13:28	04/18/16 11:46	1
Y Carrier	82.2		40 - 110					03/29/16 13:28	04/18/16 11:46	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.279	U	0.289	0.289	5.00	0.456	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: BAW-2
Date Collected: 03/23/16 13:55
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-29
Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.52				SU			03/23/16 13:55	1
Field Temperature	24.76				Centigrade			03/23/16 13:55	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: BAW-3
Date Collected: 03/23/16 15:15
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-30
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		04/05/16 12:00	04/06/16 17:26	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/05/16 12:00	04/06/16 17:26	5
Barium	0.013		0.0025	0.00049	mg/L		04/05/16 12:00	04/06/16 17:26	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 17:26	5
Boron	<0.021		0.050	0.021	mg/L		04/05/16 12:00	04/06/16 17:26	5
Cadmium	0.00041	J	0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 17:26	5
Calcium	1.1		0.25	0.13	mg/L		04/05/16 12:00	04/06/16 17:26	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/05/16 12:00	04/06/16 17:26	5
Cobalt	0.0055		0.0025	0.00040	mg/L		04/05/16 12:00	04/06/16 17:26	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/05/16 12:00	04/06/16 17:26	5
Lithium	<0.0032		0.0050	0.0032	mg/L		04/05/16 12:00	04/06/16 17:26	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/05/16 12:00	04/06/16 17:26	5
Selenium	0.00033	J	0.0013	0.00024	mg/L		04/05/16 12:00	04/06/16 17:26	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/05/16 12:00	04/06/16 17:26	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000084	J B	0.00020	0.000070	mg/L		04/11/16 09:35	04/12/16 15:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	30		5.0	3.4	mg/L			03/25/16 17:03	1
Chloride	7.3		2.0	0.60	mg/L			03/28/16 12:07	1
Fluoride	<0.032		0.10	0.032	mg/L			04/12/16 12:59	1
Sulfate	<1.4		5.0	1.4	mg/L			03/28/16 13:23	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	-0.00509	U	0.0620	0.0620	1.00	0.130	pCi/L	03/29/16 12:59	04/20/16 06:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					03/29/16 12:59	04/20/16 06:57	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.208	U	0.258	0.259	1.00	0.428	pCi/L	03/29/16 13:28	04/18/16 11:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.9		40 - 110					03/29/16 13:28	04/18/16 11:46	1
Y Carrier	83.0		40 - 110					03/29/16 13:28	04/18/16 11:46	1

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

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Combined Radium 226 + 228	0.203	U	0.266	0.266	5.00	0.428	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: BAW-3
Date Collected: 03/23/16 15:15
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-30
Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.05				SU			03/23/16 15:15	1
Field Temperature	25.14				Centigrade			03/23/16 15:15	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: BAW-4
Date Collected: 03/23/16 17:45
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-31
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		04/05/16 12:00	04/06/16 17:30	5
Arsenic	0.00087	J	0.0013	0.00046	mg/L		04/05/16 12:00	04/06/16 17:30	5
Barium	0.011		0.0025	0.00049	mg/L		04/05/16 12:00	04/06/16 17:30	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 17:30	5
Boron	0.037	J	0.050	0.021	mg/L		04/05/16 12:00	04/06/16 17:30	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 17:30	5
Calcium	3.7		0.25	0.13	mg/L		04/05/16 12:00	04/06/16 17:30	5
Chromium	0.0015	J	0.0025	0.0011	mg/L		04/05/16 12:00	04/06/16 17:30	5
Cobalt	0.00094	J	0.0025	0.00040	mg/L		04/05/16 12:00	04/06/16 17:30	5
Lead	0.00039	J	0.0013	0.00035	mg/L		04/05/16 12:00	04/06/16 17:30	5
Lithium	0.044		0.0050	0.0032	mg/L		04/05/16 12:00	04/06/16 17:30	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/05/16 12:00	04/06/16 17:30	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/05/16 12:00	04/06/16 17:30	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/05/16 12:00	04/06/16 17:30	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000073	J B	0.00020	0.000070	mg/L		04/11/16 09:37	04/12/16 15:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	46		5.0	3.4	mg/L			03/25/16 17:03	1
Chloride	7.6		2.0	0.60	mg/L			03/28/16 12:07	1
Fluoride	0.040	J	0.10	0.032	mg/L			04/12/16 13:01	1
Sulfate	2.3	J	5.0	1.4	mg/L			03/28/16 13:26	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0163	U	0.0837	0.0837	1.00	0.159	pCi/L	03/29/16 12:59	04/20/16 06:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.0		40 - 110					03/29/16 12:59	04/20/16 06:57	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.392	U	0.288	0.290	1.00	0.452	pCi/L	03/29/16 13:28	04/18/16 11:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.0		40 - 110					03/29/16 13:28	04/18/16 11:46	1
Y Carrier	81.9		40 - 110					03/29/16 13:28	04/18/16 11:46	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.409	U	0.300	0.302	5.00	0.452	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: BAW-4
Date Collected: 03/23/16 17:45
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-31
Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.38				SU			03/23/16 17:45	1
Field Temperature	23.16				Centigrade			03/23/16 17:45	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: BAW-5
Date Collected: 03/23/16 18:35
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-32
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		04/05/16 12:00	04/06/16 17:35	5
Arsenic	0.0033		0.0013	0.00046	mg/L		04/05/16 12:00	04/06/16 17:35	5
Barium	0.044		0.0025	0.00049	mg/L		04/05/16 12:00	04/06/16 17:35	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 17:35	5
Boron	0.22		0.050	0.021	mg/L		04/05/16 12:00	04/06/16 17:35	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 17:35	5
Calcium	18		0.25	0.13	mg/L		04/05/16 12:00	04/06/16 17:35	5
Chromium	0.0012	J	0.0025	0.0011	mg/L		04/05/16 12:00	04/06/16 17:35	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/05/16 12:00	04/06/16 17:35	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/05/16 12:00	04/06/16 17:35	5
Lithium	0.17		0.0050	0.0032	mg/L		04/05/16 12:00	04/06/16 17:35	5
Molybdenum	0.0026	J	0.015	0.00085	mg/L		04/05/16 12:00	04/06/16 17:35	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/05/16 12:00	04/06/16 17:35	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/05/16 12:00	04/06/16 17:35	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000074	J B	0.00020	0.000070	mg/L		04/11/16 09:37	04/12/16 15:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	88		5.0	3.4	mg/L			03/25/16 17:03	1
Chloride	9.0		2.0	0.60	mg/L			03/28/16 12:07	1
Fluoride	0.060	J	0.10	0.032	mg/L			04/12/16 13:03	1
Sulfate	4.5	J	5.0	1.4	mg/L			03/28/16 13:26	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.201		0.105	0.107	1.00	0.130	pCi/L	03/29/16 12:59	04/20/16 06:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.5		40 - 110					03/29/16 12:59	04/20/16 06:57	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.348	U	0.265	0.267	1.00	0.417	pCi/L	03/29/16 13:28	04/18/16 11:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.5		40 - 110					03/29/16 13:28	04/18/16 11:46	1
Y Carrier	83.4		40 - 110					03/29/16 13:28	04/18/16 11:46	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.549		0.285	0.288	5.00	0.417	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: BAW-5
Date Collected: 03/23/16 18:35
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-32
Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	6.64				SU			03/23/16 18:35	1
Field Temperature	22.98				Centigrade			03/23/16 18:35	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: BAW-7
Date Collected: 03/23/16 12:40
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-33
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		04/05/16 12:00	04/06/16 17:39	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/05/16 12:00	04/06/16 17:39	5
Barium	0.013		0.0025	0.00049	mg/L		04/05/16 12:00	04/06/16 17:39	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 17:39	5
Boron	<0.021		0.050	0.021	mg/L		04/05/16 12:00	04/06/16 17:39	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 17:39	5
Calcium	0.65		0.25	0.13	mg/L		04/05/16 12:00	04/06/16 17:39	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/05/16 12:00	04/06/16 17:39	5
Cobalt	0.0011	J	0.0025	0.00040	mg/L		04/05/16 12:00	04/06/16 17:39	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/05/16 12:00	04/06/16 17:39	5
Lithium	<0.0032		0.0050	0.0032	mg/L		04/05/16 12:00	04/06/16 17:39	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/05/16 12:00	04/06/16 17:39	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/05/16 12:00	04/06/16 17:39	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/05/16 12:00	04/06/16 17:39	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000071	J B	0.00020	0.000070	mg/L		04/11/16 09:37	04/12/16 15:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	22		5.0	3.4	mg/L			03/27/16 12:22	1
Chloride	6.5		2.0	0.60	mg/L			03/28/16 12:07	1
Fluoride	<0.032		0.10	0.032	mg/L			04/12/16 13:06	1
Sulfate	<1.4		5.0	1.4	mg/L			03/28/16 13:26	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0907	U	0.105	0.105	1.00	0.172	pCi/L	03/29/16 12:59	04/20/16 07:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.3		40 - 110					03/29/16 12:59	04/20/16 07:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.214	U	0.235	0.236	1.00	0.386	pCi/L	03/29/16 13:28	04/18/16 11:47	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.3		40 - 110					03/29/16 13:28	04/18/16 11:47	1
Y Carrier	87.1		40 - 110					03/29/16 13:28	04/18/16 11:47	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.305	U	0.258	0.258	5.00	0.386	pCi/L		04/20/16 19:30	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: BAW-7
Date Collected: 03/23/16 12:40
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-33
Matrix: Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.89				SU			03/23/16 12:40	1
Field Temperature	23.99				Centigrade			03/23/16 12:40	1

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Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Qualifiers

Metals

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.
B	Compound was found in the blank and sample.
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.

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.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.

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

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: MW-14
Date Collected: 03/23/16 07:45
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-21
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			300390	04/05/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300704	04/06/16 14:05	RJB	TAL PEN
Total/NA	Prep	7470A			300991	04/11/16 09:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301435	04/12/16 14:38	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	299038	03/25/16 17:03	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	299259	03/28/16 12:05	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301346	04/12/16 11:35	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299120	03/26/16 14:43	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242739	03/29/16 12:59	MJS	TAL SL
Total/NA	Analysis	9315		1	246925	04/20/16 06:56	RTM	TAL SL
Total/NA	Prep	PrecSep_0			242746	03/29/16 13:28	MJS	TAL SL
Total/NA	Analysis	9320		1	246400	04/18/16 11:46	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/23/16 07:45	BWS	TAL PEN

Client Sample ID: MW-11
Date Collected: 03/23/16 09:45
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-22
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			300390	04/05/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300704	04/06/16 14:09	RJB	TAL PEN
Total/NA	Prep	7470A			300991	04/11/16 09:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301435	04/12/16 14:43	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	299038	03/25/16 17:03	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	299259	03/28/16 12:05	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301346	04/12/16 12:08	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299120	03/26/16 14:43	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242739	03/29/16 12:59	MJS	TAL SL
Total/NA	Analysis	9315		1	246925	04/20/16 06:56	RTM	TAL SL
Total/NA	Prep	PrecSep_0			242746	03/29/16 13:28	MJS	TAL SL
Total/NA	Analysis	9320		1	246400	04/18/16 11:46	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/23/16 09:45	BWS	TAL PEN

Client Sample ID: EB-02
Date Collected: 03/23/16 07:00
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-23
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			300390	04/05/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300704	04/06/16 14:14	RJB	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: EB-02
Date Collected: 03/23/16 07:00
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-23
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			300991	04/11/16 09:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301435	04/12/16 14:45	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	299038	03/25/16 17:03	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	299259	03/28/16 12:05	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301346	04/12/16 12:11	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299120	03/26/16 14:43	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242739	03/29/16 12:59	MJS	TAL SL
Total/NA	Analysis	9315		1	246925	04/20/16 06:56	RTM	TAL SL
Total/NA	Prep	PrecSep_0			242746	03/29/16 13:28	MJS	TAL SL
Total/NA	Analysis	9320		1	246400	04/18/16 11:46	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL

Client Sample ID: FB-02
Date Collected: 03/23/16 07:10
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-24
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			300390	04/05/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300704	04/06/16 14:18	RJB	TAL PEN
Total/NA	Prep	7470A			300991	04/11/16 09:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301435	04/12/16 14:46	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	299038	03/25/16 17:03	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	299259	03/28/16 12:05	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301346	04/12/16 12:14	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299120	03/26/16 14:43	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242739	03/29/16 12:59	MJS	TAL SL
Total/NA	Analysis	9315		1	246925	04/20/16 06:57	RTM	TAL SL
Total/NA	Prep	PrecSep_0			242746	03/29/16 13:28	MJS	TAL SL
Total/NA	Analysis	9320		1	246400	04/18/16 11:46	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL

Client Sample ID: EB-03
Date Collected: 03/23/16 15:57
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-25
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			300390	04/05/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300704	04/06/16 14:22	RJB	TAL PEN
Total/NA	Prep	7470A			300991	04/11/16 09:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301435	04/12/16 14:57	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	299038	03/25/16 17:03	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	299259	03/28/16 12:05	LSS	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: EB-03
Date Collected: 03/23/16 15:57
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-25
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	301346	04/12/16 12:18	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299260	03/28/16 13:23	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242739	03/29/16 12:59	MJS	TAL SL
Total/NA	Analysis	9315		1	246925	04/20/16 06:57	RTM	TAL SL
Total/NA	Prep	PrecSep_0			242746	03/29/16 13:28	MJS	TAL SL
Total/NA	Analysis	9320		1	246400	04/18/16 11:46	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL

Client Sample ID: FB-03
Date Collected: 03/23/16 16:07
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-26
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			300390	04/05/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300704	04/06/16 14:27	RJB	TAL PEN
Total/NA	Prep	7470A			300991	04/11/16 09:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301435	04/12/16 14:58	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	299038	03/25/16 17:03	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	299259	03/28/16 12:05	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301366	04/12/16 12:52	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299260	03/28/16 13:23	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242739	03/29/16 12:59	MJS	TAL SL
Total/NA	Analysis	9315		1	246925	04/20/16 06:57	RTM	TAL SL
Total/NA	Prep	PrecSep_0			242746	03/29/16 13:28	MJS	TAL SL
Total/NA	Analysis	9320		1	246400	04/18/16 11:46	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL

Client Sample ID: DUP-03
Date Collected: 03/23/16 16:45
Date Received: 03/24/16 08:50

Lab Sample ID: 400-119192-27
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			300390	04/05/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300704	04/06/16 14:32	RJB	TAL PEN
Total/NA	Prep	7470A			300991	04/11/16 09:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301435	04/12/16 14:59	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	299038	03/25/16 17:03	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	299259	03/28/16 12:05	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301366	04/12/16 12:54	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299260	03/28/16 13:23	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242739	03/29/16 12:59	MJS	TAL SL
Total/NA	Analysis	9315		1	246925	04/20/16 06:57	RTM	TAL SL

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: DUP-03

Lab Sample ID: 400-119192-27

Date Collected: 03/23/16 16:45

Matrix: Water

Date Received: 03/24/16 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep_0			242746	03/29/16 13:28	MJS	TAL SL
Total/NA	Analysis	9320		1	246400	04/18/16 11:46	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/23/16 16:45	BWS	TAL PEN

Client Sample ID: BAW-1

Lab Sample ID: 400-119192-28

Date Collected: 03/23/16 11:20

Matrix: Water

Date Received: 03/24/16 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			300390	04/05/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300704	04/06/16 14:36	RJB	TAL PEN
Total/NA	Prep	7470A			300991	04/11/16 09:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301435	04/12/16 15:00	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	299038	03/25/16 17:03	TET	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	299259	03/28/16 12:05	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301366	04/12/16 12:45	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299260	03/28/16 13:23	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242739	03/29/16 12:59	MJS	TAL SL
Total/NA	Analysis	9315		1	246925	04/20/16 06:57	RTM	TAL SL
Total/NA	Prep	PrecSep_0			242746	03/29/16 13:28	MJS	TAL SL
Total/NA	Analysis	9320		1	246400	04/18/16 11:46	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/23/16 11:20	BWS	TAL PEN

Client Sample ID: BAW-2

Lab Sample ID: 400-119192-29

Date Collected: 03/23/16 13:55

Matrix: Water

Date Received: 03/24/16 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			300391	04/05/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300704	04/06/16 17:21	RJB	TAL PEN
Total/NA	Prep	7470A			300991	04/11/16 09:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301435	04/12/16 15:01	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	299038	03/25/16 17:03	TET	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	299259	03/28/16 12:07	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301366	04/12/16 12:56	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299260	03/28/16 13:23	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242739	03/29/16 12:59	MJS	TAL SL
Total/NA	Analysis	9315		1	246925	04/20/16 06:57	RTM	TAL SL
Total/NA	Prep	PrecSep_0			242746	03/29/16 13:28	MJS	TAL SL
Total/NA	Analysis	9320		1	246400	04/18/16 11:46	RTM	TAL SL

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: BAW-2

Lab Sample ID: 400-119192-29

Date Collected: 03/23/16 13:55

Matrix: Water

Date Received: 03/24/16 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/23/16 13:55	BWS	TAL PEN

Client Sample ID: BAW-3

Lab Sample ID: 400-119192-30

Date Collected: 03/23/16 15:15

Matrix: Water

Date Received: 03/24/16 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			300391	04/05/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300704	04/06/16 17:26	RJB	TAL PEN
Total/NA	Prep	7470A			300991	04/11/16 09:35	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301435	04/12/16 15:03	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	299038	03/25/16 17:03	TET	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	299259	03/28/16 12:07	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301366	04/12/16 12:59	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299260	03/28/16 13:23	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242739	03/29/16 12:59	MJS	TAL SL
Total/NA	Analysis	9315		1	246925	04/20/16 06:57	RTM	TAL SL
Total/NA	Prep	PrecSep_0			242746	03/29/16 13:28	MJS	TAL SL
Total/NA	Analysis	9320		1	246400	04/18/16 11:46	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/23/16 15:15	BWS	TAL PEN

Client Sample ID: BAW-4

Lab Sample ID: 400-119192-31

Date Collected: 03/23/16 17:45

Matrix: Water

Date Received: 03/24/16 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			300391	04/05/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300704	04/06/16 17:30	RJB	TAL PEN
Total/NA	Prep	7470A			300991	04/11/16 09:37	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301435	04/12/16 15:04	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	299038	03/25/16 17:03	TET	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	299259	03/28/16 12:07	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301366	04/12/16 13:01	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299260	03/28/16 13:26	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242739	03/29/16 12:59	MJS	TAL SL
Total/NA	Analysis	9315		1	246925	04/20/16 06:57	RTM	TAL SL
Total/NA	Prep	PrecSep_0			242746	03/29/16 13:28	MJS	TAL SL
Total/NA	Analysis	9320		1	246400	04/18/16 11:46	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/23/16 17:45	BWS	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Client Sample ID: BAW-5

Lab Sample ID: 400-119192-32

Date Collected: 03/23/16 18:35

Matrix: Water

Date Received: 03/24/16 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			300391	04/05/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300704	04/06/16 17:35	RJB	TAL PEN
Total/NA	Prep	7470A			300991	04/11/16 09:37	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301435	04/12/16 15:05	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	299038	03/25/16 17:03	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	299259	03/28/16 12:07	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301366	04/12/16 13:03	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299260	03/28/16 13:26	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242739	03/29/16 12:59	MJS	TAL SL
Total/NA	Analysis	9315		1	246925	04/20/16 06:57	RTM	TAL SL
Total/NA	Prep	PrecSep_0			242746	03/29/16 13:28	MJS	TAL SL
Total/NA	Analysis	9320		1	246400	04/18/16 11:46	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/23/16 18:35	BWS	TAL PEN

Client Sample ID: BAW-7

Lab Sample ID: 400-119192-33

Date Collected: 03/23/16 12:40

Matrix: Water

Date Received: 03/24/16 08:50

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			300391	04/05/16 12:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	300704	04/06/16 17:39	RJB	TAL PEN
Total/NA	Prep	7470A			300991	04/11/16 09:37	JAP	TAL PEN
Total/NA	Analysis	7470A		1	301435	04/12/16 15:06	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	299143	03/27/16 12:22	CAC	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	299259	03/28/16 12:07	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	301366	04/12/16 13:06	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	299260	03/28/16 13:26	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			242739	03/29/16 12:59	MJS	TAL SL
Total/NA	Analysis	9315		1	246926	04/20/16 07:01	RTM	TAL SL
Total/NA	Prep	PrecSep_0			242746	03/29/16 13:28	MJS	TAL SL
Total/NA	Analysis	9320		1	246400	04/18/16 11:47	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	246969	04/20/16 19:30	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	302937	03/23/16 12:40	BWS	TAL PEN

Laboratory References:

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

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

QC Association Summary

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
 SDG: Mississippi

Metals

Prep Batch: 300390

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-21	MW-14	Total Recoverable	Water	3005A	
400-119192-22	MW-11	Total Recoverable	Water	3005A	
400-119192-23	EB-02	Total Recoverable	Water	3005A	
400-119192-24	FB-02	Total Recoverable	Water	3005A	
400-119192-25	EB-03	Total Recoverable	Water	3005A	
400-119192-26	FB-03	Total Recoverable	Water	3005A	
400-119192-27	DUP-03	Total Recoverable	Water	3005A	
400-119192-28	BAW-1	Total Recoverable	Water	3005A	
400-119435-G-12-B MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-119435-G-12-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
LCS 400-300390/2-A ^1	Lab Control Sample	Total Recoverable	Water	3005A	
MB 400-300390/1-A ^5	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 300391

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-29	BAW-2	Total Recoverable	Water	3005A	
400-119192-30	BAW-3	Total Recoverable	Water	3005A	
400-119192-31	BAW-4	Total Recoverable	Water	3005A	
400-119192-32	BAW-5	Total Recoverable	Water	3005A	
400-119192-33	BAW-7	Total Recoverable	Water	3005A	
400-119582-B-1-B MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-119582-B-1-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	
LCS 400-300391/2-A ^1	Lab Control Sample	Total Recoverable	Water	3005A	
MB 400-300391/1-A ^5	Method Blank	Total Recoverable	Water	3005A	

Analysis Batch: 300704

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-21	MW-14	Total Recoverable	Water	6020	300390
400-119192-22	MW-11	Total Recoverable	Water	6020	300390
400-119192-23	EB-02	Total Recoverable	Water	6020	300390
400-119192-24	FB-02	Total Recoverable	Water	6020	300390
400-119192-25	EB-03	Total Recoverable	Water	6020	300390
400-119192-26	FB-03	Total Recoverable	Water	6020	300390
400-119192-27	DUP-03	Total Recoverable	Water	6020	300390
400-119192-28	BAW-1	Total Recoverable	Water	6020	300390
400-119192-29	BAW-2	Total Recoverable	Water	6020	300391
400-119192-30	BAW-3	Total Recoverable	Water	6020	300391
400-119192-31	BAW-4	Total Recoverable	Water	6020	300391
400-119192-32	BAW-5	Total Recoverable	Water	6020	300391
400-119192-33	BAW-7	Total Recoverable	Water	6020	300391
400-119435-G-12-B MS ^5	Matrix Spike	Total Recoverable	Water	6020	300390
400-119435-G-12-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	300390
400-119582-B-1-B MS ^5	Matrix Spike	Total Recoverable	Water	6020	300391
400-119582-B-1-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	300391
LCS 400-300390/2-A ^1	Lab Control Sample	Total Recoverable	Water	6020	300390
LCS 400-300391/2-A ^1	Lab Control Sample	Total Recoverable	Water	6020	300391
MB 400-300390/1-A ^5	Method Blank	Total Recoverable	Water	6020	300390
MB 400-300391/1-A ^5	Method Blank	Total Recoverable	Water	6020	300391
MRL 400-300704/21	Lab Control Sample	Total/NA	Water	6020	

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Metals (Continued)

Prep Batch: 300991

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-21	MW-14	Total/NA	Water	7470A	
400-119192-21 MS	MW-14	Total/NA	Water	7470A	
400-119192-21 MSD	MW-14	Total/NA	Water	7470A	
400-119192-22	MW-11	Total/NA	Water	7470A	
400-119192-23	EB-02	Total/NA	Water	7470A	
400-119192-24	FB-02	Total/NA	Water	7470A	
400-119192-25	EB-03	Total/NA	Water	7470A	
400-119192-26	FB-03	Total/NA	Water	7470A	
400-119192-27	DUP-03	Total/NA	Water	7470A	
400-119192-28	BAW-1	Total/NA	Water	7470A	
400-119192-29	BAW-2	Total/NA	Water	7470A	
400-119192-30	BAW-3	Total/NA	Water	7470A	
400-119192-31	BAW-4	Total/NA	Water	7470A	
400-119192-32	BAW-5	Total/NA	Water	7470A	
400-119192-33	BAW-7	Total/NA	Water	7470A	
LCS 400-300991/15-A	Lab Control Sample	Total/NA	Water	7470A	
MB 400-300991/14-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 301435

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-21	MW-14	Total/NA	Water	7470A	300991
400-119192-21 MS	MW-14	Total/NA	Water	7470A	300991
400-119192-21 MSD	MW-14	Total/NA	Water	7470A	300991
400-119192-22	MW-11	Total/NA	Water	7470A	300991
400-119192-23	EB-02	Total/NA	Water	7470A	300991
400-119192-24	FB-02	Total/NA	Water	7470A	300991
400-119192-25	EB-03	Total/NA	Water	7470A	300991
400-119192-26	FB-03	Total/NA	Water	7470A	300991
400-119192-27	DUP-03	Total/NA	Water	7470A	300991
400-119192-28	BAW-1	Total/NA	Water	7470A	300991
400-119192-29	BAW-2	Total/NA	Water	7470A	300991
400-119192-30	BAW-3	Total/NA	Water	7470A	300991
400-119192-31	BAW-4	Total/NA	Water	7470A	300991
400-119192-32	BAW-5	Total/NA	Water	7470A	300991
400-119192-33	BAW-7	Total/NA	Water	7470A	300991
LCS 400-300991/15-A	Lab Control Sample	Total/NA	Water	7470A	300991
MB 400-300991/14-A	Method Blank	Total/NA	Water	7470A	300991

General Chemistry

Analysis Batch: 299038

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-21	MW-14	Total/NA	Water	SM 2540C	
400-119192-22	MW-11	Total/NA	Water	SM 2540C	
400-119192-23	EB-02	Total/NA	Water	SM 2540C	
400-119192-24	FB-02	Total/NA	Water	SM 2540C	
400-119192-25	EB-03	Total/NA	Water	SM 2540C	
400-119192-26	FB-03	Total/NA	Water	SM 2540C	
400-119192-27	DUP-03	Total/NA	Water	SM 2540C	
400-119192-28	BAW-1	Total/NA	Water	SM 2540C	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

General Chemistry (Continued)

Analysis Batch: 299038 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-28 DU	BAW-1	Total/NA	Water	SM 2540C	
400-119192-29	BAW-2	Total/NA	Water	SM 2540C	
400-119192-30	BAW-3	Total/NA	Water	SM 2540C	
400-119192-31	BAW-4	Total/NA	Water	SM 2540C	
400-119192-32	BAW-5	Total/NA	Water	SM 2540C	
LCS 400-299038/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 400-299038/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 299120

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-21	MW-14	Total/NA	Water	SM 4500 SO4 E	
400-119192-22	MW-11	Total/NA	Water	SM 4500 SO4 E	
400-119192-23	EB-02	Total/NA	Water	SM 4500 SO4 E	
400-119192-24	FB-02	Total/NA	Water	SM 4500 SO4 E	
400-119192-A-7 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-119192-A-7 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	
400-119192-A-14 DU	Duplicate	Total/NA	Water	SM 4500 SO4 E	
LCS 400-299120/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MB 400-299120/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 299143

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-33	BAW-7	Total/NA	Water	SM 2540C	
400-119212-G-20 DU	Duplicate	Total/NA	Water	SM 2540C	
LCS 400-299143/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 400-299143/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 299259

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-21	MW-14	Total/NA	Water	SM 4500 CI- E	
400-119192-22	MW-11	Total/NA	Water	SM 4500 CI- E	
400-119192-23	EB-02	Total/NA	Water	SM 4500 CI- E	
400-119192-23 MS	EB-02	Total/NA	Water	SM 4500 CI- E	
400-119192-23 MSD	EB-02	Total/NA	Water	SM 4500 CI- E	
400-119192-24	FB-02	Total/NA	Water	SM 4500 CI- E	
400-119192-25	EB-03	Total/NA	Water	SM 4500 CI- E	
400-119192-26	FB-03	Total/NA	Water	SM 4500 CI- E	
400-119192-27	DUP-03	Total/NA	Water	SM 4500 CI- E	
400-119192-28	BAW-1	Total/NA	Water	SM 4500 CI- E	
400-119192-28 DU	BAW-1	Total/NA	Water	SM 4500 CI- E	
400-119192-29	BAW-2	Total/NA	Water	SM 4500 CI- E	
400-119192-30	BAW-3	Total/NA	Water	SM 4500 CI- E	
400-119192-31	BAW-4	Total/NA	Water	SM 4500 CI- E	
400-119192-32	BAW-5	Total/NA	Water	SM 4500 CI- E	
400-119192-33	BAW-7	Total/NA	Water	SM 4500 CI- E	
LCS 400-299259/7	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
MB 400-299259/6	Method Blank	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 299260

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-25	EB-03	Total/NA	Water	SM 4500 SO4 E	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

General Chemistry (Continued)

Analysis Batch: 299260 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-26	FB-03	Total/NA	Water	SM 4500 SO4 E	
400-119192-27	DUP-03	Total/NA	Water	SM 4500 SO4 E	
400-119192-28	BAW-1	Total/NA	Water	SM 4500 SO4 E	
400-119192-29	BAW-2	Total/NA	Water	SM 4500 SO4 E	
400-119192-30	BAW-3	Total/NA	Water	SM 4500 SO4 E	
400-119192-31	BAW-4	Total/NA	Water	SM 4500 SO4 E	
400-119192-32	BAW-5	Total/NA	Water	SM 4500 SO4 E	
400-119192-32 DU	BAW-5	Total/NA	Water	SM 4500 SO4 E	
400-119192-33	BAW-7	Total/NA	Water	SM 4500 SO4 E	
660-72838-H-1 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
660-72838-H-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	
LCS 400-299260/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MB 400-299260/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 301346

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-21	MW-14	Total/NA	Water	SM 4500 F C	
400-119192-21 DU	MW-14	Total/NA	Water	SM 4500 F C	
400-119192-22	MW-11	Total/NA	Water	SM 4500 F C	
400-119192-23	EB-02	Total/NA	Water	SM 4500 F C	
400-119192-24	FB-02	Total/NA	Water	SM 4500 F C	
400-119192-25	EB-03	Total/NA	Water	SM 4500 F C	
400-119192-A-10 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-119192-A-10 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
LCS 400-301346/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
MB 400-301346/3	Method Blank	Total/NA	Water	SM 4500 F C	

Analysis Batch: 301366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-26	FB-03	Total/NA	Water	SM 4500 F C	
400-119192-27	DUP-03	Total/NA	Water	SM 4500 F C	
400-119192-28	BAW-1	Total/NA	Water	SM 4500 F C	
400-119192-28 MS	BAW-1	Total/NA	Water	SM 4500 F C	
400-119192-28 MSD	BAW-1	Total/NA	Water	SM 4500 F C	
400-119192-29	BAW-2	Total/NA	Water	SM 4500 F C	
400-119192-30	BAW-3	Total/NA	Water	SM 4500 F C	
400-119192-31	BAW-4	Total/NA	Water	SM 4500 F C	
400-119192-32	BAW-5	Total/NA	Water	SM 4500 F C	
400-119192-33	BAW-7	Total/NA	Water	SM 4500 F C	
400-119722-A-1 DU	Duplicate	Total/NA	Water	SM 4500 F C	
LCS 400-301366/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
MB 400-301366/3	Method Blank	Total/NA	Water	SM 4500 F C	

Rad

Prep Batch: 242739

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-21	MW-14	Total/NA	Water	PrecSep-21	
400-119192-22	MW-11	Total/NA	Water	PrecSep-21	
400-119192-23	EB-02	Total/NA	Water	PrecSep-21	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Rad (Continued)

Prep Batch: 242739 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-24	FB-02	Total/NA	Water	PrecSep-21	
400-119192-25	EB-03	Total/NA	Water	PrecSep-21	
400-119192-26	FB-03	Total/NA	Water	PrecSep-21	
400-119192-27	DUP-03	Total/NA	Water	PrecSep-21	
400-119192-28	BAW-1	Total/NA	Water	PrecSep-21	
400-119192-29	BAW-2	Total/NA	Water	PrecSep-21	
400-119192-30	BAW-3	Total/NA	Water	PrecSep-21	
400-119192-31	BAW-4	Total/NA	Water	PrecSep-21	
400-119192-32	BAW-5	Total/NA	Water	PrecSep-21	
400-119192-33	BAW-7	Total/NA	Water	PrecSep-21	
490-99915-A-2-A MS	Matrix Spike	Total/NA	Water	PrecSep-21	
490-99915-A-2-B MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	
LCS 160-242739/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
MB 160-242739/1-A	Method Blank	Total/NA	Water	PrecSep-21	

Prep Batch: 242746

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-21	MW-14	Total/NA	Water	PrecSep_0	
400-119192-22	MW-11	Total/NA	Water	PrecSep_0	
400-119192-23	EB-02	Total/NA	Water	PrecSep_0	
400-119192-24	FB-02	Total/NA	Water	PrecSep_0	
400-119192-25	EB-03	Total/NA	Water	PrecSep_0	
400-119192-26	FB-03	Total/NA	Water	PrecSep_0	
400-119192-27	DUP-03	Total/NA	Water	PrecSep_0	
400-119192-28	BAW-1	Total/NA	Water	PrecSep_0	
400-119192-29	BAW-2	Total/NA	Water	PrecSep_0	
400-119192-30	BAW-3	Total/NA	Water	PrecSep_0	
400-119192-31	BAW-4	Total/NA	Water	PrecSep_0	
400-119192-32	BAW-5	Total/NA	Water	PrecSep_0	
400-119192-33	BAW-7	Total/NA	Water	PrecSep_0	
490-99915-A-2-C MS	Matrix Spike	Total/NA	Water	PrecSep_0	
490-99915-A-2-D MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	
LCS 160-242746/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
MB 160-242746/1-A	Method Blank	Total/NA	Water	PrecSep_0	

Field Service / Mobile Lab

Analysis Batch: 302937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-119192-21	MW-14	Total/NA	Water	Field Sampling	
400-119192-22	MW-11	Total/NA	Water	Field Sampling	
400-119192-27	DUP-03	Total/NA	Water	Field Sampling	
400-119192-28	BAW-1	Total/NA	Water	Field Sampling	
400-119192-29	BAW-2	Total/NA	Water	Field Sampling	
400-119192-30	BAW-3	Total/NA	Water	Field Sampling	
400-119192-31	BAW-4	Total/NA	Water	Field Sampling	
400-119192-32	BAW-5	Total/NA	Water	Field Sampling	
400-119192-33	BAW-7	Total/NA	Water	Field Sampling	

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MRL 400-300704/21
Matrix: Water
Analysis Batch: 300704

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.500	0.409	J	ug/L		82	50 - 150
Arsenic	0.250	<0.33		ug/L		106	50 - 150
Barium	0.500	0.460	J	ug/L		92	50 - 150
Beryllium	0.250	0.254	J	ug/L		102	50 - 150
Boron	5.00	<18		ug/L		87	50 - 150
Cadmium	0.250	0.267	J	ug/L		107	50 - 150
Calcium	50.0	<130		ug/L		107	50 - 150
Chromium	0.500	0.475	J	ug/L		95	50 - 150
Cobalt	0.500	0.512	J	ug/L		102	50 - 150
Lead	0.250	<0.33		ug/L		97	50 - 150
Lithium	0.500	<1.6		ug/L		142	50 - 150
Molybdenum	0.500	0.496	J	ug/L		99	50 - 150
Selenium	0.250	<0.23		ug/L		88	50 - 150
Thallium	0.100	0.101	J	ug/L		101	50 - 150

Lab Sample ID: MB 400-300390/1-A ^5
Matrix: Water
Analysis Batch: 300704

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 300390

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		04/05/16 12:00	04/06/16 12:07	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/05/16 12:00	04/06/16 12:07	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/05/16 12:00	04/06/16 12:07	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 12:07	5
Boron	<0.021		0.050	0.021	mg/L		04/05/16 12:00	04/06/16 12:07	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 12:07	5
Calcium	<0.13		0.25	0.13	mg/L		04/05/16 12:00	04/06/16 12:07	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/05/16 12:00	04/06/16 12:07	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/05/16 12:00	04/06/16 12:07	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/05/16 12:00	04/06/16 12:07	5
Lithium	<0.0032		0.0050	0.0032	mg/L		04/05/16 12:00	04/06/16 12:07	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/05/16 12:00	04/06/16 12:07	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/05/16 12:00	04/06/16 12:07	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/05/16 12:00	04/06/16 12:07	5

Lab Sample ID: LCS 400-300390/2-A ^1
Matrix: Water
Analysis Batch: 300704

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 300390

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0499		mg/L		100	80 - 120
Arsenic	0.0500	0.0484		mg/L		97	80 - 120
Barium	0.0500	0.0464		mg/L		93	80 - 120
Beryllium	0.0500	0.0476		mg/L		95	80 - 120
Boron	0.100	0.0981		mg/L		98	80 - 120
Cadmium	0.0500	0.0473		mg/L		95	80 - 120
Calcium	5.00	4.89		mg/L		98	80 - 120
Chromium	0.0500	0.0468		mg/L		94	80 - 120

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 400-300390/2-A ^1
Matrix: Water
Analysis Batch: 300704

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 300390

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	0.0500	0.0487		mg/L		97	80 - 120
Lead	0.0500	0.0475		mg/L		95	80 - 120
Lithium	0.0500	0.0480		mg/L		96	80 - 120
Molybdenum	0.0500	0.0475		mg/L		95	80 - 120
Selenium	0.0500	0.0490		mg/L		98	80 - 120
Thallium	0.0100	0.00973		mg/L		97	80 - 120

Lab Sample ID: 400-119435-G-12-B MS ^5
Matrix: Water
Analysis Batch: 300704

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 300390

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0010		0.0500	0.0569		mg/L		114	75 - 125
Arsenic	<0.00046		0.0500	0.0498		mg/L		100	75 - 125
Barium	0.094		0.0500	0.142		mg/L		97	75 - 125
Beryllium	<0.00034		0.0500	0.0485		mg/L		97	75 - 125
Boron	<0.021		0.100	0.119		mg/L		119	75 - 125
Cadmium	<0.00034		0.0500	0.0517		mg/L		103	75 - 125
Calcium	1.8		5.00	6.74		mg/L		99	75 - 125
Chromium	0.0025		0.0500	0.0506		mg/L		96	75 - 125
Cobalt	0.0020	J	0.0500	0.0518		mg/L		100	75 - 125
Lead	<0.00035		0.0500	0.0465		mg/L		93	75 - 125
Lithium	<0.0032	F1	0.0500	0.0649	F1	mg/L		130	75 - 125
Molybdenum	<0.00085		0.0500	0.0481		mg/L		96	75 - 125
Selenium	0.00028	J	0.0500	0.0498		mg/L		99	75 - 125
Thallium	<0.00085		0.0100	0.0100		mg/L		100	75 - 125

Lab Sample ID: 400-119435-G-12-C MSD ^5
Matrix: Water
Analysis Batch: 300704

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 300390

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	<0.0010		0.0500	0.0529		mg/L		106	75 - 125	7	20
Arsenic	<0.00046		0.0500	0.0503		mg/L		101	75 - 125	1	20
Barium	0.094		0.0500	0.141		mg/L		95	75 - 125	1	20
Beryllium	<0.00034		0.0500	0.0498		mg/L		100	75 - 125	3	20
Boron	<0.021		0.100	0.122		mg/L		122	75 - 125	3	20
Cadmium	<0.00034		0.0500	0.0491		mg/L		98	75 - 125	5	20
Calcium	1.8		5.00	6.67		mg/L		98	75 - 125	1	20
Chromium	0.0025		0.0500	0.0509		mg/L		97	75 - 125	1	20
Cobalt	0.0020	J	0.0500	0.0523		mg/L		101	75 - 125	1	20
Lead	<0.00035		0.0500	0.0477		mg/L		95	75 - 125	2	20
Lithium	<0.0032	F1	0.0500	0.0647	F1	mg/L		129	75 - 125	0	20
Molybdenum	<0.00085		0.0500	0.0486		mg/L		97	75 - 125	1	20
Selenium	0.00028	J	0.0500	0.0504		mg/L		100	75 - 125	1	20
Thallium	<0.00085		0.0100	0.00991		mg/L		99	75 - 125	1	20

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: MB 400-300391/1-A ^5
Matrix: Water
Analysis Batch: 300704

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 300391

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		04/05/16 12:00	04/06/16 17:12	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/05/16 12:00	04/06/16 17:12	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/05/16 12:00	04/06/16 17:12	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 17:12	5
Boron	<0.021		0.050	0.021	mg/L		04/05/16 12:00	04/06/16 17:12	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/05/16 12:00	04/06/16 17:12	5
Calcium	<0.13		0.25	0.13	mg/L		04/05/16 12:00	04/06/16 17:12	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/05/16 12:00	04/06/16 17:12	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/05/16 12:00	04/06/16 17:12	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/05/16 12:00	04/06/16 17:12	5
Lithium	<0.0032		0.0050	0.0032	mg/L		04/05/16 12:00	04/06/16 17:12	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/05/16 12:00	04/06/16 17:12	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/05/16 12:00	04/06/16 17:12	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/05/16 12:00	04/06/16 17:12	5

Lab Sample ID: LCS 400-300391/2-A ^1
Matrix: Water
Analysis Batch: 300704

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 300391

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0512		mg/L		102	80 - 120
Arsenic	0.0500	0.0486		mg/L		97	80 - 120
Barium	0.0500	0.0465		mg/L		93	80 - 120
Beryllium	0.0500	0.0466		mg/L		93	80 - 120
Boron	0.100	0.0965		mg/L		97	80 - 120
Cadmium	0.0500	0.0489		mg/L		98	80 - 120
Calcium	5.00	4.93		mg/L		99	80 - 120
Chromium	0.0500	0.0472		mg/L		94	80 - 120
Cobalt	0.0500	0.0487		mg/L		97	80 - 120
Lead	0.0500	0.0473		mg/L		95	80 - 120
Lithium	0.0500	0.0474		mg/L		95	80 - 120
Molybdenum	0.0500	0.0474		mg/L		95	80 - 120
Selenium	0.0500	0.0494		mg/L		99	80 - 120
Thallium	0.0100	0.00958		mg/L		96	80 - 120

Lab Sample ID: 400-119582-B-1-B MS ^5
Matrix: Water
Analysis Batch: 300704

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 300391

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0010		0.0500	0.0566		mg/L		113	75 - 125
Arsenic	0.00072	J	0.0500	0.0507		mg/L		100	75 - 125
Barium	0.11		0.0500	0.156		mg/L		97	75 - 125
Beryllium	<0.00034		0.0500	0.0494		mg/L		99	75 - 125
Boron	<0.021	F1	0.100	0.128	F1	mg/L		128	75 - 125
Cadmium	<0.00034		0.0500	0.0493		mg/L		99	75 - 125
Calcium	26		5.00	30.2	4	mg/L		93	75 - 125
Chromium	<0.0011		0.0500	0.0480		mg/L		96	75 - 125

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 400-119582-B-1-B MS ^5
Matrix: Water
Analysis Batch: 300704

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 300391

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Cobalt	0.010		0.0500	0.0600		mg/L		99	75 - 125
Lead	<0.00035		0.0500	0.0468		mg/L		94	75 - 125
Lithium	<0.0032	F1	0.0500	0.0659	F1	mg/L		132	75 - 125
Molybdenum	<0.00085		0.0500	0.0495		mg/L		99	75 - 125
Selenium	<0.00024		0.0500	0.0512		mg/L		102	75 - 125
Thallium	<0.000085		0.0100	0.0100		mg/L		100	75 - 125

Lab Sample ID: 400-119582-B-1-C MSD ^5
Matrix: Water
Analysis Batch: 300704

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 300391

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	<0.0010		0.0500	0.0535		mg/L		107	75 - 125	6	20
Arsenic	0.00072	J	0.0500	0.0502		mg/L		99	75 - 125	1	20
Barium	0.11		0.0500	0.153		mg/L		92	75 - 125	2	20
Beryllium	<0.00034		0.0500	0.0489		mg/L		98	75 - 125	1	20
Boron	<0.021	F1	0.100	0.122		mg/L		122	75 - 125	5	20
Cadmium	<0.00034		0.0500	0.0494		mg/L		99	75 - 125	0	20
Calcium	26		5.00	30.5	4	mg/L		100	75 - 125	1	20
Chromium	<0.0011		0.0500	0.0485		mg/L		97	75 - 125	1	20
Cobalt	0.010		0.0500	0.0610		mg/L		101	75 - 125	2	20
Lead	<0.00035		0.0500	0.0466		mg/L		93	75 - 125	1	20
Lithium	<0.0032	F1	0.0500	0.0670	F1	mg/L		134	75 - 125	2	20
Molybdenum	<0.00085		0.0500	0.0493		mg/L		99	75 - 125	0	20
Selenium	<0.00024		0.0500	0.0509		mg/L		102	75 - 125	0	20
Thallium	<0.000085		0.0100	0.00996		mg/L		100	75 - 125	0	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-300991/14-A
Matrix: Water
Analysis Batch: 301435

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 300991

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.0000738	J	0.00020	0.000070	mg/L		04/08/16 15:50	04/12/16 14:27	1

Lab Sample ID: LCS 400-300991/15-A
Matrix: Water
Analysis Batch: 301435

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300991

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00101	0.000940		mg/L		93	80 - 120

Lab Sample ID: 400-119192-21 MS
Matrix: Water
Analysis Batch: 301435

Client Sample ID: MW-14
Prep Type: Total/NA
Prep Batch: 300991

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.000070	F1	0.00201	0.00153	F1	mg/L		76	80 - 120

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Lab Sample ID: 400-119192-21 MSD
Matrix: Water
Analysis Batch: 301435

Client Sample ID: MW-14
Prep Type: Total/NA
Prep Batch: 300991

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.000070	F1	0.00201	0.00146	F1	mg/L		73	80 - 120	5	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 400-299038/1
Matrix: Water
Analysis Batch: 299038

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			03/25/16 17:03	1

Lab Sample ID: LCS 400-299038/2
Matrix: Water
Analysis Batch: 299038

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	276		mg/L		94	78 - 122

Lab Sample ID: 400-119192-28 DU
Matrix: Water
Analysis Batch: 299038

Client Sample ID: BAW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	20		20.0		mg/L		0	5

Lab Sample ID: MB 400-299143/1
Matrix: Water
Analysis Batch: 299143

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			03/27/16 12:22	1

Lab Sample ID: LCS 400-299143/2
Matrix: Water
Analysis Batch: 299143

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	274		mg/L		94	78 - 122

Lab Sample ID: 400-119212-G-20 DU
Matrix: Water
Analysis Batch: 299143

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	22		22.0		mg/L		0	5

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-299259/6
Matrix: Water
Analysis Batch: 299259

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			03/28/16 10:59	1

Lab Sample ID: LCS 400-299259/7
Matrix: Water
Analysis Batch: 299259

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	31.5		mg/L		105	90 - 110

Lab Sample ID: 400-119192-23 MS
Matrix: Water
Analysis Batch: 299259

Client Sample ID: EB-02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<0.60		10.0	10.4		mg/L		104	73 - 120

Lab Sample ID: 400-119192-23 MSD
Matrix: Water
Analysis Batch: 299259

Client Sample ID: EB-02
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<0.60		10.0	10.3		mg/L		103	73 - 120	1	8

Lab Sample ID: 400-119192-28 DU
Matrix: Water
Analysis Batch: 299259

Client Sample ID: BAW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	6.5		5.94	F5	mg/L		9	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-301346/3
Matrix: Water
Analysis Batch: 301346

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			04/12/16 10:55	1

Lab Sample ID: LCS 400-301346/4
Matrix: Water
Analysis Batch: 301346

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	4.19		mg/L		105	90 - 110

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: 400-119192-A-10 MS
Matrix: Water
Analysis Batch: 301346

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	1.01		mg/L		101	75 - 125

Lab Sample ID: 400-119192-A-10 MSD
Matrix: Water
Analysis Batch: 301346

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	0.990		mg/L		99	75 - 125	2	4

Lab Sample ID: 400-119192-21 DU
Matrix: Water
Analysis Batch: 301346

Client Sample ID: MW-14
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 400-301366/3
Matrix: Water
Analysis Batch: 301366

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			04/12/16 12:37	1

Lab Sample ID: LCS 400-301366/4
Matrix: Water
Analysis Batch: 301366

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	4.19		mg/L		105	90 - 110

Lab Sample ID: 400-119192-28 MS
Matrix: Water
Analysis Batch: 301366

Client Sample ID: BAW-1
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: 400-119192-28 MSD
Matrix: Water
Analysis Batch: 301366

Client Sample ID: BAW-1
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	<0.032		1.00	0.950		mg/L		95	75 - 125	0	4

Lab Sample ID: 400-119722-A-1 DU
Matrix: Water
Analysis Batch: 301366

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride	0.080	J	0.0800	J	mg/L		0	4

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-299120/6
Matrix: Water
Analysis Batch: 299120

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.4		5.0	1.4	mg/L			03/26/16 13:30	1

Lab Sample ID: LCS 400-299120/7
Matrix: Water
Analysis Batch: 299120

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	14.9		mg/L		99	90 - 110

Lab Sample ID: 400-119192-A-7 MS
Matrix: Water
Analysis Batch: 299120

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	<1.4		10.0	9.97		mg/L		100	77 - 128

Lab Sample ID: 400-119192-A-7 MSD
Matrix: Water
Analysis Batch: 299120

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	<1.4		10.0	9.98		mg/L		100	77 - 128	0	5

Lab Sample ID: 400-119192-A-14 DU
Matrix: Water
Analysis Batch: 299120

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	<1.4		<1.4		mg/L		NC	5

Lab Sample ID: MB 400-299260/6
Matrix: Water
Analysis Batch: 299260

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.4		5.0	1.4	mg/L			03/28/16 11:01	1

Lab Sample ID: LCS 400-299260/7
Matrix: Water
Analysis Batch: 299260

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	15.3		mg/L		102	90 - 110

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: 660-72838-H-1 MS
Matrix: Water
Analysis Batch: 299260

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	<1.4		10.0	10.1		mg/L		101	77 - 128

Lab Sample ID: 660-72838-H-1 MSD
Matrix: Water
Analysis Batch: 299260

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	<1.4		10.0	9.88		mg/L		99	77 - 128	2	5

Lab Sample ID: 400-119192-32 DU
Matrix: Water
Analysis Batch: 299260

Client Sample ID: BAW-5
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	4.5	J	4.60	J	mg/L		2	5

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-242739/1-A
Matrix: Water
Analysis Batch: 246925

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 242739

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.02219	U	0.0615	0.0615	1.00	0.115	pCi/L	03/29/16 12:59	04/20/16 06:56	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	91.5		40 - 110		03/29/16 12:59	04/20/16 06:56	1			

Lab Sample ID: LCS 160-242739/2-A
Matrix: Water
Analysis Batch: 246926

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 242739

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	11.2	11.35		1.18	1.00	0.103	pCi/L	102	68 - 137
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	89.7		40 - 110						

Lab Sample ID: 490-99915-A-2-A MS
Matrix: Water
Analysis Batch: 246926

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 242739

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	0.120	U	22.3	28.70		2.94	1.00	0.319	pCi/L	129	75 - 138

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: 490-99915-A-2-A MS
Matrix: Water
Analysis Batch: 246926

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 242739

Carrier	MS %Yield	MS Qualifier	Limits
Ba Carrier	81.8		40 - 110

Lab Sample ID: 490-99915-A-2-B MSD
Matrix: Water
Analysis Batch: 246926

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 242739

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	0.120	U	22.2	28.84		3.01	1.00	0.352	pCi/L	130	75 - 138	0.02	1

Carrier	MSD %Yield	MSD Qualifier	Limits
Ba Carrier	65.0		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-242746/1-A
Matrix: Water
Analysis Batch: 246400

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 242746

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2523	U	0.214	0.215	1.00	0.340	pCi/L	03/29/16 13:28	04/18/16 11:46	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	91.5		40 - 110	03/29/16 13:28	04/18/16 11:46	1
Y Carrier	87.1		40 - 110	03/29/16 13:28	04/18/16 11:46	1

Lab Sample ID: LCS 160-242746/2-A
Matrix: Water
Analysis Batch: 246400

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 242746

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	15.3	17.02		1.80	1.00	0.383	pCi/L	111	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	89.7		40 - 110
Y Carrier	83.4		40 - 110

Lab Sample ID: 490-99915-A-2-C MS
Matrix: Water
Analysis Batch: 246400

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 242746

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	0.319	U	30.5	37.77		4.02	1.00	0.909	pCi/L	124	45 - 150

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
 SDG: Mississippi

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

Lab Sample ID: 490-99915-A-2-C MS
 Matrix: Water
 Analysis Batch: 246400

Client Sample ID: Matrix Spike
 Prep Type: Total/NA
 Prep Batch: 242746

	MS	MS	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	81.8		40 - 110
Y Carrier	79.3		40 - 110

Lab Sample ID: 490-99915-A-2-D MSD
 Matrix: Water
 Analysis Batch: 246400

Client Sample ID: Matrix Spike Duplicate
 Prep Type: Total/NA
 Prep Batch: 242746

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	0.319	U	30.5	39.15		4.27	1.00	1.10	pCi/L	129	45 - 150	0.17	1

	MSD	MSD	
Carrier	%Yield	Qualifier	Limits
Ba Carrier	65.0		40 - 110
Y Carrier	80.7		40 - 110

Chain of Custody Record

Client Information Client Contact: <u>Shane Boney</u> Mr. Cafe Sellers Southern Company Address: PO BOX 2641 GSC8 Birmingham State, Zip: AL, 35291 Phone: 205-992-7762(Tel) Email: CBSSELLER@SOUTHERNCO.COM Project Name: CCR -Plant Daniel Site: Mississippi		Lab P/N: Whitnire, Cheyenne R E-Mail: cheyenne.whitnire@testamericainc.com Carrier Tracking No(s): COC No: 400-53995-23825.2 Page: Page 2 of 4 Job #:	
Due Date Requested: TAT Requested (days): PO #: Purchase Order not required WO #: Project #: 40006621 SOW #:		Analysis Requested Total Number of Containers:	
Matrix (Water, Solid, Other): Sample Type (C=Comp, G=grab): Sample Time: Sample Date: Preservation Code:		Preservation Codes: A - HCl B - NaOH C - Zr Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - 400-119192 COC N - Asmeoz O - Na2O4S P - Na2SO3 Q - NaHSO4 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Sample Identification MW-12 MW-13 MW-14 MW-15 MW-16 MW-17 MW-18 MW-11		Special Instructions/Note: 6020, 7470A SM4500 Cl ₂ E - Chloride, SM4500 SO ₄ E - Sulfate, 4500 F C - Fluoride, 2540C - Total Dissolved Solids 9315 Ra228, 9320 Ra228 Perform MS/MSD (Yes or No) Field Filtered Sample (Yes or No)	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, IV, Other (specify)			
Empty Kit Relinquished by: _____ Date: _____ Relinquished by: <u>Shane Boney</u> Date: <u>3-23-16 2100</u> Relinquished by: <u>Shane Boney</u> Date: <u>3-24-16 0850</u> Relinquished by: _____ Date: _____			
Relinquished by: _____ Date: _____ Relinquished by: _____ Date: _____ Relinquished by: _____ Date: _____		Relinquished by: _____ Date: _____ Relinquished by: _____ Date: _____ Relinquished by: _____ Date: _____	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks: <u>3.0C 0.0C, 3.1C IR-2</u>	



Chain of Custody Record

Client Information		Lab Pkt: Whitmire, Cheyenne R		Carrier Tracking No(s):		COC No: 400-53995-23825.3			
Mr. Cale Sellers		Phone: Shine Boyd		E-Mail: cheyenne.whitmire@testamericainc.com		Page: Page 3 of 4			
Southern Company		Company: RDA ENV.		Job #:					
Address: PO BOX 2641 GSC8		Due Date Requested:		Analysis Requested		Preservation Codes:			
City: Birmingham		TAT Requested (days):				A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:			
State, Zip: AL, 35291		PO #: Purchase Order not required				M - Hexane N - None O - AsNeO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)			
Phone: 205-992-7762(Tel)		WO #:							
Email: CBSSELLER@SOUTHERNCO.COM		Project #: 40006621							
CCR - Plant Daniel		SSOW #:							
Site: Mississippi									
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=waste/oil, B=Blood, A=Air)	Field Filtered Sample (Yes or No)	Perform MS/MSD (Yes or No)	Total Number of Containers	Special Instructions/Note:	
EB-01				Water					
FB-01				Water					
DUP-01				Water					
				Water					
EB-02	3-23-16	0700	G	Water	X	X			
FB-02	1	0710	G	Water	X	X			
DUP-02				Water					
				Water					
EB-03	3-23-16	1557	G	Water	X	X			
FB-03	1	1607	L	Water	X	X			
DUP-03	1	1645	L	Water	X	X			
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)								Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Empty Kit Relinquished by:								Time:	
Relinquished by: <i>Shane Boyd</i>								Date:	
Relinquished by: <i>P. Neguib</i>								Received by: <i>B. Shoukry</i>	Company: <i>RDA ENV.</i>
Relinquished by:								Received by: <i>SCCHUB</i>	Company: <i>TA</i>
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No								Received by:	Company:
Custody Seal No.:								Cooler Temperature(s) °C and Other Remarks: <i>0.0°C, 3.1°C IR-2</i>	



Chain of Custody Record

Client Information Client Contact: <u>Steve Beag</u> Phone: <u>850-336-0192</u> Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: 205-992-7762 (Tel) Email: CBSELLER@SOUTHERNCO.COM Project Name: CCR -Plait Daniel Site: Mississippi		Lab P/N: Whitnire, Cheyenne R E-Mail: cheyenne.whitnire@testamericainc.com Carrier Tracking No(s): COC No: 400-53995-23825.4 Page: Page 4 of 4 Job #:																			
Due Date Requested: TAT Requested (days): PO #: Purchase Order not required WO #:		Analysis Requested Total Number of containers:																			
Sample Identification Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (W=water, S=solid, O=soil/wall, BT=Tissue, A=Air) Preservation Code:		Field Filtered Sample (Yes or No) Particulate MS/MSD (Yes or No) 8316_Ra226_9320_Ra228 SM4600_Cl_E - Chloride, SM4600_SO4_E - Sulfate, 4500_F_C - Fluoride, 2540C - Total Dissolved Solids 6020_7470A																			
BAW-1	3-23-16	1126	G	Water	W	X	X	X													
BAW-2		1355		Water																	
BAW-3		1515		Water																	
BAW-4		1745		Water																	
BAW-5		1835		Water																	
BAW-7		1840		Water																	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months																	
Empty Kit Relinquished by:		Date:		Method of Shipment:																	
Relinquished by: <u>Steve Beag</u>		Date/Time: <u>3-23-16 2100</u>		Received by: <u>PA. Alexander</u>																	
Relinquished by: <u>PA. Alexander</u>		Date/Time: <u>3-24-16 0850</u>		Received by: <u>DC Caruso</u>																	
Relinquished by:		Date/Time:		Received by:																	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:																	



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-119192-2

SDG Number: Mississippi

Login Number: 119192

List Number: 1

Creator: Perez, Trina M

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.5°C,0.6°C,0.9°C,0.0°C,0.3°C IR-6; 0.0°C, 0.0°C, 3.1°C, IR-2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

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	06-30-16
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	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	05-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-16
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16
Michigan	State Program	5	9912	06-30-16
New Jersey	NELAP	2	FL006	06-30-16
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	06-30-16
Texas	NELAP	6	T104704286-15-9	09-30-16
USDA	Federal		P330-13-00193	07-01-16
Virginia	NELAP	3	460166	06-14-16
West Virginia DEP	State Program	3	136	06-30-16

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	06-30-16
California	State Program	9	2886	03-31-18
Connecticut	State Program	1	PH-0241	03-31-17
Florida	NELAP	4	E87689	06-30-16
Illinois	NELAP	5	003757	11-30-16
Iowa	State Program	7	373	12-01-16
Kansas	NELAP	7	E-10236	05-31-16
Kentucky (DW)	State Program	4	90125	12-31-16
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-16 *
Louisiana (DW)	NELAP	6	LA160008	12-31-16
Maryland	State Program	3	310	09-30-16
Missouri	State Program	7	780	06-30-16
Nevada	State Program	9	MO000542016-1	07-31-16
New Jersey	NELAP	2	MO002	06-30-16
New York	NELAP	2	11616	03-31-17
North Dakota	State Program	8	R207	06-30-16
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-16

* Certification renewal pending - certification considered valid.

Certification Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-119192-2
SDG: Mississippi

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
Pennsylvania	NELAP	3	68-00540	02-28-17 *
South Carolina	State Program	4	85002001	06-30-16
Texas	NELAP	6	T104704193-15-9	07-31-16
USDA	Federal		P330-07-00122	01-09-17
Utah	NELAP	8	MO000542015-7	07-31-16
Virginia	NELAP	3	460230	06-14-16
Washington	State Program	10	C592	08-30-16
West Virginia DEP	State Program	3	381	08-31-16

* Certification renewal pending - certification considered valid.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

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Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-121850-1

TestAmerica Sample Delivery Group: NAMU

Client Project/Site: CCR -Plant Daniel

For:

Southern Company

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Attn: Mr. Cale B. Sellers



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

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

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Case Narrative

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Job ID: 400-121850-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-121850-1

RAD

Method PrecSep_0: Radium-228 Prep Batch 160-252559: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: MW-17 (400-121850-1), MW-12 (400-121850-2), MW-13 (400-121850-3), MW-16 (400-121850-4), MW-15 (400-121850-5), MW-14 (400-121850-6), DUP-03 (400-121850-7), MW-11 (400-121850-8), EB-03 (400-121850-9), FB-03 (400-121850-10) and MW-18 (400-121850-11). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead.

Method PrecSep-21: Radium-226 Prep Batch 160-252548: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: MW-17 (400-121850-1), MW-12 (400-121850-2), MW-13 (400-121850-3), MW-16 (400-121850-4), MW-15 (400-121850-5), MW-14 (400-121850-6), DUP-03 (400-121850-7), MW-11 (400-121850-8), EB-03 (400-121850-9), FB-03 (400-121850-10) and MW-18 (400-121850-11). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead.

General Chemistry

Method SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-306840 and 400-306931 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recoveries were within acceptance limits.

Method SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 400-306839 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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-17

Lab Sample ID: 400-121850-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00078	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.031		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.0		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00081	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	26		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	6.0		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	1.4	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	5.09				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-12

Lab Sample ID: 400-121850-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.073		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Boron	0.024	J	0.050	0.021	mg/L	5		6020	Total Recoverable
Cobalt	0.0015	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	26		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	6.6		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	6.2		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.13				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-13

Lab Sample ID: 400-121850-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.11		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.00044	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Calcium	2.0		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0020	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0039	J	0.0050	0.0032	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	56		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	8.9		4.0	1.2	mg/L	2		SM 4500 Cl- E	Total/NA
Sulfate	4.6	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.92				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-16

Lab Sample ID: 400-121850-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.038		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.89		0.25	0.13	mg/L	5		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-16 (Continued)

Lab Sample ID: 400-121850-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.0013	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Chloride	5.4		4.0	1.2	mg/L	2		SM 4500 Cl- E	Total/NA
Field pH	4.67				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-15

Lab Sample ID: 400-121850-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.045		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.2		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0011	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	24		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	6.0		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.62				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-14

Lab Sample ID: 400-121850-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.071		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	5.5		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0012	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	26		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	7.2		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	1.9	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	5.38				SU	1		Field Sampling	Total/NA

Client Sample ID: DUP-03

Lab Sample ID: 400-121850-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.073		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	5.5		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0013	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	18		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	7.4		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	1.9	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	5.38				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-11

Lab Sample ID: 400-121850-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.065		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.8		0.25	0.13	mg/L	5		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-11 (Continued)

Lab Sample ID: 400-121850-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.0056		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	52		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	13		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	4.1	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.74				SU	1		Field Sampling	Total/NA

Client Sample ID: EB-03

Lab Sample ID: 400-121850-9

No Detections.

Client Sample ID: FB-03

Lab Sample ID: 400-121850-10

No Detections.

Client Sample ID: MW-18

Lab Sample ID: 400-121850-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.055		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.85		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0011	J	0.0025	0.0011	mg/L	5		6020	Total Recoverable
Cobalt	0.0012	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	20		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	8.4		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	3.9	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.58				SU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
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
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
Field Sampling	Field Sampling	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

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

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

Sample Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-121850-1	MW-17	Ground Water	05/18/16 12:45	05/19/16 09:20
400-121850-2	MW-12	Ground Water	05/18/16 14:00	05/19/16 09:20
400-121850-3	MW-13	Ground Water	05/18/16 15:15	05/19/16 09:20
400-121850-4	MW-16	Ground Water	05/18/16 16:30	05/19/16 09:20
400-121850-5	MW-15	Ground Water	05/18/16 11:18	05/19/16 09:20
400-121850-6	MW-14	Ground Water	05/18/16 12:51	05/19/16 09:20
400-121850-7	DUP-03	Ground Water	05/18/16 11:51	05/19/16 09:20
400-121850-8	MW-11	Ground Water	05/18/16 15:41	05/19/16 09:20
400-121850-9	EB-03	Water	05/18/16 13:54	05/19/16 09:20
400-121850-10	FB-03	Ground Water	05/18/16 14:04	05/19/16 09:20
400-121850-11	MW-18	Ground Water	05/18/16 16:46	05/19/16 09:20

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-17
Date Collected: 05/18/16 12:45
Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-1
Matrix: Ground Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		05/20/16 08:30	05/23/16 14:54	5
Arsenic	0.00078	J	0.0013	0.00046	mg/L		05/20/16 08:30	05/23/16 14:54	5
Barium	0.031		0.0025	0.00049	mg/L		05/20/16 08:30	05/23/16 14:54	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 14:54	5
Boron	<0.021		0.050	0.021	mg/L		05/20/16 08:30	05/23/16 14:54	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 14:54	5
Calcium	1.0		0.25	0.13	mg/L		05/20/16 08:30	05/23/16 14:54	5
Chromium	<0.0011		0.0025	0.0011	mg/L		05/20/16 08:30	05/23/16 14:54	5
Cobalt	0.00081	J	0.0025	0.00040	mg/L		05/20/16 08:30	05/23/16 14:54	5
Lead	<0.00035		0.0013	0.00035	mg/L		05/20/16 08:30	05/23/16 14:54	5
Lithium	<0.0032		0.0050	0.0032	mg/L		05/20/16 08:30	05/23/16 14:54	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		05/20/16 08:30	05/23/16 14:54	5
Selenium	<0.00024		0.0013	0.00024	mg/L		05/20/16 08:30	05/23/16 14:54	5
Thallium	<0.000085		0.00050	0.000085	mg/L		05/20/16 08:30	05/23/16 14:54	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		05/20/16 08:56	05/23/16 12:53	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	26		5.0	3.4	mg/L			05/20/16 15:13	1
Chloride	6.0		2.0	0.60	mg/L			05/20/16 09:17	1
Fluoride	<0.032		0.10	0.032	mg/L			06/08/16 18:10	1
Sulfate	1.4	J	5.0	1.4	mg/L			05/20/16 11:03	1

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		0.0662	0.0694	1.00	0.0594	pCi/L	05/23/16 12:40	06/14/16 07:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.7		40 - 110					05/23/16 12:40	06/14/16 07:17	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.185	U	0.203	0.203	1.00	0.332	pCi/L	05/23/16 13:17	06/01/16 13:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.7		40 - 110					05/23/16 13:17	06/01/16 13:26	1
Y Carrier	110		40 - 110					05/23/16 13:17	06/01/16 13:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.417		0.213	0.215	5.00	0.332	pCi/L		06/16/16 12:32	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-17
Date Collected: 05/18/16 12:45
Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-1
Matrix: Ground Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.09				SU			05/18/16 12:45	1

- 1
- 2
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- 8
- 9
- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-12
Date Collected: 05/18/16 14:00
Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-2
Matrix: Ground Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		05/20/16 08:30	05/23/16 15:30	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		05/20/16 08:30	05/23/16 15:30	5
Barium	0.073		0.0025	0.00049	mg/L		05/20/16 08:30	05/23/16 15:30	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 15:30	5
Boron	0.024	J	0.050	0.021	mg/L		05/20/16 08:30	05/23/16 15:30	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 15:30	5
Calcium	<0.13		0.25	0.13	mg/L		05/20/16 08:30	05/23/16 15:30	5
Chromium	<0.0011		0.0025	0.0011	mg/L		05/20/16 08:30	05/23/16 15:30	5
Cobalt	0.0015	J	0.0025	0.00040	mg/L		05/20/16 08:30	05/23/16 15:30	5
Lead	<0.00035		0.0013	0.00035	mg/L		05/20/16 08:30	05/23/16 15:30	5
Lithium	<0.0032		0.0050	0.0032	mg/L		05/20/16 08:30	05/23/16 15:30	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		05/20/16 08:30	05/23/16 15:30	5
Selenium	<0.00024		0.0013	0.00024	mg/L		05/20/16 08:30	05/23/16 15:30	5
Thallium	<0.000085		0.00050	0.000085	mg/L		05/20/16 08:30	05/23/16 15:30	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		05/20/16 08:56	05/23/16 12:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	26		5.0	3.4	mg/L			05/20/16 15:13	1
Chloride	6.6		2.0	0.60	mg/L			05/20/16 09:22	1
Fluoride	0.14		0.10	0.032	mg/L			06/08/16 18:13	1
Sulfate	6.2		5.0	1.4	mg/L			05/20/16 11:03	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.420		0.0835	0.0917	1.00	0.0483	pCi/L	05/23/16 12:40	06/14/16 07:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					05/23/16 12:40	06/14/16 07:17	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		0.253	0.261	1.00	0.344	pCi/L	05/23/16 13:17	06/01/16 13:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					05/23/16 13:17	06/01/16 13:26	1
Y Carrier	85.2		40 - 110					05/23/16 13:17	06/01/16 13:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.08		0.267	0.276	5.00	0.344	pCi/L		06/16/16 12:32	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-12
Date Collected: 05/18/16 14:00
Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-2
Matrix: Ground Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.13				SU			05/18/16 14:00	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-13
Date Collected: 05/18/16 15:15
Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-3
Matrix: Ground Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		05/20/16 08:30	05/23/16 15:39	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		05/20/16 08:30	05/23/16 15:39	5
Barium	0.11		0.0025	0.00049	mg/L		05/20/16 08:30	05/23/16 15:39	5
Beryllium	0.00044	J	0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 15:39	5
Boron	<0.021		0.050	0.021	mg/L		05/20/16 08:30	05/23/16 15:39	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 15:39	5
Calcium	2.0		0.25	0.13	mg/L		05/20/16 08:30	05/23/16 15:39	5
Chromium	<0.0011		0.0025	0.0011	mg/L		05/20/16 08:30	05/23/16 15:39	5
Cobalt	0.0020	J	0.0025	0.00040	mg/L		05/20/16 08:30	05/23/16 15:39	5
Lead	<0.00035		0.0013	0.00035	mg/L		05/20/16 08:30	05/23/16 15:39	5
Lithium	0.0039	J	0.0050	0.0032	mg/L		05/20/16 08:30	05/23/16 15:39	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		05/20/16 08:30	05/23/16 15:39	5
Selenium	<0.00024		0.0013	0.00024	mg/L		05/20/16 08:30	05/23/16 15:39	5
Thallium	<0.000085		0.00050	0.000085	mg/L		05/20/16 08:30	05/23/16 15:39	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		05/20/16 08:56	05/23/16 13:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	56		5.0	3.4	mg/L			05/24/16 16:36	1
Chloride	8.9		4.0	1.2	mg/L			05/20/16 17:37	2
Fluoride	<0.032		0.10	0.032	mg/L			06/08/16 18:16	1
Sulfate	4.6	J	5.0	1.4	mg/L			05/20/16 11:02	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.287		0.0736	0.0780	1.00	0.0709	pCi/L	05/23/16 12:40	06/14/16 07:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					05/23/16 12:40	06/14/16 07:20	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.266	U	0.217	0.219	1.00	0.344	pCi/L	05/23/16 13:17	06/01/16 13:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					05/23/16 13:17	06/01/16 13:26	1
Y Carrier	89.7		40 - 110					05/23/16 13:17	06/01/16 13:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.553		0.230	0.232	5.00	0.344	pCi/L		06/16/16 12:32	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-13
Date Collected: 05/18/16 15:15
Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-3
Matrix: Ground Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.92				SU			05/18/16 15:15	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-16
Date Collected: 05/18/16 16:30
Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-4
Matrix: Ground Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		05/20/16 08:30	05/23/16 15:43	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		05/20/16 08:30	05/23/16 15:43	5
Barium	0.038		0.0025	0.00049	mg/L		05/20/16 08:30	05/23/16 15:43	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 15:43	5
Boron	<0.021		0.050	0.021	mg/L		05/20/16 08:30	05/23/16 15:43	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 15:43	5
Calcium	0.89		0.25	0.13	mg/L		05/20/16 08:30	05/23/16 15:43	5
Chromium	<0.0011		0.0025	0.0011	mg/L		05/20/16 08:30	05/23/16 15:43	5
Cobalt	0.0013	J	0.0025	0.00040	mg/L		05/20/16 08:30	05/23/16 15:43	5
Lead	<0.00035		0.0013	0.00035	mg/L		05/20/16 08:30	05/23/16 15:43	5
Lithium	<0.0032		0.0050	0.0032	mg/L		05/20/16 08:30	05/23/16 15:43	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		05/20/16 08:30	05/23/16 15:43	5
Selenium	<0.00024		0.0013	0.00024	mg/L		05/20/16 08:30	05/23/16 15:43	5
Thallium	<0.000085		0.00050	0.000085	mg/L		05/20/16 08:30	05/23/16 15:43	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		05/20/16 08:56	05/23/16 13:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			05/24/16 16:36	1
Chloride	5.4		4.0	1.2	mg/L			05/20/16 17:37	2
Fluoride	<0.032		0.10	0.032	mg/L			06/08/16 18:20	1
Sulfate	<1.4	F1	5.0	1.4	mg/L			05/20/16 11:02	1

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		0.0710	0.0750	1.00	0.0691	pCi/L	05/23/16 12:40	06/14/16 07:20	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.6		40 - 110					05/23/16 12:40	06/14/16 07:20	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.283	U	0.212	0.214	1.00	0.332	pCi/L	05/23/16 13:17	06/01/16 13:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.6		40 - 110					05/23/16 13:17	06/01/16 13:26	1
Y Carrier	87.9		40 - 110					05/23/16 13:17	06/01/16 13:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.554		0.224	0.226	5.00	0.332	pCi/L		06/16/16 12:32	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-16
Date Collected: 05/18/16 16:30
Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-4
Matrix: Ground Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.67				SU			05/18/16 16:30	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-15
Date Collected: 05/18/16 11:18
Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-5
Matrix: Ground Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		05/20/16 08:30	05/23/16 15:48	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		05/20/16 08:30	05/23/16 15:48	5
Barium	0.045		0.0025	0.00049	mg/L		05/20/16 08:30	05/23/16 15:48	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 15:48	5
Boron	<0.021		0.050	0.021	mg/L		05/20/16 08:30	05/23/16 15:48	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 15:48	5
Calcium	1.2		0.25	0.13	mg/L		05/20/16 08:30	05/23/16 15:48	5
Chromium	<0.0011		0.0025	0.0011	mg/L		05/20/16 08:30	05/23/16 15:48	5
Cobalt	0.0011	J	0.0025	0.00040	mg/L		05/20/16 08:30	05/23/16 15:48	5
Lead	<0.00035		0.0013	0.00035	mg/L		05/20/16 08:30	05/23/16 15:48	5
Lithium	<0.0032		0.0050	0.0032	mg/L		05/20/16 08:30	05/23/16 15:48	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		05/20/16 08:30	05/23/16 15:48	5
Selenium	<0.00024		0.0013	0.00024	mg/L		05/20/16 08:30	05/23/16 15:48	5
Thallium	<0.000085		0.00050	0.000085	mg/L		05/20/16 08:30	05/23/16 15:48	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		05/20/16 08:56	05/23/16 13:03	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	24		5.0	3.4	mg/L			05/24/16 16:36	1
Chloride	6.0		2.0	0.60	mg/L			05/20/16 17:51	1
Fluoride	<0.032		0.10	0.032	mg/L			06/08/16 18:28	1
Sulfate	<1.4		5.0	1.4	mg/L			05/20/16 11:02	1

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		0.0756	0.0804	1.00	0.0707	pCi/L	05/23/16 12:40	06/14/16 07:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					05/23/16 12:40	06/14/16 07:21	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.329	U	0.226	0.228	1.00	0.351	pCi/L	05/23/16 13:17	06/01/16 13:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					05/23/16 13:17	06/01/16 13:26	1
Y Carrier	90.5		40 - 110					05/23/16 13:17	06/01/16 13:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.635		0.238	0.242	5.00	0.351	pCi/L		06/16/16 12:32	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-15
Date Collected: 05/18/16 11:18
Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-5
Matrix: Ground Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.62				SU			05/18/16 11:18	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-14
Date Collected: 05/18/16 12:51
Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-6
Matrix: Ground Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		05/20/16 08:30	05/23/16 15:52	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		05/20/16 08:30	05/23/16 15:52	5
Barium	0.071		0.0025	0.00049	mg/L		05/20/16 08:30	05/23/16 15:52	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 15:52	5
Boron	<0.021		0.050	0.021	mg/L		05/20/16 08:30	05/23/16 15:52	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 15:52	5
Calcium	5.5		0.25	0.13	mg/L		05/20/16 08:30	05/23/16 15:52	5
Chromium	<0.0011		0.0025	0.0011	mg/L		05/20/16 08:30	05/23/16 15:52	5
Cobalt	0.0012	J	0.0025	0.00040	mg/L		05/20/16 08:30	05/23/16 15:52	5
Lead	<0.00035		0.0013	0.00035	mg/L		05/20/16 08:30	05/23/16 15:52	5
Lithium	<0.0032		0.0050	0.0032	mg/L		05/20/16 08:30	05/23/16 15:52	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		05/20/16 08:30	05/23/16 15:52	5
Selenium	<0.00024		0.0013	0.00024	mg/L		05/20/16 08:30	05/23/16 15:52	5
Thallium	<0.000085		0.00050	0.000085	mg/L		05/20/16 08:30	05/23/16 15:52	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		05/20/16 08:56	05/23/16 13:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	26		5.0	3.4	mg/L			05/24/16 16:36	1
Chloride	7.2		2.0	0.60	mg/L			05/20/16 17:00	1
Fluoride	<0.032		0.10	0.032	mg/L			06/08/16 18:33	1
Sulfate	1.9	J	5.0	1.4	mg/L			05/20/16 11:02	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.470		0.0902	0.0996	1.00	0.0658	pCi/L	05/23/16 12:40	06/14/16 07:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					05/23/16 12:40	06/14/16 07:21	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.431		0.240	0.244	1.00	0.359	pCi/L	05/23/16 13:17	06/01/16 13:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					05/23/16 13:17	06/01/16 13:27	1
Y Carrier	86.7		40 - 110					05/23/16 13:17	06/01/16 13:27	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.900		0.257	0.263	5.00	0.359	pCi/L		06/16/16 12:32	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-14
Date Collected: 05/18/16 12:51
Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-6
Matrix: Ground Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.38				SU			05/18/16 12:51	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: DUP-03
Date Collected: 05/18/16 11:51
Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-7
Matrix: Ground Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		05/20/16 08:30	05/23/16 15:56	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		05/20/16 08:30	05/23/16 15:56	5
Barium	0.073		0.0025	0.00049	mg/L		05/20/16 08:30	05/23/16 15:56	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 15:56	5
Boron	<0.021		0.050	0.021	mg/L		05/20/16 08:30	05/23/16 15:56	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 15:56	5
Calcium	5.5		0.25	0.13	mg/L		05/20/16 08:30	05/23/16 15:56	5
Chromium	<0.0011		0.0025	0.0011	mg/L		05/20/16 08:30	05/23/16 15:56	5
Cobalt	0.0013	J	0.0025	0.00040	mg/L		05/20/16 08:30	05/23/16 15:56	5
Lead	<0.00035		0.0013	0.00035	mg/L		05/20/16 08:30	05/23/16 15:56	5
Lithium	<0.0032		0.0050	0.0032	mg/L		05/20/16 08:30	05/23/16 15:56	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		05/20/16 08:30	05/23/16 15:56	5
Selenium	<0.00024		0.0013	0.00024	mg/L		05/20/16 08:30	05/23/16 15:56	5
Thallium	<0.000085		0.00050	0.000085	mg/L		05/20/16 08:30	05/23/16 15:56	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		05/20/16 08:56	05/23/16 13:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	18		5.0	3.4	mg/L			05/24/16 16:36	1
Chloride	7.4		2.0	0.60	mg/L			05/20/16 17:00	1
Fluoride	<0.032		0.10	0.032	mg/L			06/08/16 18:35	1
Sulfate	1.9	J	5.0	1.4	mg/L			05/20/16 11:03	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.422		0.0838	0.0920	1.00	0.0573	pCi/L	05/23/16 12:40	06/14/16 07:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.2		40 - 110					05/23/16 12:40	06/14/16 07:21	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.805		0.290	0.300	1.00	0.403	pCi/L	05/23/16 13:17	06/01/16 13:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.2		40 - 110					05/23/16 13:17	06/01/16 13:27	1
Y Carrier	86.0		40 - 110					05/23/16 13:17	06/01/16 13:27	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.23		0.302	0.314	5.00	0.403	pCi/L		06/16/16 12:32	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: DUP-03
Date Collected: 05/18/16 11:51
Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-7
Matrix: Ground Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.38				SU			05/18/16 11:51	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-11
Date Collected: 05/18/16 15:41
Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-8
Matrix: Ground Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		05/20/16 08:30	05/23/16 16:01	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		05/20/16 08:30	05/23/16 16:01	5
Barium	0.065		0.0025	0.00049	mg/L		05/20/16 08:30	05/23/16 16:01	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 16:01	5
Boron	<0.021		0.050	0.021	mg/L		05/20/16 08:30	05/23/16 16:01	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 16:01	5
Calcium	1.8		0.25	0.13	mg/L		05/20/16 08:30	05/23/16 16:01	5
Chromium	<0.0011		0.0025	0.0011	mg/L		05/20/16 08:30	05/23/16 16:01	5
Cobalt	0.0056		0.0025	0.00040	mg/L		05/20/16 08:30	05/23/16 16:01	5
Lead	<0.00035		0.0013	0.00035	mg/L		05/20/16 08:30	05/23/16 16:01	5
Lithium	<0.0032		0.0050	0.0032	mg/L		05/20/16 08:30	05/23/16 16:01	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		05/20/16 08:30	05/23/16 16:01	5
Selenium	<0.00024		0.0013	0.00024	mg/L		05/20/16 08:30	05/23/16 16:01	5
Thallium	<0.000085		0.00050	0.000085	mg/L		05/20/16 08:30	05/23/16 16:01	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		05/20/16 08:56	05/23/16 13:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	52		5.0	3.4	mg/L			05/23/16 12:42	1
Chloride	13		2.0	0.60	mg/L			05/25/16 08:17	1
Fluoride	<0.032		0.10	0.032	mg/L			06/08/16 18:38	1
Sulfate	4.1	J	5.0	1.4	mg/L			05/20/16 11:03	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.245		0.0702	0.0736	1.00	0.0695	pCi/L	05/23/16 12:40	06/14/16 07:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					05/23/16 12:40	06/14/16 07:21	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.497		0.280	0.284	1.00	0.425	pCi/L	05/23/16 13:17	06/01/16 13:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					05/23/16 13:17	06/01/16 13:27	1
Y Carrier	86.0		40 - 110					05/23/16 13:17	06/01/16 13:27	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.742		0.288	0.293	5.00	0.425	pCi/L		06/16/16 12:32	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-11
Date Collected: 05/18/16 15:41
Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-8
Matrix: Ground Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.74				SU			05/18/16 15:41	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: EB-03

Lab Sample ID: 400-121850-9

Date Collected: 05/18/16 13:54

Matrix: Water

Date Received: 05/19/16 09:20

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		05/20/16 08:30	05/23/16 16:19	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		05/20/16 08:30	05/23/16 16:19	5
Barium	<0.00049		0.0025	0.00049	mg/L		05/20/16 08:30	05/23/16 16:19	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 16:19	5
Boron	<0.021		0.050	0.021	mg/L		05/20/16 08:30	05/23/16 16:19	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 16:19	5
Calcium	<0.13		0.25	0.13	mg/L		05/20/16 08:30	05/23/16 16:19	5
Chromium	<0.0011		0.0025	0.0011	mg/L		05/20/16 08:30	05/23/16 16:19	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		05/20/16 08:30	05/23/16 16:19	5
Lead	<0.00035		0.0013	0.00035	mg/L		05/20/16 08:30	05/23/16 16:19	5
Lithium	<0.0032		0.0050	0.0032	mg/L		05/20/16 08:30	05/23/16 16:19	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		05/20/16 08:30	05/23/16 16:19	5
Selenium	<0.00024		0.0013	0.00024	mg/L		05/20/16 08:30	05/23/16 16:19	5
Thallium	<0.000085		0.00050	0.000085	mg/L		05/20/16 08:30	05/23/16 16:19	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		05/20/16 08:56	05/23/16 13:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			05/24/16 16:36	1
Chloride	<0.60		2.0	0.60	mg/L			05/25/16 08:17	1
Fluoride	<0.032		0.10	0.032	mg/L			06/08/16 18:41	1
Sulfate	<1.4		5.0	1.4	mg/L			05/20/16 14:19	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0425	U	0.0408	0.0410	1.00	0.0640	pCi/L	05/23/16 12:40	06/14/16 07:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					05/23/16 12:40	06/14/16 07:21	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.179	U	0.233	0.234	1.00	0.387	pCi/L	05/23/16 13:17	06/01/16 13:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					05/23/16 13:17	06/01/16 13:27	1
Y Carrier	86.0		40 - 110					05/23/16 13:17	06/01/16 13:27	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.222	U	0.237	0.237	5.00	0.387	pCi/L		06/16/16 12:32	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: FB-03
Date Collected: 05/18/16 14:04
Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-10
Matrix: Ground Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		05/20/16 08:30	05/23/16 16:23	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		05/20/16 08:30	05/23/16 16:23	5
Barium	<0.00049		0.0025	0.00049	mg/L		05/20/16 08:30	05/23/16 16:23	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 16:23	5
Boron	<0.021		0.050	0.021	mg/L		05/20/16 08:30	05/23/16 16:23	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 16:23	5
Calcium	<0.13		0.25	0.13	mg/L		05/20/16 08:30	05/23/16 16:23	5
Chromium	<0.0011		0.0025	0.0011	mg/L		05/20/16 08:30	05/23/16 16:23	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		05/20/16 08:30	05/23/16 16:23	5
Lead	<0.00035		0.0013	0.00035	mg/L		05/20/16 08:30	05/23/16 16:23	5
Lithium	<0.0032		0.0050	0.0032	mg/L		05/20/16 08:30	05/23/16 16:23	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		05/20/16 08:30	05/23/16 16:23	5
Selenium	<0.00024		0.0013	0.00024	mg/L		05/20/16 08:30	05/23/16 16:23	5
Thallium	<0.000085		0.00050	0.000085	mg/L		05/20/16 08:30	05/23/16 16:23	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		05/20/16 08:56	05/23/16 13:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			05/24/16 16:36	1
Chloride	<0.60		2.0	0.60	mg/L			05/25/16 08:17	1
Fluoride	<0.032		0.10	0.032	mg/L			06/08/16 18:44	1
Sulfate	<1.4		5.0	1.4	mg/L			05/20/16 14:19	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0322	U	0.0364	0.0365	1.00	0.0591	pCi/L	05/23/16 12:40	06/14/16 07:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					05/23/16 12:40	06/14/16 07:21	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0658	U	0.217	0.217	1.00	0.378	pCi/L	05/23/16 13:17	06/01/16 13:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					05/23/16 13:17	06/01/16 13:28	1
Y Carrier	84.1		40 - 110					05/23/16 13:17	06/01/16 13:28	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0980	U	0.220	0.220	5.00	0.378	pCi/L		06/16/16 12:32	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-18
Date Collected: 05/18/16 16:46
Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-11
Matrix: Ground Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		05/20/16 08:30	05/23/16 16:28	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		05/20/16 08:30	05/23/16 16:28	5
Barium	0.055		0.0025	0.00049	mg/L		05/20/16 08:30	05/23/16 16:28	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 16:28	5
Boron	<0.021		0.050	0.021	mg/L		05/20/16 08:30	05/23/16 16:28	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 16:28	5
Calcium	0.85		0.25	0.13	mg/L		05/20/16 08:30	05/23/16 16:28	5
Chromium	0.0011	J	0.0025	0.0011	mg/L		05/20/16 08:30	05/23/16 16:28	5
Cobalt	0.0012	J	0.0025	0.00040	mg/L		05/20/16 08:30	05/23/16 16:28	5
Lead	<0.00035		0.0013	0.00035	mg/L		05/20/16 08:30	05/23/16 16:28	5
Lithium	<0.0032		0.0050	0.0032	mg/L		05/20/16 08:30	05/23/16 16:28	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		05/20/16 08:30	05/23/16 16:28	5
Selenium	<0.00024		0.0013	0.00024	mg/L		05/20/16 08:30	05/23/16 16:28	5
Thallium	<0.000085		0.00050	0.000085	mg/L		05/20/16 08:30	05/23/16 16:28	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		05/20/16 08:56	05/23/16 13:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	20		5.0	3.4	mg/L			05/24/16 16:36	1
Chloride	8.4		2.0	0.60	mg/L			05/25/16 08:18	1
Fluoride	<0.032		0.10	0.032	mg/L			06/08/16 18:48	1
Sulfate	3.9	J	5.0	1.4	mg/L			05/20/16 14:19	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.418		0.0814	0.0897	1.00	0.0518	pCi/L	05/23/16 12:40	06/14/16 07:21	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.2		40 - 110					05/23/16 12:40	06/14/16 07:21	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.448		0.244	0.247	1.00	0.363	pCi/L	05/23/16 13:17	06/01/16 13:28	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.2		40 - 110					05/23/16 13:17	06/01/16 13:28	1
Y Carrier	86.0		40 - 110					05/23/16 13:17	06/01/16 13:28	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.866		0.257	0.263	5.00	0.363	pCi/L		06/16/16 12:32	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-18
Date Collected: 05/18/16 16:46
Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-11
Matrix: Ground Water

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.58				SU			05/18/16 16:46	1

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Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Qualifiers

Metals

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.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-17
Date Collected: 05/18/16 12:45
Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-1
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			306733	05/20/16 08:30	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	307215	05/23/16 14:54	GKP	TAL PEN
Total/NA	Prep	7470A			306799	05/20/16 08:56	JAP	TAL PEN
Total/NA	Analysis	7470A		1	307114	05/23/16 12:53	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	306851	05/20/16 15:13	CAC	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	306839	05/20/16 09:17	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	309256	06/08/16 18:10	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	306840	05/20/16 11:03	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			252548	05/23/16 12:40	MCJ	TAL SL
Total/NA	Analysis	9315		1	256310	06/14/16 07:17	ALS	TAL SL
Total/NA	Prep	PrecSep_0			252559	05/23/16 13:17	MCJ	TAL SL
Total/NA	Analysis	9320		1	254106	06/01/16 13:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	256789	06/16/16 12:32	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	309179	05/18/16 12:45	BWS	TAL PEN

Client Sample ID: MW-12
Date Collected: 05/18/16 14:00
Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-2
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			306733	05/20/16 08:30	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	307215	05/23/16 15:30	GKP	TAL PEN
Total/NA	Prep	7470A			306799	05/20/16 08:56	JAP	TAL PEN
Total/NA	Analysis	7470A		1	307114	05/23/16 12:55	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	306851	05/20/16 15:13	CAC	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	306839	05/20/16 09:22	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	309256	06/08/16 18:13	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	306840	05/20/16 11:03	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			252548	05/23/16 12:40	MCJ	TAL SL
Total/NA	Analysis	9315		1	256310	06/14/16 07:17	ALS	TAL SL
Total/NA	Prep	PrecSep_0			252559	05/23/16 13:17	MCJ	TAL SL
Total/NA	Analysis	9320		1	254106	06/01/16 13:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	256789	06/16/16 12:32	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	309179	05/18/16 14:00	BWS	TAL PEN

Client Sample ID: MW-13
Date Collected: 05/18/16 15:15
Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-3
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			306733	05/20/16 08:30	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	307215	05/23/16 15:39	GKP	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-13

Lab Sample ID: 400-121850-3

Date Collected: 05/18/16 15:15

Matrix: Ground Water

Date Received: 05/19/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	7470A			306799	05/20/16 08:56	JAP	TAL PEN
Total/NA	Analysis	7470A		1	307114	05/23/16 13:00	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	307321	05/24/16 16:36	CAC	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		2	306930	05/20/16 17:37	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	309256	06/08/16 18:16	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	306840	05/20/16 11:02	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			252548	05/23/16 12:40	MCJ	TAL SL
Total/NA	Analysis	9315		1	256311	06/14/16 07:20	ALS	TAL SL
Total/NA	Prep	PrecSep_0			252559	05/23/16 13:17	MCJ	TAL SL
Total/NA	Analysis	9320		1	254106	06/01/16 13:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	256789	06/16/16 12:32	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	309179	05/18/16 15:15	BWS	TAL PEN

Client Sample ID: MW-16

Lab Sample ID: 400-121850-4

Date Collected: 05/18/16 16:30

Matrix: Ground Water

Date Received: 05/19/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			306733	05/20/16 08:30	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	307215	05/23/16 15:43	GKP	TAL PEN
Total/NA	Prep	7470A			306799	05/20/16 08:56	JAP	TAL PEN
Total/NA	Analysis	7470A		1	307114	05/23/16 13:02	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	307321	05/24/16 16:36	CAC	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		2	306930	05/20/16 17:37	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	309256	06/08/16 18:20	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	306840	05/20/16 11:02	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			252548	05/23/16 12:40	MCJ	TAL SL
Total/NA	Analysis	9315		1	256311	06/14/16 07:20	ALS	TAL SL
Total/NA	Prep	PrecSep_0			252559	05/23/16 13:17	MCJ	TAL SL
Total/NA	Analysis	9320		1	254106	06/01/16 13:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	256789	06/16/16 12:32	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	309179	05/18/16 16:30	BWS	TAL PEN

Client Sample ID: MW-15

Lab Sample ID: 400-121850-5

Date Collected: 05/18/16 11:18

Matrix: Ground Water

Date Received: 05/19/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			306733	05/20/16 08:30	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	307215	05/23/16 15:48	GKP	TAL PEN
Total/NA	Prep	7470A			306799	05/20/16 08:56	JAP	TAL PEN
Total/NA	Analysis	7470A		1	307114	05/23/16 13:03	JAP	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-15

Lab Sample ID: 400-121850-5

Date Collected: 05/18/16 11:18

Matrix: Ground Water

Date Received: 05/19/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	307321	05/24/16 16:36	CAC	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	306930	05/20/16 17:51	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	309256	06/08/16 18:28	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	306840	05/20/16 11:02	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			252548	05/23/16 12:40	MCJ	TAL SL
Total/NA	Analysis	9315		1	256311	06/14/16 07:21	ALS	TAL SL
Total/NA	Prep	PrecSep_0			252559	05/23/16 13:17	MCJ	TAL SL
Total/NA	Analysis	9320		1	254106	06/01/16 13:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	256789	06/16/16 12:32	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	309179	05/18/16 11:18	BWS	TAL PEN

Client Sample ID: MW-14

Lab Sample ID: 400-121850-6

Date Collected: 05/18/16 12:51

Matrix: Ground Water

Date Received: 05/19/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			306733	05/20/16 08:30	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	307215	05/23/16 15:52	GKP	TAL PEN
Total/NA	Prep	7470A			306799	05/20/16 08:56	JAP	TAL PEN
Total/NA	Analysis	7470A		1	307114	05/23/16 13:14	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	307321	05/24/16 16:36	CAC	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	306930	05/20/16 17:00	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	309256	06/08/16 18:33	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	306840	05/20/16 11:02	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			252548	05/23/16 12:40	MCJ	TAL SL
Total/NA	Analysis	9315		1	256311	06/14/16 07:21	ALS	TAL SL
Total/NA	Prep	PrecSep_0			252559	05/23/16 13:17	MCJ	TAL SL
Total/NA	Analysis	9320		1	254106	06/01/16 13:27	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	256789	06/16/16 12:32	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	309179	05/18/16 12:51	BWS	TAL PEN

Client Sample ID: DUP-03

Lab Sample ID: 400-121850-7

Date Collected: 05/18/16 11:51

Matrix: Ground Water

Date Received: 05/19/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			306733	05/20/16 08:30	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	307215	05/23/16 15:56	GKP	TAL PEN
Total/NA	Prep	7470A			306799	05/20/16 08:56	JAP	TAL PEN
Total/NA	Analysis	7470A		1	307114	05/23/16 13:16	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	307321	05/24/16 16:36	CAC	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	306930	05/20/16 17:00	LSS	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: DUP-03

Lab Sample ID: 400-121850-7

Date Collected: 05/18/16 11:51

Matrix: Ground Water

Date Received: 05/19/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	309256	06/08/16 18:35	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	306840	05/20/16 11:03	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			252548	05/23/16 12:40	MCJ	TAL SL
Total/NA	Analysis	9315		1	256311	06/14/16 07:21	ALS	TAL SL
Total/NA	Prep	PrecSep_0			252559	05/23/16 13:17	MCJ	TAL SL
Total/NA	Analysis	9320		1	254106	06/01/16 13:27	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	256789	06/16/16 12:32	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	309179	05/18/16 11:51	BWS	TAL PEN

Client Sample ID: MW-11

Lab Sample ID: 400-121850-8

Date Collected: 05/18/16 15:41

Matrix: Ground Water

Date Received: 05/19/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			306733	05/20/16 08:30	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	307215	05/23/16 16:01	GKP	TAL PEN
Total/NA	Prep	7470A			306799	05/20/16 08:56	JAP	TAL PEN
Total/NA	Analysis	7470A		1	307114	05/23/16 13:17	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	307100	05/23/16 12:42	CAC	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	307403	05/25/16 08:17	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	309256	06/08/16 18:38	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	306840	05/20/16 11:03	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			252548	05/23/16 12:40	MCJ	TAL SL
Total/NA	Analysis	9315		1	256311	06/14/16 07:21	ALS	TAL SL
Total/NA	Prep	PrecSep_0			252559	05/23/16 13:17	MCJ	TAL SL
Total/NA	Analysis	9320		1	254106	06/01/16 13:27	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	256789	06/16/16 12:32	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	309179	05/18/16 15:41	BWS	TAL PEN

Client Sample ID: EB-03

Lab Sample ID: 400-121850-9

Date Collected: 05/18/16 13:54

Matrix: Water

Date Received: 05/19/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			306733	05/20/16 08:30	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	307215	05/23/16 16:19	GKP	TAL PEN
Total/NA	Prep	7470A			306799	05/20/16 08:56	JAP	TAL PEN
Total/NA	Analysis	7470A		1	307114	05/23/16 13:18	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	307321	05/24/16 16:36	CAC	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	307403	05/25/16 08:17	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	309256	06/08/16 18:41	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	306931	05/20/16 14:19	LSS	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: EB-03

Lab Sample ID: 400-121850-9

Date Collected: 05/18/16 13:54

Matrix: Water

Date Received: 05/19/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			252548	05/23/16 12:40	MCJ	TAL SL
Total/NA	Analysis	9315		1	256311	06/14/16 07:21	ALS	TAL SL
Total/NA	Prep	PrecSep_0			252559	05/23/16 13:17	MCJ	TAL SL
Total/NA	Analysis	9320		1	254106	06/01/16 13:27	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	256789	06/16/16 12:32	RTM	TAL SL

Client Sample ID: FB-03

Lab Sample ID: 400-121850-10

Date Collected: 05/18/16 14:04

Matrix: Ground Water

Date Received: 05/19/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			306733	05/20/16 08:30	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	307215	05/23/16 16:23	GKP	TAL PEN
Total/NA	Prep	7470A			306799	05/20/16 08:56	JAP	TAL PEN
Total/NA	Analysis	7470A		1	307114	05/23/16 13:19	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	307321	05/24/16 16:36	CAC	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	307403	05/25/16 08:17	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	309256	06/08/16 18:44	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	306931	05/20/16 14:19	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			252548	05/23/16 12:40	MCJ	TAL SL
Total/NA	Analysis	9315		1	256311	06/14/16 07:21	ALS	TAL SL
Total/NA	Prep	PrecSep_0			252559	05/23/16 13:17	MCJ	TAL SL
Total/NA	Analysis	9320		1	254106	06/01/16 13:28	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	256789	06/16/16 12:32	RTM	TAL SL

Client Sample ID: MW-18

Lab Sample ID: 400-121850-11

Date Collected: 05/18/16 16:46

Matrix: Ground Water

Date Received: 05/19/16 09:20

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			306733	05/20/16 08:30	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	307215	05/23/16 16:28	GKP	TAL PEN
Total/NA	Prep	7470A			306799	05/20/16 08:56	JAP	TAL PEN
Total/NA	Analysis	7470A		1	307114	05/23/16 13:20	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	307321	05/24/16 16:36	CAC	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	307403	05/25/16 08:18	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	309256	06/08/16 18:48	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	306931	05/20/16 14:19	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			252548	05/23/16 12:40	MCJ	TAL SL
Total/NA	Analysis	9315		1	256311	06/14/16 07:21	ALS	TAL SL
Total/NA	Prep	PrecSep_0			252559	05/23/16 13:17	MCJ	TAL SL
Total/NA	Analysis	9320		1	254106	06/01/16 13:28	RTM	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Client Sample ID: MW-18

Date Collected: 05/18/16 16:46

Date Received: 05/19/16 09:20

Lab Sample ID: 400-121850-11

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	Ra226_Ra228		1	256789	06/16/16 12:32	RTM	TAL SL
Total/NA	Analysis	Field Sampling		1	309179	05/18/16 16:46	BWS	TAL PEN

Laboratory References:

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

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

- 1
- 2
- 3
- 4
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- 7
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- 12
- 13
- 14

QC Association Summary

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
 SDG: NAMU

Metals

Prep Batch: 306733

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-121850-1	MW-17	Total Recoverable	Ground Water	3005A	
400-121850-1 MS	MW-17	Total Recoverable	Ground Water	3005A	
400-121850-1 MSD	MW-17	Total Recoverable	Ground Water	3005A	
400-121850-2	MW-12	Total Recoverable	Ground Water	3005A	
400-121850-3	MW-13	Total Recoverable	Ground Water	3005A	
400-121850-4	MW-16	Total Recoverable	Ground Water	3005A	
400-121850-5	MW-15	Total Recoverable	Ground Water	3005A	
400-121850-6	MW-14	Total Recoverable	Ground Water	3005A	
400-121850-7	DUP-03	Total Recoverable	Ground Water	3005A	
400-121850-8	MW-11	Total Recoverable	Ground Water	3005A	
400-121850-9	EB-03	Total Recoverable	Water	3005A	
400-121850-10	FB-03	Total Recoverable	Ground Water	3005A	
400-121850-11	MW-18	Total Recoverable	Ground Water	3005A	
LCS 400-306733/2-A ^1	Lab Control Sample	Total Recoverable	Water	3005A	
MB 400-306733/1-A ^5	Method Blank	Total Recoverable	Water	3005A	

Prep Batch: 306799

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-121850-1	MW-17	Total/NA	Ground Water	7470A	
400-121850-2	MW-12	Total/NA	Ground Water	7470A	
400-121850-2 MS	MW-12	Total/NA	Ground Water	7470A	
400-121850-2 MSD	MW-12	Total/NA	Ground Water	7470A	
400-121850-3	MW-13	Total/NA	Ground Water	7470A	
400-121850-4	MW-16	Total/NA	Ground Water	7470A	
400-121850-5	MW-15	Total/NA	Ground Water	7470A	
400-121850-6	MW-14	Total/NA	Ground Water	7470A	
400-121850-7	DUP-03	Total/NA	Ground Water	7470A	
400-121850-8	MW-11	Total/NA	Ground Water	7470A	
400-121850-9	EB-03	Total/NA	Water	7470A	
400-121850-10	FB-03	Total/NA	Ground Water	7470A	
400-121850-11	MW-18	Total/NA	Ground Water	7470A	
LCS 400-306799/15-A	Lab Control Sample	Total/NA	Water	7470A	
MB 400-306799/14-A	Method Blank	Total/NA	Water	7470A	

Analysis Batch: 307114

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-121850-1	MW-17	Total/NA	Ground Water	7470A	306799
400-121850-2	MW-12	Total/NA	Ground Water	7470A	306799
400-121850-2 MS	MW-12	Total/NA	Ground Water	7470A	306799
400-121850-2 MSD	MW-12	Total/NA	Ground Water	7470A	306799
400-121850-3	MW-13	Total/NA	Ground Water	7470A	306799
400-121850-4	MW-16	Total/NA	Ground Water	7470A	306799
400-121850-5	MW-15	Total/NA	Ground Water	7470A	306799
400-121850-6	MW-14	Total/NA	Ground Water	7470A	306799
400-121850-7	DUP-03	Total/NA	Ground Water	7470A	306799
400-121850-8	MW-11	Total/NA	Ground Water	7470A	306799
400-121850-9	EB-03	Total/NA	Water	7470A	306799
400-121850-10	FB-03	Total/NA	Ground Water	7470A	306799
400-121850-11	MW-18	Total/NA	Ground Water	7470A	306799
LCS 400-306799/15-A	Lab Control Sample	Total/NA	Water	7470A	306799
MB 400-306799/14-A	Method Blank	Total/NA	Water	7470A	306799

TestAmerica Pensacola



QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Analysis Batch: 307215

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-121850-1	MW-17	Total Recoverable	Ground Water	6020	306733
400-121850-1 MS	MW-17	Total Recoverable	Ground Water	6020	306733
400-121850-1 MSD	MW-17	Total Recoverable	Ground Water	6020	306733
400-121850-2	MW-12	Total Recoverable	Ground Water	6020	306733
400-121850-3	MW-13	Total Recoverable	Ground Water	6020	306733
400-121850-4	MW-16	Total Recoverable	Ground Water	6020	306733
400-121850-5	MW-15	Total Recoverable	Ground Water	6020	306733
400-121850-6	MW-14	Total Recoverable	Ground Water	6020	306733
400-121850-7	DUP-03	Total Recoverable	Ground Water	6020	306733
400-121850-8	MW-11	Total Recoverable	Ground Water	6020	306733
400-121850-9	EB-03	Total Recoverable	Water	6020	306733
400-121850-10	FB-03	Total Recoverable	Ground Water	6020	306733
400-121850-11	MW-18	Total Recoverable	Ground Water	6020	306733
LCS 400-306733/2-A ^1	Lab Control Sample	Total Recoverable	Water	6020	306733
MB 400-306733/1-A ^5	Method Blank	Total Recoverable	Water	6020	306733

General Chemistry

Analysis Batch: 306839

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-121850-1	MW-17	Total/NA	Ground Water	SM 4500 Cl- E	
400-121850-2	MW-12	Total/NA	Ground Water	SM 4500 Cl- E	
460-113733-D-1 DU	Duplicate	Total/NA	Water	SM 4500 Cl- E	
460-113795-C-9 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
460-113795-C-9 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	
LCS 400-306839/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MB 400-306839/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 306840

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-121850-1	MW-17	Total/NA	Ground Water	SM 4500 SO4 E	
400-121850-2	MW-12	Total/NA	Ground Water	SM 4500 SO4 E	
400-121850-3	MW-13	Total/NA	Ground Water	SM 4500 SO4 E	
400-121850-4	MW-16	Total/NA	Ground Water	SM 4500 SO4 E	
400-121850-4 MS	MW-16	Total/NA	Ground Water	SM 4500 SO4 E	
400-121850-4 MSD	MW-16	Total/NA	Ground Water	SM 4500 SO4 E	
400-121850-5	MW-15	Total/NA	Ground Water	SM 4500 SO4 E	
400-121850-6	MW-14	Total/NA	Ground Water	SM 4500 SO4 E	
400-121850-7	DUP-03	Total/NA	Ground Water	SM 4500 SO4 E	
400-121850-8	MW-11	Total/NA	Ground Water	SM 4500 SO4 E	
400-121908-E-10 DU	Duplicate	Total/NA	Water	SM 4500 SO4 E	
LCS 400-306840/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MB 400-306840/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 306851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-121850-1	MW-17	Total/NA	Ground Water	SM 2540C	
400-121850-2	MW-12	Total/NA	Ground Water	SM 2540C	
400-121874-K-3 DU	Duplicate	Total/NA	Water	SM 2540C	
LCS 400-306851/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 400-306851/1	Method Blank	Total/NA	Water	SM 2540C	

QC Association Summary

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
 SDG: NAMU

General Chemistry (Continued)

Analysis Batch: 306930

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-121850-3	MW-13	Total/NA	Ground Water	SM 4500 Cl- E	
400-121850-4	MW-16	Total/NA	Ground Water	SM 4500 Cl- E	
400-121850-5	MW-15	Total/NA	Ground Water	SM 4500 Cl- E	
400-121850-6	MW-14	Total/NA	Ground Water	SM 4500 Cl- E	
400-121850-7	DUP-03	Total/NA	Ground Water	SM 4500 Cl- E	
400-121912-B-2 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-121912-B-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	
400-121912-B-6 DU	Duplicate	Total/NA	Water	SM 4500 Cl- E	
LCS 400-306930/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MB 400-306930/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 306931

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-121711-B-7 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-121711-B-7 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	
400-121850-9	EB-03	Total/NA	Water	SM 4500 SO4 E	
400-121850-10	FB-03	Total/NA	Ground Water	SM 4500 SO4 E	
400-121850-11	MW-18	Total/NA	Ground Water	SM 4500 SO4 E	
400-121852-A-3 DU	Duplicate	Total/NA	Water	SM 4500 SO4 E	
LCS 400-306931/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MB 400-306931/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 307100

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-121825-B-26 DU	Duplicate	Total/NA	Water	SM 2540C	
400-121850-8	MW-11	Total/NA	Ground Water	SM 2540C	
LCS 400-307100/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 400-307100/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 307321

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-121850-3	MW-13	Total/NA	Ground Water	SM 2540C	
400-121850-4	MW-16	Total/NA	Ground Water	SM 2540C	
400-121850-5	MW-15	Total/NA	Ground Water	SM 2540C	
400-121850-6	MW-14	Total/NA	Ground Water	SM 2540C	
400-121850-7	DUP-03	Total/NA	Ground Water	SM 2540C	
400-121850-9	EB-03	Total/NA	Water	SM 2540C	
400-121850-10	FB-03	Total/NA	Ground Water	SM 2540C	
400-121850-11	MW-18	Total/NA	Ground Water	SM 2540C	
400-121915-J-4 DU	Duplicate	Total/NA	Water	SM 2540C	
400-121915-J-5 DU	Duplicate	Total/NA	Water	SM 2540C	
LCS 400-307321/2	Lab Control Sample	Total/NA	Water	SM 2540C	
MB 400-307321/1	Method Blank	Total/NA	Water	SM 2540C	

Analysis Batch: 307403

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-121850-8	MW-11	Total/NA	Ground Water	SM 4500 Cl- E	
400-121850-9	EB-03	Total/NA	Water	SM 4500 Cl- E	
400-121850-10	FB-03	Total/NA	Ground Water	SM 4500 Cl- E	
400-121850-11	MW-18	Total/NA	Ground Water	SM 4500 Cl- E	
400-122083-A-1 DU	Duplicate	Total/NA	Water	SM 4500 Cl- E	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

General Chemistry (Continued)

Analysis Batch: 307403 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-122083-A-2 MS	Matrix Spike	Total/NA	Water	SM 4500 CI- E	
400-122083-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CI- E	
LCS 400-307403/7	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
MB 400-307403/6	Method Blank	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 309256

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-121848-E-2 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-121848-E-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-121850-1	MW-17	Total/NA	Ground Water	SM 4500 F C	
400-121850-2	MW-12	Total/NA	Ground Water	SM 4500 F C	
400-121850-3	MW-13	Total/NA	Ground Water	SM 4500 F C	
400-121850-4	MW-16	Total/NA	Ground Water	SM 4500 F C	
400-121850-5	MW-15	Total/NA	Ground Water	SM 4500 F C	
400-121850-5 DU	MW-15	Total/NA	Ground Water	SM 4500 F C	
400-121850-6	MW-14	Total/NA	Ground Water	SM 4500 F C	
400-121850-7	DUP-03	Total/NA	Ground Water	SM 4500 F C	
400-121850-8	MW-11	Total/NA	Ground Water	SM 4500 F C	
400-121850-9	EB-03	Total/NA	Water	SM 4500 F C	
400-121850-10	FB-03	Total/NA	Ground Water	SM 4500 F C	
400-121850-11	MW-18	Total/NA	Ground Water	SM 4500 F C	
LCS 400-309256/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
MB 400-309256/3	Method Blank	Total/NA	Water	SM 4500 F C	

Rad

Prep Batch: 252548

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-121850-1	MW-17	Total/NA	Ground Water	PrecSep-21	
400-121850-2	MW-12	Total/NA	Ground Water	PrecSep-21	
400-121850-3	MW-13	Total/NA	Ground Water	PrecSep-21	
400-121850-4	MW-16	Total/NA	Ground Water	PrecSep-21	
400-121850-5	MW-15	Total/NA	Ground Water	PrecSep-21	
400-121850-6	MW-14	Total/NA	Ground Water	PrecSep-21	
400-121850-7	DUP-03	Total/NA	Ground Water	PrecSep-21	
400-121850-8	MW-11	Total/NA	Ground Water	PrecSep-21	
400-121850-9	EB-03	Total/NA	Water	PrecSep-21	
400-121850-10	FB-03	Total/NA	Ground Water	PrecSep-21	
400-121850-11	MW-18	Total/NA	Ground Water	PrecSep-21	
LCS 160-252548/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-252548/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	
MB 160-252548/1-A	Method Blank	Total/NA	Water	PrecSep-21	

Prep Batch: 252559

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-121850-1	MW-17	Total/NA	Ground Water	PrecSep_0	
400-121850-2	MW-12	Total/NA	Ground Water	PrecSep_0	
400-121850-3	MW-13	Total/NA	Ground Water	PrecSep_0	
400-121850-4	MW-16	Total/NA	Ground Water	PrecSep_0	
400-121850-5	MW-15	Total/NA	Ground Water	PrecSep_0	

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Rad (Continued)

Prep Batch: 252559 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-121850-6	MW-14	Total/NA	Ground Water	PrecSep_0	
400-121850-7	DUP-03	Total/NA	Ground Water	PrecSep_0	
400-121850-8	MW-11	Total/NA	Ground Water	PrecSep_0	
400-121850-9	EB-03	Total/NA	Water	PrecSep_0	
400-121850-10	FB-03	Total/NA	Ground Water	PrecSep_0	
400-121850-11	MW-18	Total/NA	Ground Water	PrecSep_0	
LCS 160-252559/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-252559/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	
MB 160-252559/1-A	Method Blank	Total/NA	Water	PrecSep_0	

Field Service / Mobile Lab

Analysis Batch: 309179

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-121850-1	MW-17	Total/NA	Ground Water	Field Sampling	
400-121850-2	MW-12	Total/NA	Ground Water	Field Sampling	
400-121850-3	MW-13	Total/NA	Ground Water	Field Sampling	
400-121850-4	MW-16	Total/NA	Ground Water	Field Sampling	
400-121850-5	MW-15	Total/NA	Ground Water	Field Sampling	
400-121850-6	MW-14	Total/NA	Ground Water	Field Sampling	
400-121850-7	DUP-03	Total/NA	Ground Water	Field Sampling	
400-121850-8	MW-11	Total/NA	Ground Water	Field Sampling	
400-121850-11	MW-18	Total/NA	Ground Water	Field Sampling	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-306733/1-A ^5
Matrix: Water
Analysis Batch: 307215

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 306733

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		05/20/16 08:30	05/23/16 14:18	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		05/20/16 08:30	05/23/16 14:18	5
Barium	<0.00049		0.0025	0.00049	mg/L		05/20/16 08:30	05/23/16 14:18	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 14:18	5
Boron	<0.021		0.050	0.021	mg/L		05/20/16 08:30	05/23/16 14:18	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		05/20/16 08:30	05/23/16 14:18	5
Calcium	<0.13		0.25	0.13	mg/L		05/20/16 08:30	05/23/16 14:18	5
Chromium	<0.0011		0.0025	0.0011	mg/L		05/20/16 08:30	05/23/16 14:18	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		05/20/16 08:30	05/23/16 14:18	5
Lead	<0.00035		0.0013	0.00035	mg/L		05/20/16 08:30	05/23/16 14:18	5
Lithium	<0.0032		0.0050	0.0032	mg/L		05/20/16 08:30	05/23/16 14:18	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		05/20/16 08:30	05/23/16 14:18	5
Selenium	<0.00024		0.0013	0.00024	mg/L		05/20/16 08:30	05/23/16 14:18	5
Thallium	<0.000085		0.00050	0.000085	mg/L		05/20/16 08:30	05/23/16 14:18	5

Lab Sample ID: LCS 400-306733/2-A ^1
Matrix: Water
Analysis Batch: 307215

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 306733

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0532		mg/L		106	80 - 120
Arsenic	0.0500	0.0528		mg/L		106	80 - 120
Barium	0.0500	0.0457		mg/L		91	80 - 120
Beryllium	0.0500	0.0475		mg/L		95	80 - 120
Boron	0.100	0.0975		mg/L		98	80 - 120
Cadmium	0.0500	0.0505		mg/L		101	80 - 120
Calcium	5.00	5.03		mg/L		101	80 - 120
Chromium	0.0500	0.0496		mg/L		99	80 - 120
Cobalt	0.0500	0.0495		mg/L		99	80 - 120
Lead	0.0500	0.0494		mg/L		99	80 - 120
Lithium	0.0500	0.0496		mg/L		99	80 - 120
Molybdenum	0.0500	0.0492		mg/L		98	80 - 120
Selenium	0.0500	0.0502		mg/L		100	80 - 120
Thallium	0.0100	0.00996		mg/L		100	80 - 120

Lab Sample ID: 400-121850-1 MS
Matrix: Ground Water
Analysis Batch: 307215

Client Sample ID: MW-17
Prep Type: Total Recoverable
Prep Batch: 306733

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0010		0.0500	0.0533		mg/L		107	75 - 125
Arsenic	0.00078	J	0.0500	0.0538		mg/L		106	75 - 125
Barium	0.031		0.0500	0.0750		mg/L		89	75 - 125
Beryllium	<0.00034		0.0500	0.0478		mg/L		96	75 - 125
Boron	<0.021		0.100	0.117		mg/L		117	75 - 125
Cadmium	<0.00034		0.0500	0.0483		mg/L		97	75 - 125
Calcium	1.0		5.00	6.25		mg/L		105	75 - 125
Chromium	<0.0011		0.0500	0.0508		mg/L		102	75 - 125

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 400-121850-1 MS
Matrix: Ground Water
Analysis Batch: 307215

Client Sample ID: MW-17
Prep Type: Total Recoverable
Prep Batch: 306733

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	0.00081	J	0.0500	0.0513		mg/L		101	75 - 125
Lead	<0.00035		0.0500	0.0474		mg/L		95	75 - 125
Lithium	<0.0032		0.0500	0.0491		mg/L		98	75 - 125
Molybdenum	<0.00085		0.0500	0.0508		mg/L		102	75 - 125
Selenium	<0.00024		0.0500	0.0510		mg/L		102	75 - 125
Thallium	<0.000085		0.0100	0.00977		mg/L		98	75 - 125

Lab Sample ID: 400-121850-1 MSD
Matrix: Ground Water
Analysis Batch: 307215

Client Sample ID: MW-17
Prep Type: Total Recoverable
Prep Batch: 306733

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Antimony	<0.0010		0.0500	0.0525		mg/L		105	75 - 125	2	20
Arsenic	0.00078	J	0.0500	0.0532		mg/L		105	75 - 125	1	20
Barium	0.031		0.0500	0.0732		mg/L		85	75 - 125	2	20
Beryllium	<0.00034		0.0500	0.0476		mg/L		95	75 - 125	0	20
Boron	<0.021		0.100	0.111		mg/L		111	75 - 125	5	20
Cadmium	<0.00034		0.0500	0.0508		mg/L		102	75 - 125	5	20
Calcium	1.0		5.00	6.09		mg/L		102	75 - 125	3	20
Chromium	<0.0011		0.0500	0.0501		mg/L		100	75 - 125	2	20
Cobalt	0.00081	J	0.0500	0.0517		mg/L		102	75 - 125	1	20
Lead	<0.00035		0.0500	0.0471		mg/L		94	75 - 125	1	20
Lithium	<0.0032		0.0500	0.0489		mg/L		98	75 - 125	0	20
Molybdenum	<0.00085		0.0500	0.0513		mg/L		103	75 - 125	1	20
Selenium	<0.00024		0.0500	0.0524		mg/L		105	75 - 125	3	20
Thallium	<0.000085		0.0100	0.00976		mg/L		98	75 - 125	0	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-306799/14-A
Matrix: Water
Analysis Batch: 307114

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 306799

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		05/20/16 08:54	05/23/16 12:51	1

Lab Sample ID: LCS 400-306799/15-A
Matrix: Water
Analysis Batch: 307114

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 306799

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00101	0.000957		mg/L		95	80 - 120

Lab Sample ID: 400-121850-2 MS
Matrix: Ground Water
Analysis Batch: 307114

Client Sample ID: MW-12
Prep Type: Total/NA
Prep Batch: 306799

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.000070		0.00201	0.00194		mg/L		96	80 - 120

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Lab Sample ID: 400-121850-2 MSD
Matrix: Ground Water
Analysis Batch: 307114

Client Sample ID: MW-12
Prep Type: Total/NA
Prep Batch: 306799

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.000070		0.00201	0.00189		mg/L		94	80 - 120	3	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 400-306851/1
Matrix: Water
Analysis Batch: 306851

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			05/20/16 15:13	1

Lab Sample ID: LCS 400-306851/2
Matrix: Water
Analysis Batch: 306851

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	266		mg/L		91	78 - 122

Lab Sample ID: 400-121874-K-3 DU
Matrix: Water
Analysis Batch: 306851

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	5600		5460		mg/L		2	5

Lab Sample ID: MB 400-307100/1
Matrix: Water
Analysis Batch: 307100

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			05/23/16 12:42	1

Lab Sample ID: LCS 400-307100/2
Matrix: Water
Analysis Batch: 307100

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	264		mg/L		90	78 - 122

Lab Sample ID: 400-121825-B-26 DU
Matrix: Water
Analysis Batch: 307100

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	3800		3680		mg/L		3	5

Lab Sample ID: MB 400-307321/1
Matrix: Water
Analysis Batch: 307321

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			05/24/16 16:36	1

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Lab Sample ID: LCS 400-307321/2
Matrix: Water
Analysis Batch: 307321

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	268		mg/L		91	78 - 122

Lab Sample ID: 400-121915-J-4 DU
Matrix: Water
Analysis Batch: 307321

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	18000		17400		mg/L		0.6	5

Lab Sample ID: 400-121915-J-5 DU
Matrix: Water
Analysis Batch: 307321

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	19000		18200		mg/L		2	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-306839/6
Matrix: Water
Analysis Batch: 306839

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			05/20/16 08:53	1

Lab Sample ID: LCS 400-306839/7
Matrix: Water
Analysis Batch: 306839

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	31.1		mg/L		104	90 - 110

Lab Sample ID: 460-113795-C-9 MS
Matrix: Water
Analysis Batch: 306839

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<0.60	F1	1000	10.5	F1	mg/L		1	73 - 120

Lab Sample ID: 460-113795-C-9 MSD
Matrix: Water
Analysis Batch: 306839

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<0.60	F1	1000	10.3	F1	mg/L		1	73 - 120	2	8

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: 460-113733-D-1 DU
Matrix: Water
Analysis Batch: 306839

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	30		29.5		mg/L		0.7	8

Lab Sample ID: MB 400-306930/6
Matrix: Water
Analysis Batch: 306930

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			05/20/16 14:00	1

Lab Sample ID: LCS 400-306930/7
Matrix: Water
Analysis Batch: 306930

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: 400-121912-B-2 MS
Matrix: Water
Analysis Batch: 306930

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	7.9		10.0	19.4		mg/L		114	73 - 120

Lab Sample ID: 400-121912-B-2 MSD
Matrix: Water
Analysis Batch: 306930

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	7.9		10.0	18.9		mg/L		110	73 - 120	2	8

Lab Sample ID: 400-121912-B-6 DU
Matrix: Water
Analysis Batch: 306930

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	8.5		8.00		mg/L		6	8

Lab Sample ID: MB 400-307403/6
Matrix: Water
Analysis Batch: 307403

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			05/25/16 07:57	1

Lab Sample ID: LCS 400-307403/7
Matrix: Water
Analysis Batch: 307403

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	31.2		mg/L		104	90 - 110

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Lab Sample ID: 400-122083-A-2 MS
Matrix: Water
Analysis Batch: 307403

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	3.8		10.0	15.5		mg/L		116	73 - 120

Lab Sample ID: 400-122083-A-2 MSD
Matrix: Water
Analysis Batch: 307403

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	3.8		10.0	15.2		mg/L		113	73 - 120	2	8

Lab Sample ID: 400-122083-A-1 DU
Matrix: Water
Analysis Batch: 307403

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	5.8		5.85		mg/L		0.8	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-309256/3
Matrix: Water
Analysis Batch: 309256

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			06/08/16 17:50	1

Lab Sample ID: LCS 400-309256/4
Matrix: Water
Analysis Batch: 309256

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	4.19		mg/L		105	90 - 110

Lab Sample ID: 400-121848-E-2 MS
Matrix: Water
Analysis Batch: 309256

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	0.36		1.00	1.43		mg/L		107	75 - 125

Lab Sample ID: 400-121848-E-2 MSD
Matrix: Water
Analysis Batch: 309256

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	0.36		1.00	1.43		mg/L		107	75 - 125	0	4

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: 400-121850-5 DU
Matrix: Ground Water
Analysis Batch: 309256

Client Sample ID: MW-15
Prep Type: Total/NA

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

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-306840/6
Matrix: Water
Analysis Batch: 306840

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			05/20/16 08:55	1

Lab Sample ID: LCS 400-306840/7
Matrix: Water
Analysis Batch: 306840

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	14.7		mg/L		98	90 - 110

Lab Sample ID: 400-121850-4 MS
Matrix: Ground Water
Analysis Batch: 306840

Client Sample ID: MW-16
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	<1.4	F1	1000	10.0	F1	mg/L		1	77 - 128

Lab Sample ID: 400-121850-4 MSD
Matrix: Ground Water
Analysis Batch: 306840

Client Sample ID: MW-16
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Sulfate	<1.4	F1	1000	10.1	F1	mg/L		1	77 - 128	1	5

Lab Sample ID: 400-121908-E-10 DU
Matrix: Water
Analysis Batch: 306840

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Sulfate	44	J	43.6	J	mg/L		0.1	5

Lab Sample ID: MB 400-306931/6
Matrix: Water
Analysis Batch: 306931

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			05/20/16 14:02	1

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: LCS 400-306931/7

Matrix: Water

Analysis Batch: 306931

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	15.8		mg/L		105	90 - 110

Lab Sample ID: 400-121711-B-7 MS

Matrix: Water

Analysis Batch: 306931

Client Sample ID: Matrix Spike

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	<1.4	F1 F2	10.0	42.9	F1	mg/L		429	77 - 128

Lab Sample ID: 400-121711-B-7 MSD

Matrix: Water

Analysis Batch: 306931

Client Sample ID: Matrix Spike Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	<1.4	F1 F2	10.0	40.6	F1 F2	mg/L		406	77 - 128	6	5

Lab Sample ID: 400-121852-A-3 DU

Matrix: Water

Analysis Batch: 306931

Client Sample ID: Duplicate

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	<1.4		<1.4		mg/L		NC	5

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-252548/1-A

Matrix: Water

Analysis Batch: 256310

Client Sample ID: Method Blank

Prep Type: Total/NA

Prep Batch: 252548

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.007224	U	0.0428	0.0428	1.00	0.0802	pCi/L	05/23/16 12:40	06/14/16 07:17	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	85.8		40 - 110	05/23/16 12:40	06/14/16 07:17	1

Lab Sample ID: LCS 160-252548/2-A

Matrix: Water

Analysis Batch: 256310

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 252548

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	11.2	15.15		1.45	1.00	0.0722	pCi/L	136	68 - 137

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	90.3		40 - 110

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCSD 160-252548/3-A
Matrix: Water
Analysis Batch: 256310

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 252548

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	11.2	13.50		1.30	1.00	0.0797	pCi/L	121	68 - 137	0.60	1
Carrier	%Yield	LCSD Qualifier	Limits								
Ba Carrier	95.2		40 - 110								

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-252559/1-A
Matrix: Water
Analysis Batch: 254106

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 252559

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1210	U	0.232	0.232	1.00	0.396	pCi/L	05/23/16 13:17	06/01/16 13:25	1
Carrier	%Yield	MB Qualifier	Limits							
Ba Carrier	85.8		40 - 110							
Y Carrier	84.9		40 - 110							
								Prepared	Analyzed	Dil Fac
								05/23/16 13:17	06/01/16 13:25	1
								05/23/16 13:17	06/01/16 13:25	1

Lab Sample ID: LCS 160-252559/2-A
Matrix: Water
Analysis Batch: 254106

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 252559

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	15.1	19.02		1.99	1.00	0.395	pCi/L	126	56 - 140
Carrier	%Yield	LCS Qualifier	Limits						
Ba Carrier	90.3		40 - 110						
Y Carrier	82.6		40 - 110						

Lab Sample ID: LCSD 160-252559/3-A
Matrix: Water
Analysis Batch: 254106

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 252559

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	15.1	19.14		1.97	1.00	0.322	pCi/L	127	56 - 140	0.03	1
Carrier	%Yield	LCSD Qualifier	Limits								
Ba Carrier	95.2		40 - 110								
Y Carrier	89.7		40 - 110								

East Atlanta Pharmacy
 3005 International Blvd
 Marietta, GA 30066
 Phone: (770) 476-0011 Fax: (678) 419-2677

Chain of Custody Record

LAB NUMBER
 100-337416-200201

Client Information
 Client Name: Shane Beegh / Kim Whitman / Anywhere
 Address: 850-538-0190
 City: Atlanta, GA
 State: GA Zip: 30329
 Phone: 205-992-7762(Tel)
 Email: CBSSELLER@SOUTHERNCO.COM
 Project Name: CCR - Plant Dairies
 Site: 40306621

Due Date Requested: _____
 TAT Requested (days): _____
 PO #: _____
 Purchase Order not required
 W/O #: _____
 Project #: _____
 SSO#: _____

Analysis Requested
 9315_Ra226_9320_Ra228
 SM500C Cl E, SM400, SO4, F
 6020, 7470A
 2540C - Total Dissolved Solids
 4500, F, C - Fluoride

Sample Identification	Sample Date	Sample Time	Sample Type (G=Grab, C=Composite)	Matrix (W=Water, S=Soil, O=Other)	Preservation Codes	Special Instructions/Notes
MW-17	5-18-16	1245	G	Water		PH: 5.09
MW-12	5-18-16	1400	G	Water		PH: 4.13
MW-13	5-18-16	1515	G	Water		PH: 4.92
MW-16	5-18-16	1630	G	W		PH: 4.67
MW-15	5-18-16	1118	G	W		PH: 4.62
MW-14	5-18-16	1251	G	W		PH: 5.38
DUP-03	5-18-16	1151	G	W		PH: 5.38
MW-11	5-18-16	1541	G	W		PH: 4.74
EB-03	5-18-16	1354	G	W		
FB-03	5-18-16	1404	G	W		
MW-18	5-18-16	1646	G	W		PH: 4.58

Preservation Codes:
 M - Hexane
 N - None
 O - AsNO2
 P - H2CO3
 G - H2SO3
 R - Na2SO3
 F - MeOH
 C - Anticlor
 H - Ascorbic Acid
 T - TSP Dodecylsulfate
 U - Acetone
 V - H2O2
 W - pH 1.5
 X - Other (Specify)

Analysis Requested:
 4500, F, C - Fluoride
 2540C - Total Dissolved Solids
 6020, 7470A
 SM500C Cl E, SM400, SO4, F
 9315_Ra226_9320_Ra228

Special Instructions/Notes:
 PH: 5.09
 PH: 4.13
 PH: 4.92
 PH: 4.67
 PH: 4.62
 PH: 5.38
 PH: 5.38
 PH: 4.74
 PH: 4.58

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

Received By: Shane Beegh Date: 5-19-16 Time: 0920
 Company: Anywhere
 Date: 5-19-16 Time: 0920
 Date: _____ Time: _____
 Date: _____ Time: _____

0.0205000C 13C10L 1R-S

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-121850-1

SDG Number: NAMU

Login Number: 121850

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.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.5°C, 1.3°C, 3.0°C, 0.0°C, 0.0°C IR-5
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-121850-1

SDG Number: NAMU

Login Number: 121850

List Number: 2

Creator: McKinney, Gerrod E

List Source: TestAmerica St. Louis

List Creation: 05/20/16 12:44 PM

Question	Answer	Comment
Radioactivity wasn't checked or is <=/ background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	14.1
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	False	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Certification Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

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	06-30-16
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	06-30-16
Georgia	State Program	4	N/A	06-30-16
Illinois	NELAP	5	200041	10-09-16
Iowa	State Program	7	367	07-31-16
Kansas	NELAP	7	E-10253	07-31-16 *
Kentucky (UST)	State Program	4	53	06-30-16
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-16
Maryland	State Program	3	233	09-30-16
Massachusetts	State Program	1	M-FL094	06-30-16
Michigan	State Program	5	9912	06-30-16
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	06-30-16
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	06-30-16

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	06-30-16 *
California	State Program	9	2886	03-31-18
Connecticut	State Program	1	PH-0241	03-31-17
Florida	NELAP	4	E87689	06-30-16 *
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	06-30-16 *
Louisiana (DW)	NELAP	6	LA160008	12-31-16
Maryland	State Program	3	310	09-30-16
Missouri	State Program	7	780	06-30-16 *
Nevada	State Program	9	MO000542016-1	07-31-16 *
New Jersey	NELAP	2	MO002	06-30-16 *
New York	NELAP	2	11616	03-31-17
North Dakota	State Program	8	R207	06-30-16 *
NRC	NRC		24-24817-01	12-31-22

* Certification renewal pending - certification considered valid.

TestAmerica Pensacola

Certification Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-121850-1
SDG: NAMU

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	07-31-16 *
USDA	Federal		P330-07-00122	01-09-17
Utah	NELAP	8	MO000542015-7	07-31-16
Virginia	NELAP	3	460230	06-14-16 *
Washington	State Program	10	C592	08-30-16
West Virginia DEP	State Program	3	381	08-31-16

* Certification renewal pending - certification considered valid.

TestAmerica

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: 400-124344-1

TestAmerica Sample Delivery Group: NAMU

Client Project/Site: CCR -Plant Daniel

For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:

8/16/2016 5:09:58 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

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www.testamericainc.com

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

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

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

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Case Narrative

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Job ID: 400-124344-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-124344-1

RAD

Method(s) PrecSep_0: Insufficient sample volume was available to perform a sample duplicate (DUP) associated with Ra228 analytical batch 160-260753.

Method(s) PrecSep-21: Insufficient sample volume was available to perform a sample duplicate (DUP) associated with Ra-226 analytical batch 160-260748. A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Metals

Method(s) 6020: The laboratory control sample (LCS) for preparation batch 314497 and analytical batch 315556 recovered outside control limits for the following analytes: Selenium. These analytes were biased high in the LCS and were not detected in the associated samples; therefore, the data have been reported.

General Chemistry

Method(s) SM 4500 F C: The matrix spike / matrix spike duplicate (MS/MSD) precision for batch 317637 was outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) was within acceptance limits.

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Client Sample ID: MW-11

Lab Sample ID: 400-124344-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.063		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.00034	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Calcium	1.9		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0056		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Selenium - RA	0.00024	J	0.0013	0.00024	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	42		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	13		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.040	J F2	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	3.8	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.90				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-12

Lab Sample ID: 400-124344-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.085		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.00041	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Boron	0.025	J	0.050	0.021	mg/L	5		6020	Total Recoverable
Cobalt	0.0020	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0035	J	0.0050	0.0032	mg/L	5		6020	Total Recoverable
Chloride	9.7		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	6.5		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.35				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-13

Lab Sample ID: 400-124344-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.087		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.00039	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Calcium	0.70		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0016	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0039	J	0.0050	0.0032	mg/L	5		6020	Total Recoverable
Chloride	12		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	4.4	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.86				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-14

Lab Sample ID: 400-124344-4

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Client Sample ID: MW-14 (Continued)

Lab Sample ID: 400-124344-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.061		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	5.3		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0010	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Molybdenum	0.00087	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	24		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	7.5		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	2.0	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	5.65				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-15

Lab Sample ID: 400-124344-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.045		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.1		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0012	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	24		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	7.1		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	5.03				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-16

Lab Sample ID: 400-124344-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.035		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.82		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0011	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Chloride	8.1		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.75				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-17

Lab Sample ID: 400-124344-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00063	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.029		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.1		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00093	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	22		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	5.7		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	1.8	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	5.27				SU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Client Sample ID: MW-18

Lab Sample ID: 400-124344-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.046		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Boron	0.026	J	0.050	0.021	mg/L	5		6020	Total Recoverable
Calcium	0.69		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium - RA	0.0011	J	0.0025	0.0011	mg/L	5		6020	Total Recoverable
Cobalt - RA	0.0010	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	24		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	7.9		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.040	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	3.9	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.70				SU	1		Field Sampling	Total/NA

Client Sample ID: DUP-02

Lab Sample ID: 400-124344-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.045		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Boron	0.021	J	0.050	0.021	mg/L	5		6020	Total Recoverable
Calcium	0.78		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium - RA	0.0011	J	0.0025	0.0011	mg/L	5		6020	Total Recoverable
Cobalt - RA	0.00090	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	30		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	7.9		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.040	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	3.7	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.70				SU	1		Field Sampling	Total/NA

Client Sample ID: EQ BLANK-02

Lab Sample ID: 400-124344-10

No Detections.

Client Sample ID: FB-02

Lab Sample ID: 400-124344-11

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
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
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
Field Sampling	Field Sampling	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

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

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

Sample Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-124344-1	MW-11	Water	07/12/16 09:27	07/13/16 08:45
400-124344-2	MW-12	Water	07/11/16 16:33	07/13/16 08:45
400-124344-3	MW-13	Water	07/11/16 15:27	07/13/16 08:45
400-124344-4	MW-14	Water	07/12/16 10:26	07/13/16 08:45
400-124344-5	MW-15	Water	07/12/16 11:22	07/13/16 08:45
400-124344-6	MW-16	Water	07/11/16 14:39	07/13/16 08:45
400-124344-7	MW-17	Water	07/12/16 08:26	07/13/16 08:45
400-124344-8	MW-18	Water	07/12/16 07:24	07/13/16 08:45
400-124344-9	DUP-02	Water	07/12/16 06:24	07/13/16 08:45
400-124344-10	EQ BLANK-02	Water	07/12/16 09:45	07/13/16 08:45
400-124344-11	FB-02	Water	07/12/16 10:35	07/13/16 08:45

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Client Sample ID: MW-11
Date Collected: 07/12/16 09:27
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-1
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		07/18/16 09:00	07/21/16 16:58	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		07/18/16 09:00	07/21/16 16:58	5
Barium	0.063		0.0025	0.00049	mg/L		07/18/16 09:00	07/21/16 16:58	5
Beryllium	0.00034	J	0.0025	0.00034	mg/L		07/18/16 09:00	07/21/16 16:58	5
Boron	<0.021		0.050	0.021	mg/L		07/18/16 09:00	07/21/16 16:58	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/18/16 09:00	07/21/16 16:58	5
Calcium	1.9		0.25	0.13	mg/L		07/18/16 09:00	07/21/16 16:58	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/18/16 09:00	07/21/16 16:58	5
Cobalt	0.0056		0.0025	0.00040	mg/L		07/18/16 09:00	07/21/16 16:58	5
Lead	<0.00035		0.0013	0.00035	mg/L		07/18/16 09:00	07/21/16 16:58	5
Lithium	<0.0032		0.0050	0.0032	mg/L		07/18/16 09:00	07/21/16 16:58	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/18/16 09:00	07/21/16 16:58	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/18/16 09:00	07/21/16 16:58	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.00024	J	0.0013	0.00024	mg/L		07/18/16 09:00	07/25/16 15:35	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		07/14/16 10:53	07/26/16 13:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	42		5.0	3.4	mg/L			07/16/16 15:46	1
Chloride	13		2.0	0.60	mg/L			07/28/16 11:29	1
Fluoride	0.040	J F2	0.10	0.032	mg/L			08/07/16 15:08	1
Sulfate	3.8	J	5.0	1.4	mg/L			07/29/16 10:30	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.137		0.0807	0.0817	1.00	0.115	pCi/L	07/15/16 17:59	08/09/16 08:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.7		40 - 110					07/15/16 17:59	08/09/16 08:00	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.614		0.243	0.250	1.00	0.336	pCi/L	07/15/16 18:52	08/04/16 12:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.7		40 - 110					07/15/16 18:52	08/04/16 12:09	1
Y Carrier	89.7		40 - 110					07/15/16 18:52	08/04/16 12:09	1

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
 SDG: NAMU

Client Sample ID: MW-11
Date Collected: 07/12/16 09:27
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-1
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.752		0.257	0.263	5.00	0.336	pCi/L		08/10/16 05:51	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.90				SU			07/12/16 09:27	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Client Sample ID: MW-12
Date Collected: 07/11/16 16:33
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-2
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		07/18/16 09:00	07/21/16 17:16	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		07/18/16 09:00	07/21/16 17:16	5
Barium	0.085		0.0025	0.00049	mg/L		07/18/16 09:00	07/21/16 17:16	5
Beryllium	0.00041	J	0.0025	0.00034	mg/L		07/18/16 09:00	07/21/16 17:16	5
Boron	0.025	J	0.050	0.021	mg/L		07/18/16 09:00	07/21/16 17:16	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/18/16 09:00	07/21/16 17:16	5
Calcium	<0.13		0.25	0.13	mg/L		07/18/16 09:00	07/21/16 17:16	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/18/16 09:00	07/21/16 17:16	5
Cobalt	0.0020	J	0.0025	0.00040	mg/L		07/18/16 09:00	07/21/16 17:16	5
Lead	<0.00035		0.0013	0.00035	mg/L		07/18/16 09:00	07/21/16 17:16	5
Lithium	0.0035	J	0.0050	0.0032	mg/L		07/18/16 09:00	07/21/16 17:16	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/18/16 09:00	07/21/16 17:16	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/18/16 09:00	07/21/16 17:16	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.00024	*	0.0013	0.00024	mg/L		07/18/16 09:00	07/22/16 16:46	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		07/14/16 10:53	07/26/16 13:41	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			07/16/16 15:07	1
Chloride	9.7		2.0	0.60	mg/L			07/28/16 11:29	1
Fluoride	0.16		0.10	0.032	mg/L			08/07/16 15:19	1
Sulfate	6.5		5.0	1.4	mg/L			07/29/16 10:30	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.407		0.104	0.110	1.00	0.0934	pCi/L	07/15/16 17:59	08/09/16 08:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					07/15/16 17:59	08/09/16 08:00	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.580		0.246	0.252	1.00	0.344	pCi/L	07/15/16 18:52	08/04/16 12:09	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					07/15/16 18:52	08/04/16 12:09	1
Y Carrier	84.5		40 - 110					07/15/16 18:52	08/04/16 12:09	1

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
 SDG: NAMU

Client Sample ID: MW-12
Date Collected: 07/11/16 16:33
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-2
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.987		0.267	0.275	5.00	0.344	pCi/L		08/10/16 05:51	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.35				SU			07/11/16 16:33	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Client Sample ID: MW-13
Date Collected: 07/11/16 15:27
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-3
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		07/18/16 09:00	07/21/16 17:38	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		07/18/16 09:00	07/21/16 17:38	5
Barium	0.087		0.0025	0.00049	mg/L		07/18/16 09:00	07/21/16 17:38	5
Beryllium	0.00039	J	0.0025	0.00034	mg/L		07/18/16 09:00	07/21/16 17:38	5
Boron	<0.021		0.050	0.021	mg/L		07/18/16 09:00	07/21/16 17:38	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/18/16 09:00	07/21/16 17:38	5
Calcium	0.70		0.25	0.13	mg/L		07/18/16 09:00	07/21/16 17:38	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/18/16 09:00	07/21/16 17:38	5
Cobalt	0.0016	J	0.0025	0.00040	mg/L		07/18/16 09:00	07/21/16 17:38	5
Lead	<0.00035		0.0013	0.00035	mg/L		07/18/16 09:00	07/21/16 17:38	5
Lithium	0.0039	J	0.0050	0.0032	mg/L		07/18/16 09:00	07/21/16 17:38	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/18/16 09:00	07/21/16 17:38	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/18/16 09:00	07/21/16 17:38	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.00024	*	0.0013	0.00024	mg/L		07/18/16 09:00	07/22/16 17:08	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		07/14/16 10:53	07/26/16 13:43	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			07/16/16 15:07	1
Chloride	12		2.0	0.60	mg/L			07/28/16 11:29	1
Fluoride	<0.032		0.10	0.032	mg/L			08/07/16 15:32	1
Sulfate	4.4	J	5.0	1.4	mg/L			07/29/16 10:30	1

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		0.0894	0.0918	1.00	0.108	pCi/L	07/15/16 17:59	08/09/16 08:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		40 - 110					07/15/16 17:59	08/09/16 08:00	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.182	U	0.204	0.205	1.00	0.335	pCi/L	07/15/16 18:52	08/04/16 12:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		40 - 110					07/15/16 18:52	08/04/16 12:07	1
Y Carrier	84.1		40 - 110					07/15/16 18:52	08/04/16 12:07	1

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
 SDG: NAMU

Client Sample ID: MW-13
Date Collected: 07/11/16 15:27
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-3
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.415		0.223	0.224	5.00	0.335	pCi/L		08/10/16 05:51	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.86				SU			07/11/16 15:27	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Client Sample ID: MW-14
Date Collected: 07/12/16 10:26
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-4
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		07/18/16 09:00	07/21/16 17:43	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		07/18/16 09:00	07/21/16 17:43	5
Barium	0.061		0.0025	0.00049	mg/L		07/18/16 09:00	07/21/16 17:43	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/18/16 09:00	07/21/16 17:43	5
Boron	<0.021		0.050	0.021	mg/L		07/18/16 09:00	07/21/16 17:43	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/18/16 09:00	07/21/16 17:43	5
Calcium	5.3		0.25	0.13	mg/L		07/18/16 09:00	07/21/16 17:43	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/18/16 09:00	07/21/16 17:43	5
Cobalt	0.0010	J	0.0025	0.00040	mg/L		07/18/16 09:00	07/21/16 17:43	5
Lead	<0.00035		0.0013	0.00035	mg/L		07/18/16 09:00	07/21/16 17:43	5
Lithium	<0.0032		0.0050	0.0032	mg/L		07/18/16 09:00	07/21/16 17:43	5
Molybdenum	0.00087	J	0.015	0.00085	mg/L		07/18/16 09:00	07/21/16 17:43	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/18/16 09:00	07/21/16 17:43	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.00024	*	0.0013	0.00024	mg/L		07/18/16 09:00	07/22/16 17:13	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		07/14/16 10:53	07/26/16 13:44	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	24		5.0	3.4	mg/L			07/16/16 15:46	1
Chloride	7.5		2.0	0.60	mg/L			07/28/16 11:29	1
Fluoride	<0.032		0.10	0.032	mg/L			08/07/16 15:35	1
Sulfate	2.0	J	5.0	1.4	mg/L			07/29/16 10:30	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.430		0.0998	0.107	1.00	0.0754	pCi/L	07/15/16 17:59	08/09/16 08:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		40 - 110					07/15/16 17:59	08/09/16 08:00	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.603		0.273	0.279	1.00	0.399	pCi/L	07/15/16 18:52	08/04/16 12:08	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		40 - 110					07/15/16 18:52	08/04/16 12:08	1
Y Carrier	88.2		40 - 110					07/15/16 18:52	08/04/16 12:08	1

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
 SDG: NAMU

Client Sample ID: MW-14
Date Collected: 07/12/16 10:26
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-4
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.03		0.291	0.298	5.00	0.399	pCi/L		08/10/16 05:51	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.65				SU			07/12/16 10:26	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Client Sample ID: MW-15
Date Collected: 07/12/16 11:22
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-5
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		07/18/16 09:00	07/21/16 17:47	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		07/18/16 09:00	07/21/16 17:47	5
Barium	0.045		0.0025	0.00049	mg/L		07/18/16 09:00	07/21/16 17:47	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/18/16 09:00	07/21/16 17:47	5
Boron	<0.021		0.050	0.021	mg/L		07/18/16 09:00	07/21/16 17:47	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/18/16 09:00	07/21/16 17:47	5
Calcium	1.1		0.25	0.13	mg/L		07/18/16 09:00	07/21/16 17:47	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/18/16 09:00	07/21/16 17:47	5
Cobalt	0.0012	J	0.0025	0.00040	mg/L		07/18/16 09:00	07/21/16 17:47	5
Lead	<0.00035		0.0013	0.00035	mg/L		07/18/16 09:00	07/21/16 17:47	5
Lithium	<0.0032		0.0050	0.0032	mg/L		07/18/16 09:00	07/21/16 17:47	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/18/16 09:00	07/21/16 17:47	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/18/16 09:00	07/21/16 17:47	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.00024	*	0.0013	0.00024	mg/L		07/18/16 09:00	07/22/16 17:31	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		07/14/16 10:53	07/26/16 13:46	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	24		5.0	3.4	mg/L			07/16/16 15:46	1
Chloride	7.1		2.0	0.60	mg/L			07/28/16 11:34	1
Fluoride	<0.032		0.10	0.032	mg/L			08/07/16 15:38	1
Sulfate	<1.4		5.0	1.4	mg/L			07/29/16 10:30	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.239		0.0869	0.0895	1.00	0.102	pCi/L	07/15/16 17:59	08/09/16 08:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.6		40 - 110					07/15/16 17:59	08/09/16 08:00	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.405		0.210	0.213	1.00	0.306	pCi/L	07/15/16 18:52	08/04/16 12:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.6		40 - 110					07/15/16 18:52	08/04/16 12:07	1
Y Carrier	89.7		40 - 110					07/15/16 18:52	08/04/16 12:07	1

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
 SDG: NAMU

Client Sample ID: MW-15
Date Collected: 07/12/16 11:22
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-5
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.644		0.227	0.231	5.00	0.306	pCi/L		08/10/16 05:51	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.03				SU			07/12/16 11:22	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Client Sample ID: MW-16
Date Collected: 07/11/16 14:39
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-6
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		07/18/16 09:00	07/21/16 17:52	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		07/18/16 09:00	07/21/16 17:52	5
Barium	0.035		0.0025	0.00049	mg/L		07/18/16 09:00	07/21/16 17:52	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/18/16 09:00	07/21/16 17:52	5
Boron	<0.021		0.050	0.021	mg/L		07/18/16 09:00	07/21/16 17:52	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/18/16 09:00	07/21/16 17:52	5
Calcium	0.82		0.25	0.13	mg/L		07/18/16 09:00	07/21/16 17:52	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/18/16 09:00	07/21/16 17:52	5
Cobalt	0.0011	J	0.0025	0.00040	mg/L		07/18/16 09:00	07/21/16 17:52	5
Lead	<0.00035		0.0013	0.00035	mg/L		07/18/16 09:00	07/21/16 17:52	5
Lithium	<0.0032		0.0050	0.0032	mg/L		07/18/16 09:00	07/21/16 17:52	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/18/16 09:00	07/21/16 17:52	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/18/16 09:00	07/21/16 17:52	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.00024	*	0.0013	0.00024	mg/L		07/18/16 09:00	07/22/16 17:35	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		07/14/16 10:53	07/26/16 13:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			07/16/16 15:07	1
Chloride	8.1		2.0	0.60	mg/L			07/28/16 11:26	1
Fluoride	<0.032		0.10	0.032	mg/L			08/07/16 15:41	1
Sulfate	<1.4		5.0	1.4	mg/L			07/29/16 10:36	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.331		0.0902	0.0950	1.00	0.0774	pCi/L	07/15/16 17:59	08/09/16 08:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.9		40 - 110					07/15/16 17:59	08/09/16 08:00	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.156	U	0.195	0.196	1.00	0.324	pCi/L	07/15/16 18:52	08/04/16 12:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.9		40 - 110					07/15/16 18:52	08/04/16 12:07	1
Y Carrier	86.0		40 - 110					07/15/16 18:52	08/04/16 12:07	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
 SDG: NAMU

Client Sample ID: MW-16
Date Collected: 07/11/16 14:39
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-6
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.487		0.215	0.218	5.00	0.324	pCi/L		08/10/16 05:51	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.75				SU			07/11/16 14:39	1

- 1
- 2
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- 12
- 13
- 14

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Client Sample ID: MW-17
Date Collected: 07/12/16 08:26
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-7
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		07/18/16 09:00	07/21/16 17:56	5
Arsenic	0.00063	J	0.0013	0.00046	mg/L		07/18/16 09:00	07/21/16 17:56	5
Barium	0.029		0.0025	0.00049	mg/L		07/18/16 09:00	07/21/16 17:56	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/18/16 09:00	07/21/16 17:56	5
Boron	<0.021		0.050	0.021	mg/L		07/18/16 09:00	07/21/16 17:56	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/18/16 09:00	07/21/16 17:56	5
Calcium	1.1		0.25	0.13	mg/L		07/18/16 09:00	07/21/16 17:56	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/18/16 09:00	07/21/16 17:56	5
Cobalt	0.00093	J	0.0025	0.00040	mg/L		07/18/16 09:00	07/21/16 17:56	5
Lead	<0.00035		0.0013	0.00035	mg/L		07/18/16 09:00	07/21/16 17:56	5
Lithium	<0.0032		0.0050	0.0032	mg/L		07/18/16 09:00	07/21/16 17:56	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/18/16 09:00	07/21/16 17:56	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/18/16 09:00	07/21/16 17:56	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.00024	*	0.0013	0.00024	mg/L		07/18/16 09:00	07/22/16 17:40	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		07/14/16 10:53	07/26/16 13:48	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	22		5.0	3.4	mg/L			07/16/16 15:46	1
Chloride	5.7		2.0	0.60	mg/L			07/28/16 11:26	1
Fluoride	<0.032		0.10	0.032	mg/L			08/07/16 15:44	1
Sulfate	1.8	J	5.0	1.4	mg/L			07/29/16 10:36	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.291		0.0888	0.0925	1.00	0.0881	pCi/L	07/15/16 17:59	08/09/16 08:00	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					07/15/16 17:59	08/09/16 08:00	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.318	U	0.222	0.224	1.00	0.344	pCi/L	07/15/16 18:52	08/04/16 12:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.0		40 - 110					07/15/16 18:52	08/04/16 12:07	1
Y Carrier	87.1		40 - 110					07/15/16 18:52	08/04/16 12:07	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
 SDG: NAMU

Client Sample ID: MW-17
Date Collected: 07/12/16 08:26
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-7
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.609		0.239	0.242	5.00	0.344	pCi/L		08/10/16 05:51	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.27				SU			07/12/16 08:26	1

- 1
- 2
- 3
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- 13
- 14

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Client Sample ID: MW-18
Date Collected: 07/12/16 07:24
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-8
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.046		0.0025	0.00049	mg/L		07/18/16 09:00	07/21/16 18:14	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/18/16 09:00	07/21/16 18:14	5
Boron	0.026	J	0.050	0.021	mg/L		07/18/16 09:00	07/21/16 18:14	5
Calcium	0.69		0.25	0.13	mg/L		07/18/16 09:00	07/21/16 18:14	5
Lead	<0.00035		0.0013	0.00035	mg/L		07/18/16 09:00	07/21/16 18:14	5
Lithium	<0.0032		0.0050	0.0032	mg/L		07/18/16 09:00	07/21/16 18:14	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/18/16 09:00	07/21/16 18:14	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		07/18/16 09:00	07/22/16 17:44	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		07/18/16 09:00	07/22/16 17:44	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/18/16 09:00	07/22/16 17:44	5
Chromium	0.0011	J	0.0025	0.0011	mg/L		07/18/16 09:00	07/22/16 17:44	5
Cobalt	0.0010	J	0.0025	0.00040	mg/L		07/18/16 09:00	07/22/16 17:44	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/18/16 09:00	07/22/16 17:44	5
Selenium	<0.00024	*	0.0013	0.00024	mg/L		07/18/16 09:00	07/22/16 17:44	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		07/14/16 10:53	07/26/16 13:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	24		5.0	3.4	mg/L			07/16/16 15:46	1
Chloride	7.9		2.0	0.60	mg/L			07/28/16 11:26	1
Fluoride	0.040	J	0.10	0.032	mg/L			08/07/16 15:53	1
Sulfate	3.9	J	5.0	1.4	mg/L			07/29/16 10:36	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	0.422		0.0992	0.106	1.00	0.0775	pCi/L	07/15/16 17:59	08/09/16 07:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.7		40 - 110					07/15/16 17:59	08/09/16 07:59	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.314	U	0.218	0.220	1.00	0.338	pCi/L	07/15/16 18:52	08/04/16 12:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.7		40 - 110					07/15/16 18:52	08/04/16 12:07	1
Y Carrier	85.2		40 - 110					07/15/16 18:52	08/04/16 12:07	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
 SDG: NAMU

Client Sample ID: MW-18
Date Collected: 07/12/16 07:24
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-8
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.735		0.240	0.244	5.00	0.338	pCi/L		08/10/16 05:51	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.70				SU			07/12/16 07:24	1

- 1
- 2
- 3
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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Client Sample ID: DUP-02
Date Collected: 07/12/16 06:24
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-9
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	0.045		0.0025	0.00049	mg/L		07/18/16 09:00	07/21/16 18:19	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/18/16 09:00	07/21/16 18:19	5
Boron	0.021	J	0.050	0.021	mg/L		07/18/16 09:00	07/21/16 18:19	5
Calcium	0.78		0.25	0.13	mg/L		07/18/16 09:00	07/21/16 18:19	5
Lead	<0.00035		0.0013	0.00035	mg/L		07/18/16 09:00	07/21/16 18:19	5
Lithium	<0.0032		0.0050	0.0032	mg/L		07/18/16 09:00	07/21/16 18:19	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/18/16 09:00	07/21/16 18:19	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		07/18/16 09:00	07/22/16 17:49	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		07/18/16 09:00	07/22/16 17:49	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/18/16 09:00	07/22/16 17:49	5
Chromium	0.0011	J	0.0025	0.0011	mg/L		07/18/16 09:00	07/22/16 17:49	5
Cobalt	0.00090	J	0.0025	0.00040	mg/L		07/18/16 09:00	07/22/16 17:49	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/18/16 09:00	07/22/16 17:49	5
Selenium	<0.00024	*	0.0013	0.00024	mg/L		07/18/16 09:00	07/22/16 17:49	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		07/14/16 10:53	07/26/16 13:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	30		5.0	3.4	mg/L			07/16/16 15:46	1
Chloride	7.9		2.0	0.60	mg/L			07/28/16 11:26	1
Fluoride	0.040	J	0.10	0.032	mg/L			08/07/16 16:00	1
Sulfate	3.7	J	5.0	1.4	mg/L			07/29/16 10:36	1

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		0.113	0.120	1.00	0.121	pCi/L	07/15/16 17:59	08/09/16 07:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.3		40 - 110					07/15/16 17:59	08/09/16 07:59	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.343		0.214	0.217	1.00	0.326	pCi/L	07/15/16 18:52	08/04/16 12:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.3		40 - 110					07/15/16 18:52	08/04/16 12:07	1
Y Carrier	88.6		40 - 110					07/15/16 18:52	08/04/16 12:07	1

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
 SDG: NAMU

Client Sample ID: DUP-02
Date Collected: 07/12/16 06:24
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-9
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.772		0.242	0.247	5.00	0.326	pCi/L		08/10/16 05:51	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.70				SU			07/12/16 06:24	1

- 1
- 2
- 3
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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Client Sample ID: EQ BLANK-02

Lab Sample ID: 400-124344-10

Date Collected: 07/12/16 09:45

Matrix: Water

Date Received: 07/13/16 08:45

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.00049		0.0025	0.00049	mg/L		07/18/16 09:00	07/21/16 18:23	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/18/16 09:00	07/21/16 18:23	5
Boron	<0.021		0.050	0.021	mg/L		07/18/16 09:00	07/21/16 18:23	5
Calcium	<0.13		0.25	0.13	mg/L		07/18/16 09:00	07/21/16 18:23	5
Lead	<0.00035		0.0013	0.00035	mg/L		07/18/16 09:00	07/21/16 18:23	5
Lithium	<0.0032		0.0050	0.0032	mg/L		07/18/16 09:00	07/21/16 18:23	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/18/16 09:00	07/21/16 18:23	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		07/18/16 09:00	07/22/16 17:53	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		07/18/16 09:00	07/22/16 17:53	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/18/16 09:00	07/22/16 17:53	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/18/16 09:00	07/22/16 17:53	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		07/18/16 09:00	07/22/16 17:53	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/18/16 09:00	07/22/16 17:53	5
Selenium	<0.00024 *		0.0013	0.00024	mg/L		07/18/16 09:00	07/22/16 17:53	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		07/14/16 10:53	07/26/16 14:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			07/16/16 15:46	1
Chloride	<0.60		2.0	0.60	mg/L			07/28/16 11:26	1
Fluoride	<0.032		0.10	0.032	mg/L			08/07/16 16:02	1
Sulfate	<1.4		5.0	1.4	mg/L			07/29/16 10:36	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.0417	U	0.0430	0.0432	1.00	0.0674	pCi/L	07/15/16 17:59	08/09/16 07:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.4		40 - 110					07/15/16 17:59	08/09/16 07:59	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.115	U	0.186	0.186	1.00	0.314	pCi/L	07/15/16 18:52	08/04/16 12:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.4		40 - 110					07/15/16 18:52	08/04/16 12:07	1
Y Carrier	88.6		40 - 110					07/15/16 18:52	08/04/16 12:07	1

TestAmerica Pensacola

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Client Sample ID: EQ BLANK-02

Lab Sample ID: 400-124344-10

Date Collected: 07/12/16 09:45

Matrix: Water

Date Received: 07/13/16 08:45

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.156	U	0.191	0.191	5.00	0.314	pCi/L		08/10/16 05:51	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Client Sample ID: FB-02
Date Collected: 07/12/16 10:35
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-11
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Barium	<0.00049		0.0025	0.00049	mg/L		07/18/16 09:00	07/21/16 18:28	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/18/16 09:00	07/21/16 18:28	5
Boron	<0.021		0.050	0.021	mg/L		07/18/16 09:00	07/21/16 18:28	5
Calcium	<0.13		0.25	0.13	mg/L		07/18/16 09:00	07/21/16 18:28	5
Lead	<0.00035		0.0013	0.00035	mg/L		07/18/16 09:00	07/21/16 18:28	5
Lithium	<0.0032		0.0050	0.0032	mg/L		07/18/16 09:00	07/21/16 18:28	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/18/16 09:00	07/21/16 18:28	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		07/18/16 09:00	07/22/16 17:58	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		07/18/16 09:00	07/22/16 17:58	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/18/16 09:00	07/22/16 17:58	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/18/16 09:00	07/22/16 17:58	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		07/18/16 09:00	07/22/16 17:58	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/18/16 09:00	07/22/16 17:58	5
Selenium	<0.00024	*	0.0013	0.00024	mg/L		07/18/16 09:00	07/22/16 17:58	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		07/14/16 10:53	07/26/16 14:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			07/18/16 16:51	1
Chloride	<0.60		2.0	0.60	mg/L			07/28/16 11:26	1
Fluoride	<0.032		0.10	0.032	mg/L			08/07/16 16:05	1
Sulfate	<1.4		5.0	1.4	mg/L			07/29/16 10:36	1

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-226	-0.0122	U	0.0561	0.0561	1.00	0.111	pCi/L	07/15/16 17:59	08/09/16 07:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					07/15/16 17:59	08/09/16 07:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
			Uncert.	Uncert.						
			(2σ+/-)	(2σ+/-)						
Radium-228	0.0901	U	0.240	0.241	1.00	0.414	pCi/L	07/15/16 18:52	08/04/16 12:07	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					07/15/16 18:52	08/04/16 12:07	1
Y Carrier	83.7		40 - 110					07/15/16 18:52	08/04/16 12:07	1

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
 SDG: NAMU

Client Sample ID: FB-02
Date Collected: 07/12/16 10:35
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-11
Matrix: Water

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0779	U	0.247	0.247	5.00	0.414	pCi/L		08/10/16 05:51	1

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Qualifiers

Metals

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.
*	LCS or LCSD is outside acceptance limits.

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

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

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Client Sample ID: MW-11
Date Collected: 07/12/16 09:27
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			314497	07/18/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	315315	07/21/16 16:58	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		314497	07/18/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	315697	07/25/16 15:35	GKP	TAL PEN
Total/NA	Prep	7470A			314267	07/14/16 10:53	JAP	TAL PEN
Total/NA	Analysis	7470A		1	315804	07/26/16 13:23	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	314566	07/16/16 15:46	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	316238	07/28/16 11:29	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	317637	08/07/16 15:08	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	316370	07/29/16 10:30	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			260748	07/15/16 17:59	MCJ	TAL SL
Total/NA	Analysis	9315		1	264054	08/09/16 08:00	CMA	TAL SL
Total/NA	Prep	PrecSep_0			260753	07/15/16 18:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	263544	08/04/16 12:09	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	264114	08/10/16 05:51	ALS	TAL SL
Total/NA	Analysis	Field Sampling		1	317498	07/12/16 09:27	BWS	TAL PEN

Client Sample ID: MW-12
Date Collected: 07/11/16 16:33
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			314497	07/18/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	315315	07/21/16 17:16	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		314497	07/18/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	315556	07/22/16 16:46	GKP	TAL PEN
Total/NA	Prep	7470A			314267	07/14/16 10:53	JAP	TAL PEN
Total/NA	Analysis	7470A		1	315804	07/26/16 13:41	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	314565	07/16/16 15:07	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	316238	07/28/16 11:29	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	317637	08/07/16 15:19	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	316370	07/29/16 10:30	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			260748	07/15/16 17:59	MCJ	TAL SL
Total/NA	Analysis	9315		1	264054	08/09/16 08:00	CMA	TAL SL
Total/NA	Prep	PrecSep_0			260753	07/15/16 18:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	263544	08/04/16 12:09	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	264114	08/10/16 05:51	ALS	TAL SL
Total/NA	Analysis	Field Sampling		1	317498	07/11/16 16:33	BWS	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Client Sample ID: MW-13

Lab Sample ID: 400-124344-3

Date Collected: 07/11/16 15:27

Matrix: Water

Date Received: 07/13/16 08:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			314497	07/18/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	315315	07/21/16 17:38	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		314497	07/18/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	315556	07/22/16 17:08	GKP	TAL PEN
Total/NA	Prep	7470A			314267	07/14/16 10:53	JAP	TAL PEN
Total/NA	Analysis	7470A		1	315804	07/26/16 13:43	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	314565	07/16/16 15:07	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	316238	07/28/16 11:29	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	317637	08/07/16 15:32	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	316370	07/29/16 10:30	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			260748	07/15/16 17:59	MCJ	TAL SL
Total/NA	Analysis	9315		1	264054	08/09/16 08:00	CMA	TAL SL
Total/NA	Prep	PrecSep_0			260753	07/15/16 18:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	263542	08/04/16 12:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	264114	08/10/16 05:51	ALS	TAL SL
Total/NA	Analysis	Field Sampling		1	317498	07/11/16 15:27	BWS	TAL PEN

Client Sample ID: MW-14

Lab Sample ID: 400-124344-4

Date Collected: 07/12/16 10:26

Matrix: Water

Date Received: 07/13/16 08:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			314497	07/18/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	315315	07/21/16 17:43	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		314497	07/18/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	315556	07/22/16 17:13	GKP	TAL PEN
Total/NA	Prep	7470A			314267	07/14/16 10:53	JAP	TAL PEN
Total/NA	Analysis	7470A		1	315804	07/26/16 13:44	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	314566	07/16/16 15:46	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	316238	07/28/16 11:29	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	317637	08/07/16 15:35	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	316370	07/29/16 10:30	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			260748	07/15/16 17:59	MCJ	TAL SL
Total/NA	Analysis	9315		1	264054	08/09/16 08:00	CMA	TAL SL
Total/NA	Prep	PrecSep_0			260753	07/15/16 18:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	263542	08/04/16 12:08	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	264114	08/10/16 05:51	ALS	TAL SL
Total/NA	Analysis	Field Sampling		1	317498	07/12/16 10:26	BWS	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Client Sample ID: MW-15

Lab Sample ID: 400-124344-5

Date Collected: 07/12/16 11:22

Matrix: Water

Date Received: 07/13/16 08:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			314497	07/18/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	315315	07/21/16 17:47	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		314497	07/18/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	315556	07/22/16 17:31	GKP	TAL PEN
Total/NA	Prep	7470A			314267	07/14/16 10:53	JAP	TAL PEN
Total/NA	Analysis	7470A		1	315804	07/26/16 13:46	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	314566	07/16/16 15:46	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	316238	07/28/16 11:34	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	317637	08/07/16 15:38	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	316370	07/29/16 10:30	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			260748	07/15/16 17:59	MCJ	TAL SL
Total/NA	Analysis	9315		1	264054	08/09/16 08:00	CMA	TAL SL
Total/NA	Prep	PrecSep_0			260753	07/15/16 18:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	263542	08/04/16 12:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	264114	08/10/16 05:51	ALS	TAL SL
Total/NA	Analysis	Field Sampling		1	317498	07/12/16 11:22	BWS	TAL PEN

Client Sample ID: MW-16

Lab Sample ID: 400-124344-6

Date Collected: 07/11/16 14:39

Matrix: Water

Date Received: 07/13/16 08:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			314497	07/18/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	315315	07/21/16 17:52	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		314497	07/18/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	315556	07/22/16 17:35	GKP	TAL PEN
Total/NA	Prep	7470A			314267	07/14/16 10:53	JAP	TAL PEN
Total/NA	Analysis	7470A		1	315804	07/26/16 13:47	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	314565	07/16/16 15:07	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	316238	07/28/16 11:26	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	317637	08/07/16 15:41	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	316370	07/29/16 10:36	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			260748	07/15/16 17:59	MCJ	TAL SL
Total/NA	Analysis	9315		1	264054	08/09/16 08:00	CMA	TAL SL
Total/NA	Prep	PrecSep_0			260753	07/15/16 18:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	263542	08/04/16 12:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	264114	08/10/16 05:51	ALS	TAL SL
Total/NA	Analysis	Field Sampling		1	317498	07/11/16 14:39	BWS	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Client Sample ID: MW-17

Lab Sample ID: 400-124344-7

Date Collected: 07/12/16 08:26

Matrix: Water

Date Received: 07/13/16 08:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			314497	07/18/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	315315	07/21/16 17:56	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		314497	07/18/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	315556	07/22/16 17:40	GKP	TAL PEN
Total/NA	Prep	7470A			314267	07/14/16 10:53	JAP	TAL PEN
Total/NA	Analysis	7470A		1	315804	07/26/16 13:48	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	314566	07/16/16 15:46	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	316238	07/28/16 11:26	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	317637	08/07/16 15:44	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	316370	07/29/16 10:36	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			260748	07/15/16 17:59	MCJ	TAL SL
Total/NA	Analysis	9315		1	264054	08/09/16 08:00	CMA	TAL SL
Total/NA	Prep	PrecSep_0			260753	07/15/16 18:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	263542	08/04/16 12:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	264114	08/10/16 05:51	ALS	TAL SL
Total/NA	Analysis	Field Sampling		1	317498	07/12/16 08:26	BWS	TAL PEN

Client Sample ID: MW-18

Lab Sample ID: 400-124344-8

Date Collected: 07/12/16 07:24

Matrix: Water

Date Received: 07/13/16 08:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			314497	07/18/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	315315	07/21/16 18:14	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		314497	07/18/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	315556	07/22/16 17:44	GKP	TAL PEN
Total/NA	Prep	7470A			314267	07/14/16 10:53	JAP	TAL PEN
Total/NA	Analysis	7470A		1	315804	07/26/16 13:57	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	314566	07/16/16 15:46	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	316238	07/28/16 11:26	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	317637	08/07/16 15:53	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	316370	07/29/16 10:36	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			260748	07/15/16 17:59	MCJ	TAL SL
Total/NA	Analysis	9315		1	264054	08/09/16 07:59	CMA	TAL SL
Total/NA	Prep	PrecSep_0			260753	07/15/16 18:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	263542	08/04/16 12:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	264114	08/10/16 05:51	ALS	TAL SL
Total/NA	Analysis	Field Sampling		1	317498	07/12/16 07:24	BWS	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Client Sample ID: DUP-02

Lab Sample ID: 400-124344-9

Date Collected: 07/12/16 06:24

Matrix: Water

Date Received: 07/13/16 08:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			314497	07/18/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	315315	07/21/16 18:19	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		314497	07/18/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	315556	07/22/16 17:49	GKP	TAL PEN
Total/NA	Prep	7470A			314267	07/14/16 10:53	JAP	TAL PEN
Total/NA	Analysis	7470A		1	315804	07/26/16 13:59	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	314566	07/16/16 15:46	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	316238	07/28/16 11:26	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	317637	08/07/16 16:00	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	316370	07/29/16 10:36	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			260748	07/15/16 17:59	MCJ	TAL SL
Total/NA	Analysis	9315		1	264054	08/09/16 07:59	CMA	TAL SL
Total/NA	Prep	PrecSep_0			260753	07/15/16 18:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	263542	08/04/16 12:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	264114	08/10/16 05:51	ALS	TAL SL
Total/NA	Analysis	Field Sampling		1	317498	07/12/16 06:24	BWS	TAL PEN

Client Sample ID: EQ BLANK-02

Lab Sample ID: 400-124344-10

Date Collected: 07/12/16 09:45

Matrix: Water

Date Received: 07/13/16 08:45

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			314497	07/18/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	315315	07/21/16 18:23	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		314497	07/18/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	315556	07/22/16 17:53	GKP	TAL PEN
Total/NA	Prep	7470A			314267	07/14/16 10:53	JAP	TAL PEN
Total/NA	Analysis	7470A		1	315804	07/26/16 14:00	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	314566	07/16/16 15:46	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	316238	07/28/16 11:26	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	317637	08/07/16 16:02	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	316370	07/29/16 10:36	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			260748	07/15/16 17:59	MCJ	TAL SL
Total/NA	Analysis	9315		1	264054	08/09/16 07:59	CMA	TAL SL
Total/NA	Prep	PrecSep_0			260753	07/15/16 18:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	263542	08/04/16 12:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	264114	08/10/16 05:51	ALS	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Client Sample ID: FB-02
Date Collected: 07/12/16 10:35
Date Received: 07/13/16 08:45

Lab Sample ID: 400-124344-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			314497	07/18/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	315315	07/21/16 18:28	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		314497	07/18/16 09:00	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	315556	07/22/16 17:58	GKP	TAL PEN
Total/NA	Prep	7470A			314267	07/14/16 10:53	JAP	TAL PEN
Total/NA	Analysis	7470A		1	315804	07/26/16 14:01	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	314751	07/18/16 16:51	TET	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	316238	07/28/16 11:26	LSS	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	317637	08/07/16 16:05	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	316370	07/29/16 10:36	LSS	TAL PEN
Total/NA	Prep	PrecSep-21			260748	07/15/16 17:59	MCJ	TAL SL
Total/NA	Analysis	9315		1	264054	08/09/16 07:58	CMA	TAL SL
Total/NA	Prep	PrecSep_0			260753	07/15/16 18:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	263542	08/04/16 12:07	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	264114	08/10/16 05:51	ALS	TAL SL

Laboratory References:

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

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

QC Association Summary

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
 SDG: NAMU

Metals

Prep Batch: 314267

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-124344-1	MW-11	Total/NA	Water	7470A	
400-124344-2	MW-12	Total/NA	Water	7470A	
400-124344-3	MW-13	Total/NA	Water	7470A	
400-124344-4	MW-14	Total/NA	Water	7470A	
400-124344-5	MW-15	Total/NA	Water	7470A	
400-124344-6	MW-16	Total/NA	Water	7470A	
400-124344-7	MW-17	Total/NA	Water	7470A	
400-124344-8	MW-18	Total/NA	Water	7470A	
400-124344-9	DUP-02	Total/NA	Water	7470A	
400-124344-10	EQ BLANK-02	Total/NA	Water	7470A	
400-124344-11	FB-02	Total/NA	Water	7470A	
MB 400-314267/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-314267/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-124344-1 MS	MW-11	Total/NA	Water	7470A	
400-124344-1 MSD	MW-11	Total/NA	Water	7470A	

Prep Batch: 314497

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-124344-1 - RA	MW-11	Total Recoverable	Water	3005A	
400-124344-1	MW-11	Total Recoverable	Water	3005A	
400-124344-2 - RA	MW-12	Total Recoverable	Water	3005A	
400-124344-2	MW-12	Total Recoverable	Water	3005A	
400-124344-3 - RA	MW-13	Total Recoverable	Water	3005A	
400-124344-3	MW-13	Total Recoverable	Water	3005A	
400-124344-4 - RA	MW-14	Total Recoverable	Water	3005A	
400-124344-4	MW-14	Total Recoverable	Water	3005A	
400-124344-5 - RA	MW-15	Total Recoverable	Water	3005A	
400-124344-5	MW-15	Total Recoverable	Water	3005A	
400-124344-6 - RA	MW-16	Total Recoverable	Water	3005A	
400-124344-6	MW-16	Total Recoverable	Water	3005A	
400-124344-7 - RA	MW-17	Total Recoverable	Water	3005A	
400-124344-7	MW-17	Total Recoverable	Water	3005A	
400-124344-8	MW-18	Total Recoverable	Water	3005A	
400-124344-8 - RA	MW-18	Total Recoverable	Water	3005A	
400-124344-9	DUP-02	Total Recoverable	Water	3005A	
400-124344-9 - RA	DUP-02	Total Recoverable	Water	3005A	
400-124344-10	EQ BLANK-02	Total Recoverable	Water	3005A	
400-124344-10 - RA	EQ BLANK-02	Total Recoverable	Water	3005A	
400-124344-11	FB-02	Total Recoverable	Water	3005A	
400-124344-11 - RA	FB-02	Total Recoverable	Water	3005A	
MB 400-314497/1-A ^5 - RA	Method Blank	Total Recoverable	Water	3005A	
MB 400-314497/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-314497/2-A ^1	Lab Control Sample	Total Recoverable	Water	3005A	
LCS 400-314497/2-A ^1 - RA	Lab Control Sample	Total Recoverable	Water	3005A	
400-124344-2 MS - RA	MW-12	Total Recoverable	Water	3005A	
400-124344-2 MS	MW-12	Total Recoverable	Water	3005A	
400-124344-2 MSD	MW-12	Total Recoverable	Water	3005A	
400-124344-2 MSD - RA	MW-12	Total Recoverable	Water	3005A	

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Metals (Continued)

Analysis Batch: 315315

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-124344-1	MW-11	Total Recoverable	Water	6020	314497
400-124344-2	MW-12	Total Recoverable	Water	6020	314497
400-124344-3	MW-13	Total Recoverable	Water	6020	314497
400-124344-4	MW-14	Total Recoverable	Water	6020	314497
400-124344-5	MW-15	Total Recoverable	Water	6020	314497
400-124344-6	MW-16	Total Recoverable	Water	6020	314497
400-124344-7	MW-17	Total Recoverable	Water	6020	314497
400-124344-8	MW-18	Total Recoverable	Water	6020	314497
400-124344-9	DUP-02	Total Recoverable	Water	6020	314497
400-124344-10	EQ BLANK-02	Total Recoverable	Water	6020	314497
400-124344-11	FB-02	Total Recoverable	Water	6020	314497
MB 400-314497/1-A ^5	Method Blank	Total Recoverable	Water	6020	314497
LCS 400-314497/2-A ^1	Lab Control Sample	Total Recoverable	Water	6020	314497
400-124344-2 MS	MW-12	Total Recoverable	Water	6020	314497
400-124344-2 MSD	MW-12	Total Recoverable	Water	6020	314497

Analysis Batch: 315556

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-124344-2 - RA	MW-12	Total Recoverable	Water	6020	314497
400-124344-3 - RA	MW-13	Total Recoverable	Water	6020	314497
400-124344-4 - RA	MW-14	Total Recoverable	Water	6020	314497
400-124344-5 - RA	MW-15	Total Recoverable	Water	6020	314497
400-124344-6 - RA	MW-16	Total Recoverable	Water	6020	314497
400-124344-7 - RA	MW-17	Total Recoverable	Water	6020	314497
400-124344-8 - RA	MW-18	Total Recoverable	Water	6020	314497
400-124344-9 - RA	DUP-02	Total Recoverable	Water	6020	314497
400-124344-10 - RA	EQ BLANK-02	Total Recoverable	Water	6020	314497
400-124344-11 - RA	FB-02	Total Recoverable	Water	6020	314497
MB 400-314497/1-A ^5 - RA	Method Blank	Total Recoverable	Water	6020	314497
400-124344-2 MS - RA	MW-12	Total Recoverable	Water	6020	314497
400-124344-2 MSD - RA	MW-12	Total Recoverable	Water	6020	314497

Analysis Batch: 315697

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-124344-1 - RA	MW-11	Total Recoverable	Water	6020	314497
LCS 400-314497/2-A ^1 - RA	Lab Control Sample	Total Recoverable	Water	6020	314497

Analysis Batch: 315804

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-124344-1	MW-11	Total/NA	Water	7470A	314267
400-124344-2	MW-12	Total/NA	Water	7470A	314267
400-124344-3	MW-13	Total/NA	Water	7470A	314267
400-124344-4	MW-14	Total/NA	Water	7470A	314267
400-124344-5	MW-15	Total/NA	Water	7470A	314267
400-124344-6	MW-16	Total/NA	Water	7470A	314267
400-124344-7	MW-17	Total/NA	Water	7470A	314267
400-124344-8	MW-18	Total/NA	Water	7470A	314267
400-124344-9	DUP-02	Total/NA	Water	7470A	314267
400-124344-10	EQ BLANK-02	Total/NA	Water	7470A	314267
400-124344-11	FB-02	Total/NA	Water	7470A	314267
MB 400-314267/14-A	Method Blank	Total/NA	Water	7470A	314267

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Metals (Continued)

Analysis Batch: 315804 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-314267/15-A	Lab Control Sample	Total/NA	Water	7470A	314267
400-124344-1 MS	MW-11	Total/NA	Water	7470A	314267
400-124344-1 MSD	MW-11	Total/NA	Water	7470A	314267

General Chemistry

Analysis Batch: 314565

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-124344-2	MW-12	Total/NA	Water	SM 2540C	
400-124344-3	MW-13	Total/NA	Water	SM 2540C	
400-124344-6	MW-16	Total/NA	Water	SM 2540C	
MB 400-314565/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-314565/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-124344-2 DU	MW-12	Total/NA	Water	SM 2540C	

Analysis Batch: 314566

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-124344-1	MW-11	Total/NA	Water	SM 2540C	
400-124344-4	MW-14	Total/NA	Water	SM 2540C	
400-124344-5	MW-15	Total/NA	Water	SM 2540C	
400-124344-7	MW-17	Total/NA	Water	SM 2540C	
400-124344-8	MW-18	Total/NA	Water	SM 2540C	
400-124344-9	DUP-02	Total/NA	Water	SM 2540C	
400-124344-10	EQ BLANK-02	Total/NA	Water	SM 2540C	
MB 400-314566/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-314566/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-124341-A-4 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 314751

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-124344-11	FB-02	Total/NA	Water	SM 2540C	
MB 400-314751/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-314751/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-124394-A-5 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 316238

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-124344-1	MW-11	Total/NA	Water	SM 4500 CI- E	
400-124344-2	MW-12	Total/NA	Water	SM 4500 CI- E	
400-124344-3	MW-13	Total/NA	Water	SM 4500 CI- E	
400-124344-4	MW-14	Total/NA	Water	SM 4500 CI- E	
400-124344-5	MW-15	Total/NA	Water	SM 4500 CI- E	
400-124344-6	MW-16	Total/NA	Water	SM 4500 CI- E	
400-124344-7	MW-17	Total/NA	Water	SM 4500 CI- E	
400-124344-8	MW-18	Total/NA	Water	SM 4500 CI- E	
400-124344-9	DUP-02	Total/NA	Water	SM 4500 CI- E	
400-124344-10	EQ BLANK-02	Total/NA	Water	SM 4500 CI- E	
400-124344-11	FB-02	Total/NA	Water	SM 4500 CI- E	
MB 400-316238/6	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 400-316238/7	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

General Chemistry (Continued)

Analysis Batch: 316238 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MRL 400-316238/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-124344-7 MS	MW-17	Total/NA	Water	SM 4500 Cl- E	
400-124344-7 MSD	MW-17	Total/NA	Water	SM 4500 Cl- E	
400-124344-6 DU	MW-16	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 316370

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-124344-1	MW-11	Total/NA	Water	SM 4500 SO4 E	
400-124344-2	MW-12	Total/NA	Water	SM 4500 SO4 E	
400-124344-3	MW-13	Total/NA	Water	SM 4500 SO4 E	
400-124344-4	MW-14	Total/NA	Water	SM 4500 SO4 E	
400-124344-5	MW-15	Total/NA	Water	SM 4500 SO4 E	
400-124344-6	MW-16	Total/NA	Water	SM 4500 SO4 E	
400-124344-7	MW-17	Total/NA	Water	SM 4500 SO4 E	
400-124344-8	MW-18	Total/NA	Water	SM 4500 SO4 E	
400-124344-9	DUP-02	Total/NA	Water	SM 4500 SO4 E	
400-124344-10	EQ BLANK-02	Total/NA	Water	SM 4500 SO4 E	
400-124344-11	FB-02	Total/NA	Water	SM 4500 SO4 E	
MB 400-316370/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-316370/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-316370/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-124344-1 MS	MW-11	Total/NA	Water	SM 4500 SO4 E	
400-124344-1 MSD	MW-11	Total/NA	Water	SM 4500 SO4 E	
400-124344-6 DU	MW-16	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 317637

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-124344-1	MW-11	Total/NA	Water	SM 4500 F C	
400-124344-2	MW-12	Total/NA	Water	SM 4500 F C	
400-124344-3	MW-13	Total/NA	Water	SM 4500 F C	
400-124344-4	MW-14	Total/NA	Water	SM 4500 F C	
400-124344-5	MW-15	Total/NA	Water	SM 4500 F C	
400-124344-6	MW-16	Total/NA	Water	SM 4500 F C	
400-124344-7	MW-17	Total/NA	Water	SM 4500 F C	
400-124344-8	MW-18	Total/NA	Water	SM 4500 F C	
400-124344-9	DUP-02	Total/NA	Water	SM 4500 F C	
400-124344-10	EQ BLANK-02	Total/NA	Water	SM 4500 F C	
400-124344-11	FB-02	Total/NA	Water	SM 4500 F C	
MB 400-317637/4	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-317637/5	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-124344-1 MS	MW-11	Total/NA	Water	SM 4500 F C	
400-124344-1 MSD	MW-11	Total/NA	Water	SM 4500 F C	
400-124344-8 DU	MW-18	Total/NA	Water	SM 4500 F C	

Rad

Prep Batch: 260748

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-124344-1	MW-11	Total/NA	Water	PrecSep-21	
400-124344-2	MW-12	Total/NA	Water	PrecSep-21	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
 SDG: NAMU

Rad (Continued)

Prep Batch: 260748 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-124344-3	MW-13	Total/NA	Water	PrecSep-21	
400-124344-4	MW-14	Total/NA	Water	PrecSep-21	
400-124344-5	MW-15	Total/NA	Water	PrecSep-21	
400-124344-6	MW-16	Total/NA	Water	PrecSep-21	
400-124344-7	MW-17	Total/NA	Water	PrecSep-21	
400-124344-8	MW-18	Total/NA	Water	PrecSep-21	
400-124344-9	DUP-02	Total/NA	Water	PrecSep-21	
400-124344-10	EQ BLANK-02	Total/NA	Water	PrecSep-21	
400-124344-11	FB-02	Total/NA	Water	PrecSep-21	
MB 160-260748/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-260748/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-260748/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 260753

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-124344-1	MW-11	Total/NA	Water	PrecSep_0	
400-124344-2	MW-12	Total/NA	Water	PrecSep_0	
400-124344-3	MW-13	Total/NA	Water	PrecSep_0	
400-124344-4	MW-14	Total/NA	Water	PrecSep_0	
400-124344-5	MW-15	Total/NA	Water	PrecSep_0	
400-124344-6	MW-16	Total/NA	Water	PrecSep_0	
400-124344-7	MW-17	Total/NA	Water	PrecSep_0	
400-124344-8	MW-18	Total/NA	Water	PrecSep_0	
400-124344-9	DUP-02	Total/NA	Water	PrecSep_0	
400-124344-10	EQ BLANK-02	Total/NA	Water	PrecSep_0	
400-124344-11	FB-02	Total/NA	Water	PrecSep_0	
MB 160-260753/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-260753/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-260753/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

Field Service / Mobile Lab

Analysis Batch: 317498

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-124344-1	MW-11	Total/NA	Water	Field Sampling	
400-124344-2	MW-12	Total/NA	Water	Field Sampling	
400-124344-3	MW-13	Total/NA	Water	Field Sampling	
400-124344-4	MW-14	Total/NA	Water	Field Sampling	
400-124344-5	MW-15	Total/NA	Water	Field Sampling	
400-124344-6	MW-16	Total/NA	Water	Field Sampling	
400-124344-7	MW-17	Total/NA	Water	Field Sampling	
400-124344-8	MW-18	Total/NA	Water	Field Sampling	
400-124344-9	DUP-02	Total/NA	Water	Field Sampling	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-314497/1-A ^5
Matrix: Water
Analysis Batch: 315315

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 314497

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		07/18/16 09:00	07/21/16 16:49	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		07/18/16 09:00	07/21/16 16:49	5
Barium	<0.00049		0.0025	0.00049	mg/L		07/18/16 09:00	07/21/16 16:49	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/18/16 09:00	07/21/16 16:49	5
Boron	<0.021		0.050	0.021	mg/L		07/18/16 09:00	07/21/16 16:49	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/18/16 09:00	07/21/16 16:49	5
Calcium	<0.13		0.25	0.13	mg/L		07/18/16 09:00	07/21/16 16:49	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/18/16 09:00	07/21/16 16:49	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		07/18/16 09:00	07/21/16 16:49	5
Lead	<0.00035		0.0013	0.00035	mg/L		07/18/16 09:00	07/21/16 16:49	5
Lithium	<0.0032		0.0050	0.0032	mg/L		07/18/16 09:00	07/21/16 16:49	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/18/16 09:00	07/21/16 16:49	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/18/16 09:00	07/21/16 16:49	5

Lab Sample ID: LCS 400-314497/2-A ^1
Matrix: Water
Analysis Batch: 315315

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 314497

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.0500	0.0553		mg/L		111	80 - 120
Arsenic	0.0500	0.0551		mg/L		110	80 - 120
Barium	0.0500	0.0439		mg/L		88	80 - 120
Beryllium	0.0500	0.0512		mg/L		102	80 - 120
Boron	0.100	0.0964		mg/L		96	80 - 120
Cadmium	0.0500	0.0512		mg/L		102	80 - 120
Calcium	5.00	4.82		mg/L		96	80 - 120
Chromium	0.0500	0.0518		mg/L		104	80 - 120
Cobalt	0.0500	0.0517		mg/L		103	80 - 120
Lead	0.0500	0.0495		mg/L		99	80 - 120
Lithium	0.0500	0.0523		mg/L		105	80 - 120
Molybdenum	0.0500	0.0524		mg/L		105	80 - 120
Thallium	0.0100	0.0104		mg/L		104	80 - 120

Lab Sample ID: 400-124344-2 MS
Matrix: Water
Analysis Batch: 315315

Client Sample ID: MW-12
Prep Type: Total Recoverable
Prep Batch: 314497

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	<0.0010		0.0500	0.0575		mg/L		115	75 - 125
Arsenic	<0.00046		0.0500	0.0561		mg/L		112	75 - 125
Barium	0.085		0.0500	0.130		mg/L		91	75 - 125
Beryllium	0.00041	J	0.0500	0.0529		mg/L		105	75 - 125
Boron	0.025	J	0.100	0.136		mg/L		111	75 - 125
Cadmium	<0.00034		0.0500	0.0529		mg/L		106	75 - 125
Calcium	<0.13		5.00	4.88		mg/L		98	75 - 125
Chromium	<0.0011		0.0500	0.0526		mg/L		105	75 - 125
Cobalt	0.0020	J	0.0500	0.0541		mg/L		104	75 - 125
Lead	<0.00035		0.0500	0.0484		mg/L		97	75 - 125

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 400-124344-2 MS
Matrix: Water
Analysis Batch: 315315

Client Sample ID: MW-12
Prep Type: Total Recoverable
Prep Batch: 314497

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Lithium	0.0035	J	0.0500	0.0536		mg/L		100	75 - 125
Molybdenum	<0.00085		0.0500	0.0533		mg/L		107	75 - 125
Thallium	<0.00085		0.0100	0.0104		mg/L		104	75 - 125

Lab Sample ID: 400-124344-2 MSD
Matrix: Water
Analysis Batch: 315315

Client Sample ID: MW-12
Prep Type: Total Recoverable
Prep Batch: 314497

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Antimony	<0.0010		0.0500	0.0573		mg/L		115	75 - 125	0	20
Arsenic	<0.00046		0.0500	0.0577		mg/L		115	75 - 125	3	20
Barium	0.085		0.0500	0.131		mg/L		92	75 - 125	0	20
Beryllium	0.00041	J	0.0500	0.0544		mg/L		108	75 - 125	3	20
Boron	0.025	J	0.100	0.131		mg/L		106	75 - 125	3	20
Cadmium	<0.00034		0.0500	0.0535		mg/L		107	75 - 125	1	20
Calcium	<0.13		5.00	4.99		mg/L		100	75 - 125	2	20
Chromium	<0.0011		0.0500	0.0534		mg/L		107	75 - 125	2	20
Cobalt	0.0020	J	0.0500	0.0561		mg/L		108	75 - 125	4	20
Lead	<0.00035		0.0500	0.0495		mg/L		99	75 - 125	2	20
Lithium	0.0035	J	0.0500	0.0534		mg/L		100	75 - 125	0	20
Molybdenum	<0.00085		0.0500	0.0537		mg/L		107	75 - 125	1	20
Thallium	<0.00085		0.0100	0.0105		mg/L		105	75 - 125	1	20

Method: 6020 - Metals (ICP/MS) - RA

Lab Sample ID: MB 400-314497/1-A ^5
Matrix: Water
Analysis Batch: 315556

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 314497

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium - RA	<0.00024		0.0013	0.00024	mg/L		07/18/16 09:00	07/22/16 16:32	5

Lab Sample ID: LCS 400-314497/2-A ^1
Matrix: Water
Analysis Batch: 315697

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 314497

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium - RA	0.0500	0.0512		mg/L		102	80 - 120

Lab Sample ID: 400-124344-2 MS
Matrix: Water
Analysis Batch: 315556

Client Sample ID: MW-12
Prep Type: Total Recoverable
Prep Batch: 314497

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Selenium - RA	<0.00024	*	0.0500	0.0531		mg/L		106	75 - 125

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Method: 6020 - Metals (ICP/MS) - RA (Continued)

Lab Sample ID: 400-124344-2 MSD
Matrix: Water
Analysis Batch: 315556

Client Sample ID: MW-12
Prep Type: Total Recoverable
Prep Batch: 314497

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Selenium - RA	<0.00024	*	0.0500	0.0537		mg/L		107	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-314267/14-A
Matrix: Water
Analysis Batch: 315804

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 314267

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		07/14/16 10:49	07/26/16 13:36	1

Lab Sample ID: LCS 400-314267/15-A
Matrix: Water
Analysis Batch: 315804

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 314267

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00101	0.00100		mg/L		100	80 - 120

Lab Sample ID: 400-124344-1 MS
Matrix: Water
Analysis Batch: 315804

Client Sample ID: MW-11
Prep Type: Total/NA
Prep Batch: 314267

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.000070		0.00201	0.00200		mg/L		99	80 - 120

Lab Sample ID: 400-124344-1 MSD
Matrix: Water
Analysis Batch: 315804

Client Sample ID: MW-11
Prep Type: Total/NA
Prep Batch: 314267

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.000070		0.00201	0.00197		mg/L		98	80 - 120	1	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 400-314565/1
Matrix: Water
Analysis Batch: 314565

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			07/16/16 15:07	1

Lab Sample ID: LCS 400-314565/2
Matrix: Water
Analysis Batch: 314565

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	264		mg/L		90	78 - 122

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 400-124344-2 DU
Matrix: Water
Analysis Batch: 314565

Client Sample ID: MW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	<3.4		<3.4		mg/L		NC	5

Lab Sample ID: MB 400-314566/1
Matrix: Water
Analysis Batch: 314566

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			07/16/16 15:46	1

Lab Sample ID: LCS 400-314566/2
Matrix: Water
Analysis Batch: 314566

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	268		mg/L		91	78 - 122

Lab Sample ID: 400-124341-A-4 DU
Matrix: Water
Analysis Batch: 314566

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	24		24.0		mg/L		0	5

Lab Sample ID: MB 400-314751/1
Matrix: Water
Analysis Batch: 314751

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			07/18/16 16:51	1

Lab Sample ID: LCS 400-314751/2
Matrix: Water
Analysis Batch: 314751

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	278		mg/L		95	78 - 122

Lab Sample ID: 400-124394-A-5 DU
Matrix: Water
Analysis Batch: 314751

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	120		122		mg/L		2	5

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-316238/6
Matrix: Water
Analysis Batch: 316238

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			07/28/16 09:27	1

Lab Sample ID: LCS 400-316238/7
Matrix: Water
Analysis Batch: 316238

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 400-316238/3
Matrix: Water
Analysis Batch: 316238

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	1.63	J	mg/L		82	50 - 150

Lab Sample ID: 400-124344-7 MS
Matrix: Water
Analysis Batch: 316238

Client Sample ID: MW-17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.7		10.0	17.5		mg/L		118	73 - 120

Lab Sample ID: 400-124344-7 MSD
Matrix: Water
Analysis Batch: 316238

Client Sample ID: MW-17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	5.7		10.0	17.5		mg/L		118	73 - 120	0	8

Lab Sample ID: 400-124344-6 DU
Matrix: Water
Analysis Batch: 316238

Client Sample ID: MW-16
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Chloride	8.1		8.16		mg/L		0.4	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-317637/4
Matrix: Water
Analysis Batch: 317637

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			08/07/16 14:59	1

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: LCS 400-317637/5
Matrix: Water
Analysis Batch: 317637

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	4.19		mg/L		105	90 - 110

Lab Sample ID: 400-124344-1 MS
Matrix: Water
Analysis Batch: 317637

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.040	J F2	1.00	1.12		mg/L		108	75 - 125

Lab Sample ID: 400-124344-1 MSD
Matrix: Water
Analysis Batch: 317637

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.040	J F2	1.00	1.05	F2	mg/L		101	75 - 125	6	4

Lab Sample ID: 400-124344-8 DU
Matrix: Water
Analysis Batch: 317637

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	DU Result	DU Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.040	J		0.0400	J	mg/L				0	4

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-316370/6
Matrix: Water
Analysis Batch: 316370

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			07/29/16 09:47	1

Lab Sample ID: LCS 400-316370/7
Matrix: Water
Analysis Batch: 316370

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	15.8		mg/L		105	90 - 110

Lab Sample ID: MRL 400-316370/3
Matrix: Water
Analysis Batch: 316370

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	3.82	J	mg/L		76	50 - 150

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: 400-124344-1 MS
Matrix: Water
Analysis Batch: 316370

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	3.8	J	10.0	12.3		mg/L		85	77 - 128

Lab Sample ID: 400-124344-1 MSD
Matrix: Water
Analysis Batch: 316370

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	3.8	J	10.0	12.4		mg/L		85	77 - 128	0	5

Lab Sample ID: 400-124344-6 DU
Matrix: Water
Analysis Batch: 316370

Client Sample ID: MW-16
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Sulfate	<1.4		<1.4		mg/L		NC	5

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-260748/1-A
Matrix: Water
Analysis Batch: 264048

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260748

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1716		0.0823	0.0837	1.00	0.108	pCi/L	07/15/16 17:59	08/09/16 07:33	1
Carrier	MB %Yield	MB Qualifier	Limits		Prepared	Analyzed	Dil Fac			
Ba Carrier	91.7		40 - 110		07/15/16 17:59	08/09/16 07:33	1			

Lab Sample ID: LCS 160-260748/2-A
Matrix: Water
Analysis Batch: 264048

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260748

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	11.2	14.22		1.39	1.00	0.113	pCi/L	127	68 - 137
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	92.3		40 - 110						

Lab Sample ID: LCSD 160-260748/3-A
Matrix: Water
Analysis Batch: 264048

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 260748

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	11.2	13.54		1.33	1.00	0.0964	pCi/L	121	68 - 137	0.25	1

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Method: 9315 - Radium-226 (GFPC) (Continued)

Lab Sample ID: LCSD 160-260748/3-A
Matrix: Water
Analysis Batch: 264048

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 260748

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	91.2		40 - 110

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-260753/1-A
Matrix: Water
Analysis Batch: 263544

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 260753

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.04734	U	0.211	0.211	1.00	0.370	pCi/L	07/15/16 18:52	08/04/16 12:09	1

Carrier	MB %Yield	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Ba Carrier	91.7		40 - 110	07/15/16 18:52	08/04/16 12:09	1
Y Carrier	87.5		40 - 110	07/15/16 18:52	08/04/16 12:09	1

Lab Sample ID: LCS 160-260753/2-A
Matrix: Water
Analysis Batch: 263544

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 260753

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	14.8	16.37		1.73	1.00	0.321	pCi/L	111	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	92.3		40 - 110
Y Carrier	85.6		40 - 110

Lab Sample ID: LCSD 160-260753/3-A
Matrix: Water
Analysis Batch: 263544

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 260753

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	14.8	15.95		1.70	1.00	0.350	pCi/L	108	56 - 140	0.12	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	91.2		40 - 110
Y Carrier	85.6		40 - 110

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-124344-1

SDG Number: NAMU

Login Number: 124344

List Number: 1

Creator: Siddoway, Benjamin

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6°C, 3.4°C, 2.1°C, 4.1°C, 1.4°C, 2.3°C IR-6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

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.

TestAmerica Pensacola

Certification Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-124344-1
SDG: NAMU

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Oklahoma	State Program	6	9997	08-31-16 *
Pennsylvania	NELAP	3	68-00540	02-28-17 *
South Carolina	State Program	4	85002001	06-30-16 *
Texas	NELAP	6	T104704193-15-9	07-31-17
USDA	Federal		P330-07-00122	01-09-17
Utah	NELAP	8	MO000542015-7	07-31-16 *
Virginia	NELAP	3	460230	06-14-17
Washington	State Program	10	C592	08-30-16 *
West Virginia DEP	State Program	3	381	08-31-16 *

* Certification renewal pending - certification considered valid.

TestAmerica Pensacola

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: 400-127141-1

TestAmerica Sample Delivery Group: NAMU

Client Project/Site: CCR -Plant Daniel

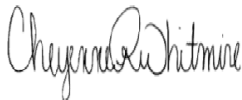
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:

10/17/2016 6:35:02 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

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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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Job ID: 400-127141-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-127141-1

General Chemistry

Method(s) SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 325706 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

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Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Client Sample ID: MW-11

Lab Sample ID: 400-127141-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.075		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	2.0		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0053		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium - RA	0.0034	J	0.0050	0.0032	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	42		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	13		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.040	J	0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	3.9	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.72				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-12

Lab Sample ID: 400-127141-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00053	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.11		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Boron	0.025	J	0.050	0.021	mg/L	5		6020	Total Recoverable
Calcium	0.14	J	0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0023	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lead	0.00035	J	0.0013	0.00035	mg/L	5		6020	Total Recoverable
Lithium - RA	0.0038	J	0.0050	0.0032	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	52		5.0	3.4	mg/L	1		SM 2540C	Total/NA
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	8.5		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.05				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-13

Lab Sample ID: 400-127141-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.098		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.41		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0014	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium - RA	0.0054		0.0050	0.0032	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	68		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	11		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	5.0		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.56				SU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Client Sample ID: MW-14

Lab Sample ID: 400-127141-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.079		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	4.9		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0013	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	32		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	8.4		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	2.0	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	5.14				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-15

Lab Sample ID: 400-127141-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.053		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.4		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0013	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium - RA	0.0035	J	0.0050	0.0032	mg/L	5		6020	Total Recoverable
Selenium - RA	0.00026	J	0.0013	0.00024	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	4.0	J	5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	7.3		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.60				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-16

Lab Sample ID: 400-127141-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.035		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.82		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0012	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	48		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	6.2		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	1.7	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.56				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-17

Lab Sample ID: 400-127141-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00096	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.034		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.98		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00093	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	32		5.0	3.4	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Client Sample ID: MW-17 (Continued)

Lab Sample ID: 400-127141-7

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	2.2	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.94				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-18

Lab Sample ID: 400-127141-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00061	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.055		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.86		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0011	J	0.0025	0.0011	mg/L	5		6020	Total Recoverable
Cobalt	0.0011	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	48		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	7.6		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	4.5	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.60				SU	1		Field Sampling	Total/NA

Client Sample ID: FD-02

Lab Sample ID: 400-127141-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.080		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	4.9		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0013	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	58		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	8.8		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	1.9	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	5.14				SU	1		Field Sampling	Total/NA

Client Sample ID: EB-02

Lab Sample ID: 400-127141-10

No Detections.

Client Sample ID: FB-02

Lab Sample ID: 400-127141-11

No Detections.

Client Sample ID: MW-19

Lab Sample ID: 400-127141-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0013		0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.033		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.92		0.25	0.13	mg/L	5		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Client Sample ID: MW-19 (Continued)

Lab Sample ID: 400-127141-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.00055	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	12		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	5.0		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	5.55				SU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

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Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
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
Field Sampling	Field Sampling	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-127141-1	MW-11	Water	09/12/16 10:49	09/14/16 08:19
400-127141-2	MW-12	Water	09/13/16 06:44	09/14/16 08:19
400-127141-3	MW-13	Water	09/13/16 07:40	09/14/16 08:19
400-127141-4	MW-14	Water	09/12/16 09:15	09/14/16 08:19
400-127141-5	MW-15	Water	09/12/16 08:36	09/14/16 08:19
400-127141-6	MW-16	Water	09/13/16 08:31	09/14/16 08:19
400-127141-7	MW-17	Water	09/12/16 13:42	09/14/16 08:19
400-127141-8	MW-18	Water	09/12/16 12:40	09/14/16 08:19
400-127141-9	FD-02	Water	09/12/16 08:15	09/14/16 08:19
400-127141-10	EB-02	Water	09/13/16 08:40	09/14/16 08:19
400-127141-11	FB-02	Water	09/13/16 07:50	09/14/16 08:19
400-127141-12	MW-19	Water	09/12/16 15:20	09/14/16 08:19

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Client Sample ID: MW-11
Date Collected: 09/12/16 10:49
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-1
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		09/26/16 12:33	09/28/16 14:46	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		09/26/16 12:33	09/28/16 14:46	5
Barium	0.075		0.0025	0.00049	mg/L		09/26/16 12:33	09/28/16 14:46	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/28/16 14:46	5
Boron	<0.021		0.050	0.021	mg/L		09/26/16 12:33	09/28/16 14:46	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/28/16 14:46	5
Calcium	2.0		0.25	0.13	mg/L		09/26/16 12:33	09/28/16 14:46	5
Chromium	<0.0011		0.0025	0.0011	mg/L		09/26/16 12:33	09/28/16 14:46	5
Cobalt	0.0053		0.0025	0.00040	mg/L		09/26/16 12:33	09/28/16 14:46	5
Lead	<0.00035		0.0013	0.00035	mg/L		09/26/16 12:33	09/28/16 14:46	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		09/26/16 12:33	09/28/16 14:46	5
Thallium	<0.000085		0.00050	0.000085	mg/L		09/26/16 12:33	09/28/16 14:46	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Lithium	0.0034	J	0.0050	0.0032	mg/L		09/26/16 12:33	09/30/16 17:00	5
Selenium	<0.00024		0.0013	0.00024	mg/L		09/26/16 12:33	09/30/16 17:00	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		09/16/16 10:44	09/20/16 12:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	42		5.0	3.4	mg/L			09/16/16 16:50	1
Chloride	13		2.0	0.60	mg/L			10/06/16 14:08	1
Fluoride	0.040	J	0.10	0.032	mg/L			10/09/16 13:43	1
Sulfate	3.9	J	5.0	1.4	mg/L			10/06/16 14:01	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.72				SU			09/12/16 10:49	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Client Sample ID: MW-12
Date Collected: 09/13/16 06:44
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-2
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		09/26/16 12:33	09/28/16 15:17	5
Arsenic	0.00053	J	0.0013	0.00046	mg/L		09/26/16 12:33	09/28/16 15:17	5
Barium	0.11		0.0025	0.00049	mg/L		09/26/16 12:33	09/28/16 15:17	5
Boron	0.025	J	0.050	0.021	mg/L		09/26/16 12:33	09/28/16 15:17	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/28/16 15:17	5
Calcium	0.14	J	0.25	0.13	mg/L		09/26/16 12:33	09/28/16 15:17	5
Chromium	<0.0011		0.0025	0.0011	mg/L		09/26/16 12:33	09/28/16 15:17	5
Cobalt	0.0023	J	0.0025	0.00040	mg/L		09/26/16 12:33	09/28/16 15:17	5
Lead	0.00035	J	0.0013	0.00035	mg/L		09/26/16 12:33	09/28/16 15:17	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		09/26/16 12:33	09/28/16 15:17	5
Thallium	<0.000085		0.00050	0.000085	mg/L		09/26/16 12:33	09/28/16 15:17	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/30/16 17:23	5
Lithium	0.0038	J	0.0050	0.0032	mg/L		09/26/16 12:33	09/30/16 17:23	5
Selenium	<0.00024		0.0013	0.00024	mg/L		09/26/16 12:33	09/30/16 17:23	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		09/16/16 10:44	09/20/16 12:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	52		5.0	3.4	mg/L			09/17/16 17:44	1
Chloride	10		2.0	0.60	mg/L			10/06/16 14:45	1
Fluoride	0.18		0.10	0.032	mg/L			10/09/16 14:33	1
Sulfate	8.5		5.0	1.4	mg/L			10/06/16 14:52	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.05				SU			09/13/16 06:44	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Client Sample ID: MW-13
Date Collected: 09/13/16 07:40
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-3
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		09/26/16 12:33	09/28/16 15:21	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		09/26/16 12:33	09/28/16 15:21	5
Barium	0.098		0.0025	0.00049	mg/L		09/26/16 12:33	09/28/16 15:21	5
Boron	<0.021		0.050	0.021	mg/L		09/26/16 12:33	09/28/16 15:21	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/28/16 15:21	5
Calcium	0.41		0.25	0.13	mg/L		09/26/16 12:33	09/28/16 15:21	5
Chromium	<0.0011		0.0025	0.0011	mg/L		09/26/16 12:33	09/28/16 15:21	5
Cobalt	0.0014	J	0.0025	0.00040	mg/L		09/26/16 12:33	09/28/16 15:21	5
Lead	<0.00035		0.0013	0.00035	mg/L		09/26/16 12:33	09/28/16 15:21	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		09/26/16 12:33	09/28/16 15:21	5
Thallium	<0.000085		0.00050	0.000085	mg/L		09/26/16 12:33	09/28/16 15:21	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/30/16 17:27	5
Lithium	0.0054		0.0050	0.0032	mg/L		09/26/16 12:33	09/30/16 17:27	5
Selenium	<0.00024		0.0013	0.00024	mg/L		09/26/16 12:33	09/30/16 17:27	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		09/16/16 10:44	09/20/16 12:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	68		5.0	3.4	mg/L			09/17/16 17:44	1
Chloride	11		2.0	0.60	mg/L			10/06/16 14:45	1
Fluoride	<0.032		0.10	0.032	mg/L			10/09/16 14:36	1
Sulfate	5.0		5.0	1.4	mg/L			10/06/16 14:52	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.56				SU			09/13/16 07:40	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Client Sample ID: MW-14
Date Collected: 09/12/16 09:15
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-4
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		09/26/16 12:33	09/28/16 15:26	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		09/26/16 12:33	09/28/16 15:26	5
Barium	0.079		0.0025	0.00049	mg/L		09/26/16 12:33	09/28/16 15:26	5
Boron	<0.021		0.050	0.021	mg/L		09/26/16 12:33	09/28/16 15:26	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/28/16 15:26	5
Calcium	4.9		0.25	0.13	mg/L		09/26/16 12:33	09/28/16 15:26	5
Chromium	<0.0011		0.0025	0.0011	mg/L		09/26/16 12:33	09/28/16 15:26	5
Cobalt	0.0013	J	0.0025	0.00040	mg/L		09/26/16 12:33	09/28/16 15:26	5
Lead	<0.00035		0.0013	0.00035	mg/L		09/26/16 12:33	09/28/16 15:26	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		09/26/16 12:33	09/28/16 15:26	5
Thallium	<0.000085		0.00050	0.000085	mg/L		09/26/16 12:33	09/28/16 15:26	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/30/16 17:45	5
Lithium	<0.0032		0.0050	0.0032	mg/L		09/26/16 12:33	09/30/16 17:45	5
Selenium	<0.00024		0.0013	0.00024	mg/L		09/26/16 12:33	09/30/16 17:45	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		09/16/16 10:44	09/20/16 12:23	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	32		5.0	3.4	mg/L			09/16/16 16:50	1
Chloride	8.4		2.0	0.60	mg/L			10/06/16 14:08	1
Fluoride	<0.032		0.10	0.032	mg/L			10/09/16 13:45	1
Sulfate	2.0	J	5.0	1.4	mg/L			10/06/16 14:01	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.14				SU			09/12/16 09:15	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Client Sample ID: MW-15
Date Collected: 09/12/16 08:36
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-5
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		09/26/16 12:33	09/28/16 15:30	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		09/26/16 12:33	09/28/16 15:30	5
Barium	0.053		0.0025	0.00049	mg/L		09/26/16 12:33	09/28/16 15:30	5
Boron	<0.021		0.050	0.021	mg/L		09/26/16 12:33	09/28/16 15:30	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/28/16 15:30	5
Calcium	1.4		0.25	0.13	mg/L		09/26/16 12:33	09/28/16 15:30	5
Chromium	<0.0011		0.0025	0.0011	mg/L		09/26/16 12:33	09/28/16 15:30	5
Cobalt	0.0013	J	0.0025	0.00040	mg/L		09/26/16 12:33	09/28/16 15:30	5
Lead	<0.00035		0.0013	0.00035	mg/L		09/26/16 12:33	09/28/16 15:30	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		09/26/16 12:33	09/28/16 15:30	5
Thallium	<0.000085		0.00050	0.000085	mg/L		09/26/16 12:33	09/28/16 15:30	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/30/16 17:50	5
Lithium	0.0035	J	0.0050	0.0032	mg/L		09/26/16 12:33	09/30/16 17:50	5
Selenium	0.00026	J	0.0013	0.00024	mg/L		09/26/16 12:33	09/30/16 17:50	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		09/16/16 10:44	09/20/16 12:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	4.0	J	5.0	3.4	mg/L			09/16/16 16:50	1
Chloride	7.3		2.0	0.60	mg/L			10/06/16 14:08	1
Fluoride	<0.032		0.10	0.032	mg/L			10/09/16 13:47	1
Sulfate	<1.4		5.0	1.4	mg/L			10/06/16 14:01	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.60				SU			09/12/16 08:36	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Client Sample ID: MW-16
Date Collected: 09/13/16 08:31
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-6
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		09/26/16 12:33	09/28/16 15:35	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		09/26/16 12:33	09/28/16 15:35	5
Barium	0.035		0.0025	0.00049	mg/L		09/26/16 12:33	09/28/16 15:35	5
Boron	<0.021		0.050	0.021	mg/L		09/26/16 12:33	09/28/16 15:35	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/28/16 15:35	5
Calcium	0.82		0.25	0.13	mg/L		09/26/16 12:33	09/28/16 15:35	5
Chromium	<0.0011		0.0025	0.0011	mg/L		09/26/16 12:33	09/28/16 15:35	5
Cobalt	0.0012	J	0.0025	0.00040	mg/L		09/26/16 12:33	09/28/16 15:35	5
Lead	<0.00035		0.0013	0.00035	mg/L		09/26/16 12:33	09/28/16 15:35	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		09/26/16 12:33	09/28/16 15:35	5
Thallium	<0.000085		0.00050	0.000085	mg/L		09/26/16 12:33	09/28/16 15:35	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/30/16 17:54	5
Lithium	<0.0032		0.0050	0.0032	mg/L		09/26/16 12:33	09/30/16 17:54	5
Selenium	<0.00024		0.0013	0.00024	mg/L		09/26/16 12:33	09/30/16 17:54	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		09/16/16 10:44	09/20/16 12:26	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	48		5.0	3.4	mg/L			09/17/16 17:44	1
Chloride	6.2		2.0	0.60	mg/L			10/06/16 14:45	1
Fluoride	<0.032		0.10	0.032	mg/L			10/09/16 15:34	1
Sulfate	1.7	J	5.0	1.4	mg/L			10/06/16 14:52	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.56				SU			09/13/16 08:31	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Client Sample ID: MW-17
Date Collected: 09/12/16 13:42
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-7
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		09/26/16 12:33	09/28/16 15:39	5
Arsenic	0.00096	J	0.0013	0.00046	mg/L		09/26/16 12:33	09/28/16 15:39	5
Barium	0.034		0.0025	0.00049	mg/L		09/26/16 12:33	09/28/16 15:39	5
Boron	<0.021		0.050	0.021	mg/L		09/26/16 12:33	09/28/16 15:39	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/28/16 15:39	5
Calcium	0.98		0.25	0.13	mg/L		09/26/16 12:33	09/28/16 15:39	5
Chromium	<0.0011		0.0025	0.0011	mg/L		09/26/16 12:33	09/28/16 15:39	5
Cobalt	0.00093	J	0.0025	0.00040	mg/L		09/26/16 12:33	09/28/16 15:39	5
Lead	<0.00035		0.0013	0.00035	mg/L		09/26/16 12:33	09/28/16 15:39	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		09/26/16 12:33	09/28/16 15:39	5
Thallium	<0.000085		0.00050	0.000085	mg/L		09/26/16 12:33	09/28/16 15:39	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/30/16 17:59	5
Lithium	<0.0032		0.0050	0.0032	mg/L		09/26/16 12:33	09/30/16 17:59	5
Selenium	<0.00024		0.0013	0.00024	mg/L		09/26/16 12:33	09/30/16 17:59	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		09/16/16 10:44	09/20/16 12:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	32		5.0	3.4	mg/L			09/16/16 16:50	1
Chloride	5.7		2.0	0.60	mg/L			10/06/16 14:08	1
Fluoride	<0.032		0.10	0.032	mg/L			10/09/16 13:49	1
Sulfate	2.2	J	5.0	1.4	mg/L			10/06/16 14:01	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.94				SU			09/12/16 13:42	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Client Sample ID: MW-18
Date Collected: 09/12/16 12:40
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-8
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		09/26/16 12:33	09/28/16 15:43	5
Arsenic	0.00061	J	0.0013	0.00046	mg/L		09/26/16 12:33	09/28/16 15:43	5
Barium	0.055		0.0025	0.00049	mg/L		09/26/16 12:33	09/28/16 15:43	5
Boron	<0.021		0.050	0.021	mg/L		09/26/16 12:33	09/28/16 15:43	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/28/16 15:43	5
Calcium	0.86		0.25	0.13	mg/L		09/26/16 12:33	09/28/16 15:43	5
Chromium	0.0011	J	0.0025	0.0011	mg/L		09/26/16 12:33	09/28/16 15:43	5
Cobalt	0.0011	J	0.0025	0.00040	mg/L		09/26/16 12:33	09/28/16 15:43	5
Lead	<0.00035		0.0013	0.00035	mg/L		09/26/16 12:33	09/28/16 15:43	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		09/26/16 12:33	09/28/16 15:43	5
Thallium	<0.000085		0.00050	0.000085	mg/L		09/26/16 12:33	09/28/16 15:43	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/30/16 18:03	5
Lithium	<0.0032		0.0050	0.0032	mg/L		09/26/16 12:33	09/30/16 18:03	5
Selenium	<0.00024		0.0013	0.00024	mg/L		09/26/16 12:33	09/30/16 18:03	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		09/16/16 10:44	09/20/16 12:28	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	48		5.0	3.4	mg/L			09/16/16 16:50	1
Chloride	7.6		2.0	0.60	mg/L			10/06/16 14:09	1
Fluoride	<0.032		0.10	0.032	mg/L			10/09/16 13:53	1
Sulfate	4.5	J	5.0	1.4	mg/L			10/06/16 14:01	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.60				SU			09/12/16 12:40	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Client Sample ID: FD-02
Date Collected: 09/12/16 08:15
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-9
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		09/26/16 12:33	09/28/16 16:01	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		09/26/16 12:33	09/28/16 16:01	5
Barium	0.080		0.0025	0.00049	mg/L		09/26/16 12:33	09/28/16 16:01	5
Boron	<0.021		0.050	0.021	mg/L		09/26/16 12:33	09/28/16 16:01	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/28/16 16:01	5
Calcium	4.9		0.25	0.13	mg/L		09/26/16 12:33	09/28/16 16:01	5
Chromium	<0.0011		0.0025	0.0011	mg/L		09/26/16 12:33	09/28/16 16:01	5
Cobalt	0.0013	J	0.0025	0.00040	mg/L		09/26/16 12:33	09/28/16 16:01	5
Lead	<0.00035		0.0013	0.00035	mg/L		09/26/16 12:33	09/28/16 16:01	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		09/26/16 12:33	09/28/16 16:01	5
Thallium	<0.000085		0.00050	0.000085	mg/L		09/26/16 12:33	09/28/16 16:01	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/30/16 18:08	5
Lithium	<0.0032		0.0050	0.0032	mg/L		09/26/16 12:33	09/30/16 18:08	5
Selenium	<0.00024		0.0013	0.00024	mg/L		09/26/16 12:33	09/30/16 18:08	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		09/16/16 10:44	09/20/16 12:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	58		5.0	3.4	mg/L			09/16/16 16:50	1
Chloride	8.8		2.0	0.60	mg/L			10/06/16 14:09	1
Fluoride	<0.032		0.10	0.032	mg/L			10/09/16 13:55	1
Sulfate	1.9	J	5.0	1.4	mg/L			10/06/16 14:01	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.14				SU			09/12/16 08:15	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Client Sample ID: EB-02
Date Collected: 09/13/16 08:40
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-10
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		09/26/16 12:33	09/28/16 16:05	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		09/26/16 12:33	09/28/16 16:05	5
Barium	<0.00049		0.0025	0.00049	mg/L		09/26/16 12:33	09/28/16 16:05	5
Boron	<0.021		0.050	0.021	mg/L		09/26/16 12:33	09/28/16 16:05	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/28/16 16:05	5
Calcium	<0.13		0.25	0.13	mg/L		09/26/16 12:33	09/28/16 16:05	5
Chromium	<0.0011		0.0025	0.0011	mg/L		09/26/16 12:33	09/28/16 16:05	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		09/26/16 12:33	09/28/16 16:05	5
Lead	<0.00035		0.0013	0.00035	mg/L		09/26/16 12:33	09/28/16 16:05	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		09/26/16 12:33	09/28/16 16:05	5
Thallium	<0.000085		0.00050	0.000085	mg/L		09/26/16 12:33	09/28/16 16:05	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/30/16 18:12	5
Lithium	<0.0032		0.0050	0.0032	mg/L		09/26/16 12:33	09/30/16 18:12	5
Selenium	<0.00024		0.0013	0.00024	mg/L		09/26/16 12:33	09/30/16 18:12	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		09/16/16 10:44	09/20/16 12:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			09/17/16 17:44	1
Chloride	<0.60		2.0	0.60	mg/L			10/06/16 14:45	1
Fluoride	<0.032		0.10	0.032	mg/L			10/09/16 15:41	1
Sulfate	<1.4		5.0	1.4	mg/L			10/06/16 14:52	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Client Sample ID: FB-02
Date Collected: 09/13/16 07:50
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-11
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		09/26/16 12:33	09/28/16 16:10	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		09/26/16 12:33	09/28/16 16:10	5
Barium	<0.00049		0.0025	0.00049	mg/L		09/26/16 12:33	09/28/16 16:10	5
Boron	<0.021		0.050	0.021	mg/L		09/26/16 12:33	09/28/16 16:10	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/28/16 16:10	5
Calcium	<0.13		0.25	0.13	mg/L		09/26/16 12:33	09/28/16 16:10	5
Chromium	<0.0011		0.0025	0.0011	mg/L		09/26/16 12:33	09/28/16 16:10	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		09/26/16 12:33	09/28/16 16:10	5
Lead	<0.00035		0.0013	0.00035	mg/L		09/26/16 12:33	09/28/16 16:10	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		09/26/16 12:33	09/28/16 16:10	5
Thallium	<0.000085		0.00050	0.000085	mg/L		09/26/16 12:33	09/28/16 16:10	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/30/16 18:17	5
Lithium	<0.0032		0.0050	0.0032	mg/L		09/26/16 12:33	09/30/16 18:17	5
Selenium	<0.00024		0.0013	0.00024	mg/L		09/26/16 12:33	09/30/16 18:17	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		09/16/16 10:44	09/20/16 12:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			09/17/16 17:44	1
Chloride	<0.60		2.0	0.60	mg/L			10/06/16 14:45	1
Fluoride	<0.032		0.10	0.032	mg/L			10/09/16 15:44	1
Sulfate	<1.4		5.0	1.4	mg/L			10/06/16 14:52	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Client Sample ID: MW-19
Date Collected: 09/12/16 15:20
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-12
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		09/26/16 12:33	09/28/16 16:14	5
Arsenic	0.0013		0.0013	0.00046	mg/L		09/26/16 12:33	09/28/16 16:14	5
Barium	0.033		0.0025	0.00049	mg/L		09/26/16 12:33	09/28/16 16:14	5
Boron	<0.021		0.050	0.021	mg/L		09/26/16 12:33	09/28/16 16:14	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/28/16 16:14	5
Calcium	0.92		0.25	0.13	mg/L		09/26/16 12:33	09/28/16 16:14	5
Chromium	<0.0011		0.0025	0.0011	mg/L		09/26/16 12:33	09/28/16 16:14	5
Cobalt	0.00055 J		0.0025	0.00040	mg/L		09/26/16 12:33	09/28/16 16:14	5
Lead	<0.00035		0.0013	0.00035	mg/L		09/26/16 12:33	09/28/16 16:14	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		09/26/16 12:33	09/28/16 16:14	5
Thallium	<0.000085		0.00050	0.000085	mg/L		09/26/16 12:33	09/28/16 16:14	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/30/16 18:21	5
Lithium	<0.0032		0.0050	0.0032	mg/L		09/26/16 12:33	09/30/16 18:21	5
Selenium	<0.00024		0.0013	0.00024	mg/L		09/26/16 12:33	09/30/16 18:21	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		09/16/16 10:44	09/20/16 12:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	12		5.0	3.4	mg/L			09/16/16 16:50	1
Chloride	5.0		2.0	0.60	mg/L			10/06/16 14:09	1
Fluoride	<0.032		0.10	0.032	mg/L			10/09/16 13:57	1
Sulfate	<1.4		5.0	1.4	mg/L			10/06/16 14:01	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.55				SU			09/12/16 15:20	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Qualifiers

Metals

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.

General Chemistry

Qualifier	Qualifier Description
F1	MS and/or MSD Recovery is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Client Sample ID: MW-11
Date Collected: 09/12/16 10:49
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	324742	09/28/16 14:46	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	325201	09/30/16 17:00	RJB	TAL PEN
Total/NA	Prep	7470A			322785	09/16/16 10:44	JAP	TAL PEN
Total/NA	Analysis	7470A		1	323375	09/20/16 12:04	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	322911	09/16/16 16:50	JLB	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	325706	10/06/16 14:08	SEH	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	325992	10/09/16 13:43	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	325707	10/06/16 14:01	SEH	TAL PEN
Total/NA	Analysis	Field Sampling		1	326108	09/12/16 10:49	BWS	TAL PEN

Client Sample ID: MW-12
Date Collected: 09/13/16 06:44
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	324742	09/28/16 15:17	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	325201	09/30/16 17:23	RJB	TAL PEN
Total/NA	Prep	7470A			322785	09/16/16 10:44	JAP	TAL PEN
Total/NA	Analysis	7470A		1	323375	09/20/16 12:05	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	323021	09/17/16 17:44	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	325706	10/06/16 14:45	SEH	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	325992	10/09/16 14:33	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	325707	10/06/16 14:52	SEH	TAL PEN
Total/NA	Analysis	Field Sampling		1	326108	09/13/16 06:44	BWS	TAL PEN

Client Sample ID: MW-13
Date Collected: 09/13/16 07:40
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	324742	09/28/16 15:21	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	325201	09/30/16 17:27	RJB	TAL PEN
Total/NA	Prep	7470A			322785	09/16/16 10:44	JAP	TAL PEN
Total/NA	Analysis	7470A		1	323375	09/20/16 12:06	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	323021	09/17/16 17:44	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	325706	10/06/16 14:45	SEH	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Client Sample ID: MW-13

Lab Sample ID: 400-127141-3

Date Collected: 09/13/16 07:40

Matrix: Water

Date Received: 09/14/16 08:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	325992	10/09/16 14:36	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	325707	10/06/16 14:52	SEH	TAL PEN
Total/NA	Analysis	Field Sampling		1	326108	09/13/16 07:40	BWS	TAL PEN

Client Sample ID: MW-14

Lab Sample ID: 400-127141-4

Date Collected: 09/12/16 09:15

Matrix: Water

Date Received: 09/14/16 08:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	324742	09/28/16 15:26	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	325201	09/30/16 17:45	RJB	TAL PEN
Total/NA	Prep	7470A			322785	09/16/16 10:44	JAP	TAL PEN
Total/NA	Analysis	7470A		1	323375	09/20/16 12:23	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	322911	09/16/16 16:50	JLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	325706	10/06/16 14:08	SEH	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	325992	10/09/16 13:45	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	325707	10/06/16 14:01	SEH	TAL PEN
Total/NA	Analysis	Field Sampling		1	326108	09/12/16 09:15	BWS	TAL PEN

Client Sample ID: MW-15

Lab Sample ID: 400-127141-5

Date Collected: 09/12/16 08:36

Matrix: Water

Date Received: 09/14/16 08:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	324742	09/28/16 15:30	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	325201	09/30/16 17:50	RJB	TAL PEN
Total/NA	Prep	7470A			322785	09/16/16 10:44	JAP	TAL PEN
Total/NA	Analysis	7470A		1	323375	09/20/16 12:25	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	322911	09/16/16 16:50	JLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	325706	10/06/16 14:08	SEH	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	325992	10/09/16 13:47	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	325707	10/06/16 14:01	SEH	TAL PEN
Total/NA	Analysis	Field Sampling		1	326108	09/12/16 08:36	BWS	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Client Sample ID: MW-16

Lab Sample ID: 400-127141-6

Date Collected: 09/13/16 08:31

Matrix: Water

Date Received: 09/14/16 08:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	324742	09/28/16 15:35	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	325201	09/30/16 17:54	RJB	TAL PEN
Total/NA	Prep	7470A			322785	09/16/16 10:44	JAP	TAL PEN
Total/NA	Analysis	7470A		1	323375	09/20/16 12:26	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	323021	09/17/16 17:44	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	325706	10/06/16 14:45	SEH	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	326000	10/09/16 15:34	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	325707	10/06/16 14:52	SEH	TAL PEN
Total/NA	Analysis	Field Sampling		1	326108	09/13/16 08:31	BWS	TAL PEN

Client Sample ID: MW-17

Lab Sample ID: 400-127141-7

Date Collected: 09/12/16 13:42

Matrix: Water

Date Received: 09/14/16 08:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	324742	09/28/16 15:39	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	325201	09/30/16 17:59	RJB	TAL PEN
Total/NA	Prep	7470A			322785	09/16/16 10:44	JAP	TAL PEN
Total/NA	Analysis	7470A		1	323375	09/20/16 12:27	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	322911	09/16/16 16:50	JLB	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	325706	10/06/16 14:08	SEH	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	325992	10/09/16 13:49	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	325707	10/06/16 14:01	SEH	TAL PEN
Total/NA	Analysis	Field Sampling		1	326108	09/12/16 13:42	BWS	TAL PEN

Client Sample ID: MW-18

Lab Sample ID: 400-127141-8

Date Collected: 09/12/16 12:40

Matrix: Water

Date Received: 09/14/16 08:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	324742	09/28/16 15:43	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	325201	09/30/16 18:03	RJB	TAL PEN
Total/NA	Prep	7470A			322785	09/16/16 10:44	JAP	TAL PEN
Total/NA	Analysis	7470A		1	323375	09/20/16 12:28	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	322911	09/16/16 16:50	JLB	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	325706	10/06/16 14:09	SEH	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Client Sample ID: MW-18

Lab Sample ID: 400-127141-8

Date Collected: 09/12/16 12:40

Matrix: Water

Date Received: 09/14/16 08:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	325992	10/09/16 13:53	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	325707	10/06/16 14:01	SEH	TAL PEN
Total/NA	Analysis	Field Sampling		1	326108	09/12/16 12:40	BWS	TAL PEN

Client Sample ID: FD-02

Lab Sample ID: 400-127141-9

Date Collected: 09/12/16 08:15

Matrix: Water

Date Received: 09/14/16 08:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	324742	09/28/16 16:01	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	325201	09/30/16 18:08	RJB	TAL PEN
Total/NA	Prep	7470A			322785	09/16/16 10:44	JAP	TAL PEN
Total/NA	Analysis	7470A		1	323375	09/20/16 12:29	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	322911	09/16/16 16:50	JLB	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	325706	10/06/16 14:09	SEH	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	325992	10/09/16 13:55	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	325707	10/06/16 14:01	SEH	TAL PEN
Total/NA	Analysis	Field Sampling		1	326108	09/12/16 08:15	BWS	TAL PEN

Client Sample ID: EB-02

Lab Sample ID: 400-127141-10

Date Collected: 09/13/16 08:40

Matrix: Water

Date Received: 09/14/16 08:19

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	324742	09/28/16 16:05	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	325201	09/30/16 18:12	RJB	TAL PEN
Total/NA	Prep	7470A			322785	09/16/16 10:44	JAP	TAL PEN
Total/NA	Analysis	7470A		1	323375	09/20/16 12:31	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	323021	09/17/16 17:44	TET	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	325706	10/06/16 14:45	SEH	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	326000	10/09/16 15:41	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	325707	10/06/16 14:52	SEH	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Client Sample ID: FB-02
Date Collected: 09/13/16 07:50
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	324742	09/28/16 16:10	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	325201	09/30/16 18:17	RJB	TAL PEN
Total/NA	Prep	7470A			322785	09/16/16 10:44	JAP	TAL PEN
Total/NA	Analysis	7470A		1	323375	09/20/16 12:32	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	323021	09/17/16 17:44	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	325706	10/06/16 14:45	SEH	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	326000	10/09/16 15:44	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	325707	10/06/16 14:52	SEH	TAL PEN

Client Sample ID: MW-19
Date Collected: 09/12/16 15:20
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	324742	09/28/16 16:14	RJB	TAL PEN
Total Recoverable	Prep	3005A	RA		323204	09/26/16 12:33	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	325201	09/30/16 18:21	RJB	TAL PEN
Total/NA	Prep	7470A			322785	09/16/16 10:44	JAP	TAL PEN
Total/NA	Analysis	7470A		1	323375	09/20/16 12:33	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	322911	09/16/16 16:50	JLB	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	325706	10/06/16 14:09	SEH	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	325992	10/09/16 13:57	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	325707	10/06/16 14:01	SEH	TAL PEN
Total/NA	Analysis	Field Sampling		1	326108	09/12/16 15:20	BWS	TAL PEN

Laboratory References:

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

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Metals

Prep Batch: 322785

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127141-1	MW-11	Total/NA	Water	7470A	
400-127141-2	MW-12	Total/NA	Water	7470A	
400-127141-3	MW-13	Total/NA	Water	7470A	
400-127141-4	MW-14	Total/NA	Water	7470A	
400-127141-5	MW-15	Total/NA	Water	7470A	
400-127141-6	MW-16	Total/NA	Water	7470A	
400-127141-7	MW-17	Total/NA	Water	7470A	
400-127141-8	MW-18	Total/NA	Water	7470A	
400-127141-9	FD-02	Total/NA	Water	7470A	
400-127141-10	EB-02	Total/NA	Water	7470A	
400-127141-11	FB-02	Total/NA	Water	7470A	
400-127141-12	MW-19	Total/NA	Water	7470A	
MB 400-322785/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-322785/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-127183-B-1-B MS	Matrix Spike	Total/NA	Water	7470A	
400-127183-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Prep Batch: 323204

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127141-1	MW-11	Total Recoverable	Water	3005A	
400-127141-1 - RA	MW-11	Total Recoverable	Water	3005A	
400-127141-2	MW-12	Total Recoverable	Water	3005A	
400-127141-2 - RA	MW-12	Total Recoverable	Water	3005A	
400-127141-3 - RA	MW-13	Total Recoverable	Water	3005A	
400-127141-3	MW-13	Total Recoverable	Water	3005A	
400-127141-4	MW-14	Total Recoverable	Water	3005A	
400-127141-4 - RA	MW-14	Total Recoverable	Water	3005A	
400-127141-5	MW-15	Total Recoverable	Water	3005A	
400-127141-5 - RA	MW-15	Total Recoverable	Water	3005A	
400-127141-6 - RA	MW-16	Total Recoverable	Water	3005A	
400-127141-6	MW-16	Total Recoverable	Water	3005A	
400-127141-7	MW-17	Total Recoverable	Water	3005A	
400-127141-7 - RA	MW-17	Total Recoverable	Water	3005A	
400-127141-8 - RA	MW-18	Total Recoverable	Water	3005A	
400-127141-8	MW-18	Total Recoverable	Water	3005A	
400-127141-9	FD-02	Total Recoverable	Water	3005A	
400-127141-9 - RA	FD-02	Total Recoverable	Water	3005A	
400-127141-10 - RA	EB-02	Total Recoverable	Water	3005A	
400-127141-10	EB-02	Total Recoverable	Water	3005A	
400-127141-11	FB-02	Total Recoverable	Water	3005A	
400-127141-11 - RA	FB-02	Total Recoverable	Water	3005A	
400-127141-12	MW-19	Total Recoverable	Water	3005A	
400-127141-12 - RA	MW-19	Total Recoverable	Water	3005A	
MB 400-323204/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-323204/2-A ^1	Lab Control Sample	Total Recoverable	Water	3005A	
400-127141-1 MS	MW-11	Total Recoverable	Water	3005A	
400-127141-1 MS - RA	MW-11	Total Recoverable	Water	3005A	
400-127141-1 MSD - RA	MW-11	Total Recoverable	Water	3005A	
400-127141-1 MSD	MW-11	Total Recoverable	Water	3005A	

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Metals (Continued)

Analysis Batch: 323375

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127141-1	MW-11	Total/NA	Water	7470A	322785
400-127141-2	MW-12	Total/NA	Water	7470A	322785
400-127141-3	MW-13	Total/NA	Water	7470A	322785
400-127141-4	MW-14	Total/NA	Water	7470A	322785
400-127141-5	MW-15	Total/NA	Water	7470A	322785
400-127141-6	MW-16	Total/NA	Water	7470A	322785
400-127141-7	MW-17	Total/NA	Water	7470A	322785
400-127141-8	MW-18	Total/NA	Water	7470A	322785
400-127141-9	FD-02	Total/NA	Water	7470A	322785
400-127141-10	EB-02	Total/NA	Water	7470A	322785
400-127141-11	FB-02	Total/NA	Water	7470A	322785
400-127141-12	MW-19	Total/NA	Water	7470A	322785
MB 400-322785/14-A	Method Blank	Total/NA	Water	7470A	322785
LCS 400-322785/15-A	Lab Control Sample	Total/NA	Water	7470A	322785
400-127183-B-1-B MS	Matrix Spike	Total/NA	Water	7470A	322785
400-127183-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	322785

Analysis Batch: 324742

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127141-1	MW-11	Total Recoverable	Water	6020	323204
400-127141-2	MW-12	Total Recoverable	Water	6020	323204
400-127141-3	MW-13	Total Recoverable	Water	6020	323204
400-127141-4	MW-14	Total Recoverable	Water	6020	323204
400-127141-5	MW-15	Total Recoverable	Water	6020	323204
400-127141-6	MW-16	Total Recoverable	Water	6020	323204
400-127141-7	MW-17	Total Recoverable	Water	6020	323204
400-127141-8	MW-18	Total Recoverable	Water	6020	323204
400-127141-9	FD-02	Total Recoverable	Water	6020	323204
400-127141-10	EB-02	Total Recoverable	Water	6020	323204
400-127141-11	FB-02	Total Recoverable	Water	6020	323204
400-127141-12	MW-19	Total Recoverable	Water	6020	323204
MB 400-323204/1-A ^5	Method Blank	Total Recoverable	Water	6020	323204
LCS 400-323204/2-A ^1	Lab Control Sample	Total Recoverable	Water	6020	323204
400-127141-1 MS	MW-11	Total Recoverable	Water	6020	323204
400-127141-1 MSD	MW-11	Total Recoverable	Water	6020	323204

Analysis Batch: 325201

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127141-1 - RA	MW-11	Total Recoverable	Water	6020	323204
400-127141-2 - RA	MW-12	Total Recoverable	Water	6020	323204
400-127141-3 - RA	MW-13	Total Recoverable	Water	6020	323204
400-127141-4 - RA	MW-14	Total Recoverable	Water	6020	323204
400-127141-5 - RA	MW-15	Total Recoverable	Water	6020	323204
400-127141-6 - RA	MW-16	Total Recoverable	Water	6020	323204
400-127141-7 - RA	MW-17	Total Recoverable	Water	6020	323204
400-127141-8 - RA	MW-18	Total Recoverable	Water	6020	323204
400-127141-9 - RA	FD-02	Total Recoverable	Water	6020	323204
400-127141-10 - RA	EB-02	Total Recoverable	Water	6020	323204
400-127141-11 - RA	FB-02	Total Recoverable	Water	6020	323204
400-127141-12 - RA	MW-19	Total Recoverable	Water	6020	323204
MB 400-323204/1-A ^5	Method Blank	Total Recoverable	Water	6020	323204

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Metals (Continued)

Analysis Batch: 325201 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-323204/2-A ^1	Lab Control Sample	Total Recoverable	Water	6020	323204
400-127141-1 MS - RA	MW-11	Total Recoverable	Water	6020	323204
400-127141-1 MSD - RA	MW-11	Total Recoverable	Water	6020	323204

General Chemistry

Analysis Batch: 322911

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127141-1	MW-11	Total/NA	Water	SM 2540C	
400-127141-4	MW-14	Total/NA	Water	SM 2540C	
400-127141-5	MW-15	Total/NA	Water	SM 2540C	
400-127141-7	MW-17	Total/NA	Water	SM 2540C	
400-127141-8	MW-18	Total/NA	Water	SM 2540C	
400-127141-9	FD-02	Total/NA	Water	SM 2540C	
400-127141-12	MW-19	Total/NA	Water	SM 2540C	
MB 400-322911/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-322911/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-126926-A-7 DU	Duplicate	Total/NA	Water	SM 2540C	
400-127090-D-3 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 323021

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127141-2	MW-12	Total/NA	Water	SM 2540C	
400-127141-3	MW-13	Total/NA	Water	SM 2540C	
400-127141-6	MW-16	Total/NA	Water	SM 2540C	
400-127141-10	EB-02	Total/NA	Water	SM 2540C	
400-127141-11	FB-02	Total/NA	Water	SM 2540C	
MB 400-323021/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-323021/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-127140-A-5 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 325706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127141-1	MW-11	Total/NA	Water	SM 4500 CI- E	
400-127141-2	MW-12	Total/NA	Water	SM 4500 CI- E	
400-127141-3	MW-13	Total/NA	Water	SM 4500 CI- E	
400-127141-4	MW-14	Total/NA	Water	SM 4500 CI- E	
400-127141-5	MW-15	Total/NA	Water	SM 4500 CI- E	
400-127141-6	MW-16	Total/NA	Water	SM 4500 CI- E	
400-127141-7	MW-17	Total/NA	Water	SM 4500 CI- E	
400-127141-8	MW-18	Total/NA	Water	SM 4500 CI- E	
400-127141-9	FD-02	Total/NA	Water	SM 4500 CI- E	
400-127141-10	EB-02	Total/NA	Water	SM 4500 CI- E	
400-127141-11	FB-02	Total/NA	Water	SM 4500 CI- E	
400-127141-12	MW-19	Total/NA	Water	SM 4500 CI- E	
MB 400-325706/6	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 400-325706/7	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
MRL 400-325706/3	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
400-127140-A-1 MS	Matrix Spike	Total/NA	Water	SM 4500 CI- E	
400-127140-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CI- E	

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

General Chemistry (Continued)

Analysis Batch: 325707

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127141-1	MW-11	Total/NA	Water	SM 4500 SO4 E	
400-127141-2	MW-12	Total/NA	Water	SM 4500 SO4 E	
400-127141-3	MW-13	Total/NA	Water	SM 4500 SO4 E	
400-127141-4	MW-14	Total/NA	Water	SM 4500 SO4 E	
400-127141-5	MW-15	Total/NA	Water	SM 4500 SO4 E	
400-127141-6	MW-16	Total/NA	Water	SM 4500 SO4 E	
400-127141-7	MW-17	Total/NA	Water	SM 4500 SO4 E	
400-127141-8	MW-18	Total/NA	Water	SM 4500 SO4 E	
400-127141-9	FD-02	Total/NA	Water	SM 4500 SO4 E	
400-127141-10	EB-02	Total/NA	Water	SM 4500 SO4 E	
400-127141-11	FB-02	Total/NA	Water	SM 4500 SO4 E	
400-127141-12	MW-19	Total/NA	Water	SM 4500 SO4 E	
MB 400-325707/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-325707/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-325707/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-127140-A-1 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-127140-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 325992

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127141-1	MW-11	Total/NA	Water	SM 4500 F C	
400-127141-2	MW-12	Total/NA	Water	SM 4500 F C	
400-127141-3	MW-13	Total/NA	Water	SM 4500 F C	
400-127141-4	MW-14	Total/NA	Water	SM 4500 F C	
400-127141-5	MW-15	Total/NA	Water	SM 4500 F C	
400-127141-7	MW-17	Total/NA	Water	SM 4500 F C	
400-127141-8	MW-18	Total/NA	Water	SM 4500 F C	
400-127141-9	FD-02	Total/NA	Water	SM 4500 F C	
400-127141-12	MW-19	Total/NA	Water	SM 4500 F C	
MB 400-325992/5	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-325992/6	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-127559-C-10 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-127559-C-10 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-127142-A-3 DU	Duplicate	Total/NA	Water	SM 4500 F C	

Analysis Batch: 326000

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127141-6	MW-16	Total/NA	Water	SM 4500 F C	
400-127141-10	EB-02	Total/NA	Water	SM 4500 F C	
400-127141-11	FB-02	Total/NA	Water	SM 4500 F C	
MB 400-326000/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-326000/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-127141-6 MS	MW-16	Total/NA	Water	SM 4500 F C	
400-127141-6 MSD	MW-16	Total/NA	Water	SM 4500 F C	
400-127142-A-9 DU	Duplicate	Total/NA	Water	SM 4500 F C	

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Field Service / Mobile Lab

Analysis Batch: 326108

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127141-1	MW-11	Total/NA	Water	Field Sampling	
400-127141-2	MW-12	Total/NA	Water	Field Sampling	
400-127141-3	MW-13	Total/NA	Water	Field Sampling	
400-127141-4	MW-14	Total/NA	Water	Field Sampling	
400-127141-5	MW-15	Total/NA	Water	Field Sampling	
400-127141-6	MW-16	Total/NA	Water	Field Sampling	
400-127141-7	MW-17	Total/NA	Water	Field Sampling	
400-127141-8	MW-18	Total/NA	Water	Field Sampling	
400-127141-9	FD-02	Total/NA	Water	Field Sampling	
400-127141-12	MW-19	Total/NA	Water	Field Sampling	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-323204/1-A ^5
Matrix: Water
Analysis Batch: 324742

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 323204

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		09/26/16 12:33	09/28/16 13:46	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		09/26/16 12:33	09/28/16 13:46	5
Barium	<0.00049		0.0025	0.00049	mg/L		09/26/16 12:33	09/28/16 13:46	5
Boron	<0.021		0.050	0.021	mg/L		09/26/16 12:33	09/28/16 13:46	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/28/16 13:46	5
Calcium	<0.13		0.25	0.13	mg/L		09/26/16 12:33	09/28/16 13:46	5
Chromium	<0.0011		0.0025	0.0011	mg/L		09/26/16 12:33	09/28/16 13:46	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		09/26/16 12:33	09/28/16 13:46	5
Lead	<0.00035		0.0013	0.00035	mg/L		09/26/16 12:33	09/28/16 13:46	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		09/26/16 12:33	09/28/16 13:46	5
Thallium	<0.000085		0.00050	0.000085	mg/L		09/26/16 12:33	09/28/16 13:46	5

Lab Sample ID: MB 400-323204/1-A ^5
Matrix: Water
Analysis Batch: 325201

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 323204

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Beryllium	<0.00034		0.0025	0.00034	mg/L		09/26/16 12:33	09/30/16 16:47	5
Lithium	<0.0032		0.0050	0.0032	mg/L		09/26/16 12:33	09/30/16 16:47	5
Selenium	<0.00024		0.0013	0.00024	mg/L		09/26/16 12:33	09/30/16 16:47	5

Lab Sample ID: LCS 400-323204/2-A ^1
Matrix: Water
Analysis Batch: 324742

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 323204

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0524		mg/L		105	80 - 120
Arsenic	0.0500	0.0513		mg/L		103	80 - 120
Barium	0.0500	0.0477		mg/L		95	80 - 120
Boron	0.100	0.0932		mg/L		93	80 - 120
Cadmium	0.0500	0.0508		mg/L		102	80 - 120
Calcium	5.00	4.83		mg/L		97	80 - 120
Chromium	0.0500	0.0496		mg/L		99	80 - 120
Cobalt	0.0500	0.0489		mg/L		98	80 - 120
Lead	0.0500	0.0482		mg/L		96	80 - 120
Molybdenum	0.0500	0.0495		mg/L		99	80 - 120
Thallium	0.0100	0.0100		mg/L		100	80 - 120

Lab Sample ID: LCS 400-323204/2-A ^1
Matrix: Water
Analysis Batch: 325201

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 323204

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Beryllium	0.0500	0.0449		mg/L		90	80 - 120
Lithium	0.0500	0.0495		mg/L		99	80 - 120
Selenium	0.0500	0.0495		mg/L		99	80 - 120

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 400-127141-1 MS

Matrix: Water

Analysis Batch: 324742

Client Sample ID: MW-11

Prep Type: Total Recoverable

Prep Batch: 323204

Analyte	Sample	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec.		
	Result			Result	Qualifier				Limits	RPD	Limit
Antimony	<0.0010		0.0500	0.0553		mg/L		111	75 - 125		
Arsenic	<0.00046		0.0500	0.0550		mg/L		110	75 - 125		
Barium	0.075		0.0500	0.126		mg/L		103	75 - 125		
Boron	<0.021		0.100	0.113		mg/L		113	75 - 125		
Cadmium	<0.00034		0.0500	0.0528		mg/L		106	75 - 125		
Calcium	2.0		5.00	7.22		mg/L		104	75 - 125		
Chromium	<0.0011		0.0500	0.0527		mg/L		105	75 - 125		
Cobalt	0.0053		0.0500	0.0583		mg/L		106	75 - 125		
Lead	<0.00035		0.0500	0.0498		mg/L		100	75 - 125		
Molybdenum	<0.00085		0.0500	0.0533		mg/L		107	75 - 125		
Selenium	<0.00024 *		0.0500	0.0536		mg/L		107	75 - 125		
Thallium	<0.00085		0.0100	0.0104		mg/L		104	75 - 125		

Lab Sample ID: 400-127141-1 MSD

Matrix: Water

Analysis Batch: 324742

Client Sample ID: MW-11

Prep Type: Total Recoverable

Prep Batch: 323204

Analyte	Sample	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec.		RPD	Limit
	Result			Result	Qualifier				Limits	RPD		
Antimony	<0.0010		0.0500	0.0533		mg/L		107	75 - 125	4	20	
Arsenic	<0.00046		0.0500	0.0546		mg/L		109	75 - 125	1	20	
Barium	0.075		0.0500	0.124		mg/L		98	75 - 125	2	20	
Boron	<0.021		0.100	0.108		mg/L		108	75 - 125	4	20	
Cadmium	<0.00034		0.0500	0.0521		mg/L		104	75 - 125	1	20	
Calcium	2.0		5.00	7.15		mg/L		102	75 - 125	1	20	
Chromium	<0.0011		0.0500	0.0530		mg/L		106	75 - 125	0	20	
Cobalt	0.0053		0.0500	0.0575		mg/L		104	75 - 125	1	20	
Lead	<0.00035		0.0500	0.0491		mg/L		98	75 - 125	1	20	
Molybdenum	<0.00085		0.0500	0.0514		mg/L		103	75 - 125	4	20	
Selenium	<0.00024 *		0.0500	0.0536		mg/L		107	75 - 125	0	20	
Thallium	<0.00085		0.0100	0.0103		mg/L		103	75 - 125	2	20	

Method: 6020 - Metals (ICP/MS) - RA

Lab Sample ID: 400-127141-1 MS

Matrix: Water

Analysis Batch: 325201

Client Sample ID: MW-11

Prep Type: Total Recoverable

Prep Batch: 323204

Analyte	Sample	Sample Qualifier	Spike Added	MS		Unit	D	%Rec	%Rec.	
	Result			Result	Qualifier				Limits	
Beryllium - RA	<0.00034		0.0500	0.0490		mg/L		98	75 - 125	
Lithium - RA	0.0034	J	0.0500	0.0572		mg/L		108	75 - 125	
Selenium - RA	<0.00024		0.0500	0.0517		mg/L		103	75 - 125	

Lab Sample ID: 400-127141-1 MSD

Matrix: Water

Analysis Batch: 325201

Client Sample ID: MW-11

Prep Type: Total Recoverable

Prep Batch: 323204

Analyte	Sample	Sample Qualifier	Spike Added	MSD		Unit	D	%Rec	%Rec.		RPD	Limit
	Result			Result	Qualifier				Limits	RPD		
Beryllium - RA	<0.00034		0.0500	0.0467		mg/L		93	75 - 125	5	20	

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Method: 6020 - Metals (ICP/MS) - RA (Continued)

Lab Sample ID: 400-127141-1 MSD
Matrix: Water
Analysis Batch: 325201

Client Sample ID: MW-11
Prep Type: Total Recoverable
Prep Batch: 323204

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Lithium - RA	0.0034	J	0.0500	0.0547		mg/L		103	75 - 125	4	20
Selenium - RA	<0.00024		0.0500	0.0516		mg/L		103	75 - 125	0	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-322785/14-A
Matrix: Water
Analysis Batch: 323375

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 322785

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		09/15/16 15:15	09/20/16 11:39	1

Lab Sample ID: LCS 400-322785/15-A
Matrix: Water
Analysis Batch: 323375

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 322785

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00101	0.00106		mg/L		105	80 - 120

Lab Sample ID: 400-127183-B-1-B MS
Matrix: Water
Analysis Batch: 323375

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 322785

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.000070		0.00201	0.00213		mg/L		106	80 - 120

Lab Sample ID: 400-127183-B-1-C MSD
Matrix: Water
Analysis Batch: 323375

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 322785

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.000070		0.00201	0.00204		mg/L		101	80 - 120	4	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 400-322911/1
Matrix: Water
Analysis Batch: 322911

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			09/16/16 16:50	1

Lab Sample ID: LCS 400-322911/2
Matrix: Water
Analysis Batch: 322911

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	258		mg/L		88	78 - 122

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: 400-126926-A-7 DU
Matrix: Water
Analysis Batch: 322911

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	5200		5230		mg/L		0.6	5

Lab Sample ID: 400-127090-D-3 DU
Matrix: Water
Analysis Batch: 322911

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	150		152		mg/L		0	5

Lab Sample ID: MB 400-323021/1
Matrix: Water
Analysis Batch: 323021

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			09/17/16 17:44	1

Lab Sample ID: LCS 400-323021/2
Matrix: Water
Analysis Batch: 323021

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	296		mg/L		101	78 - 122

Lab Sample ID: 400-127140-A-5 DU
Matrix: Water
Analysis Batch: 323021

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	92		92.0		mg/L		0	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-325706/6
Matrix: Water
Analysis Batch: 325706

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			10/06/16 13:41	1

Lab Sample ID: LCS 400-325706/7
Matrix: Water
Analysis Batch: 325706

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	30.1		mg/L		100	90 - 110

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: MRL 400-325706/3
Matrix: Water
Analysis Batch: 325706

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	1.21	J	mg/L		60	50 - 150

Lab Sample ID: 400-127140-A-1 MS
Matrix: Water
Analysis Batch: 325706

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	4.8	F1	10.0	17.4	F1	mg/L		125	73 - 120

Lab Sample ID: 400-127140-A-1 MSD
Matrix: Water
Analysis Batch: 325706

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	4.8	F1	10.0	17.0	F1	mg/L		122	73 - 120	2	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-325992/5
Matrix: Water
Analysis Batch: 325992

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			10/09/16 13:28	1

Lab Sample ID: LCS 400-325992/6
Matrix: Water
Analysis Batch: 325992

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	4.09		mg/L		102	90 - 110

Lab Sample ID: 400-127559-C-10 MS
Matrix: Water
Analysis Batch: 325992

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	1.08		mg/L		104	75 - 125

Lab Sample ID: 400-127559-C-10 MSD
Matrix: Water
Analysis Batch: 325992

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	1.06		mg/L		102	75 - 125	2	4

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: 400-127142-A-3 DU
Matrix: Water
Analysis Batch: 325992

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 400-326000/3
Matrix: Water
Analysis Batch: 326000

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			10/09/16 15:25	1

Lab Sample ID: LCS 400-326000/4
Matrix: Water
Analysis Batch: 326000

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	4.17		mg/L		104	90 - 110

Lab Sample ID: 400-127141-6 MS
Matrix: Water
Analysis Batch: 326000

Client Sample ID: MW-16
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	1.04		mg/L		104	75 - 125

Lab Sample ID: 400-127141-6 MSD
Matrix: Water
Analysis Batch: 326000

Client Sample ID: MW-16
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	1.01		mg/L		101	75 - 125	3	4

Lab Sample ID: 400-127142-A-9 DU
Matrix: Water
Analysis Batch: 326000

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 400-325707/6
Matrix: Water
Analysis Batch: 325707

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			10/06/16 13:43	1

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: LCS 400-325707/7
Matrix: Water
Analysis Batch: 325707

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	14.3		mg/L		95	90 - 110

Lab Sample ID: MRL 400-325707/3
Matrix: Water
Analysis Batch: 325707

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	4.71	J	mg/L		94	50 - 150

Lab Sample ID: 400-127140-A-1 MS
Matrix: Water
Analysis Batch: 325707

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	<1.4		10.0	10.1		mg/L		101	77 - 128

Lab Sample ID: 400-127140-A-1 MSD
Matrix: Water
Analysis Batch: 325707

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	<1.4		10.0	10.1		mg/L		101	77 - 128	0	5

Chain of Custody Record

Client Information Client Contact: Mr. Cale Sellers Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: 205-992-7762(Tel) Email: CBSSELLER@SOUTHERNCO.COM Project Name: CCR -Plant Daniel Site: NAMU		Lab PIV: Whitnire, Cheyenne R E-Mail: cheyenne.whitnire@testamericainc.com Carrier Tracking No(s): COC No: 400-55446-23825.2 Page: 2-2 Job #:	
Due Date Requested: TAT Requested (days): PO #: Purchase Order not required WO #: Project #: 40006621 SSO#:		Analysis Requested Field Sampling Parameters Mercury 6020 - Sb,As,Ba,Bi,Cd,Cr,Cu,Pb,LI,Mo,Se,Tl,7470A - SM4500, Cl, E - Chloride, SM4500, SO4, E - Sulfate, 2640 - 9315, Ra226, 9320, Ra228, Ra228Ra228, GPPC Perform MS/MD (Yes or No)	
Sample Identification MW-12 MW-13 MW-14 MW-15 MW-16 MW-17 MW-18		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Matrix (W=Water, S=Soil, O=Water/Oil, I=Ice, T=TPD, A=Aspirator) Sample Type (C=Comp, G=grab) Sample Time 9/12/16 1520 G Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Special Instructions/Note: Total Number of Containers:	
Deliverable Requested: I, II, III, IV, Other (specify)		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Empty Kit Relinquished by: <i>W. Sellers</i> Relinquished by: <i>W. Sellers</i> Relinquished by: <i>W. Sellers</i> Relinquished by:		Method of Shipment: Date/Time: 9/14/16 0819 Date/Time: Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks: Date/Time: 09/14/16 0819 Company:	



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-127141-1

SDG Number: NAMU

Login Number: 127141

List Number: 1

Creator: Siddoway, Benjamin

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6°C , 1.7°C , 2.2°C IR-6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-1
SDG: NAMU

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-17
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	07-31-16 *
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-16
Louisiana	NELAP	6	30976	06-30-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-16
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-17
Rhode Island	State Program	1	LAO00307	12-30-16
South Carolina	State Program	4	96026	06-30-16 *
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17

* Certification renewal pending - certification considered valid.

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-127141-2

TestAmerica Sample Delivery Group: NAMU

Client Project/Site: CCR -Plant Daniel

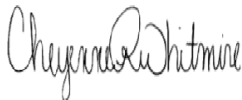
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:

10/20/2016 3:03:06 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

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

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

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

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Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
SDG: NAMU

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

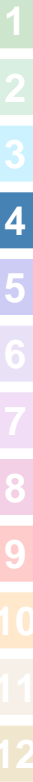


Sample Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
SDG: NAMU

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-127141-1	MW-11	Water	09/12/16 10:49	09/14/16 08:19
400-127141-2	MW-12	Water	09/13/16 06:44	09/14/16 08:19
400-127141-3	MW-13	Water	09/13/16 07:40	09/14/16 08:19
400-127141-4	MW-14	Water	09/12/16 09:15	09/14/16 08:19
400-127141-5	MW-15	Water	09/12/16 08:36	09/14/16 08:19
400-127141-6	MW-16	Water	09/13/16 08:31	09/14/16 08:19
400-127141-7	MW-17	Water	09/12/16 13:42	09/14/16 08:19
400-127141-8	MW-18	Water	09/12/16 12:40	09/14/16 08:19
400-127141-9	FD-02	Water	09/12/16 08:15	09/14/16 08:19
400-127141-10	EB-02	Water	09/13/16 08:40	09/14/16 08:19
400-127141-11	FB-02	Water	09/13/16 07:50	09/14/16 08:19
400-127141-12	MW-19	Water	09/12/16 15:20	09/14/16 08:19



Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
SDG: NAMU

Client Sample ID: MW-11
Date Collected: 09/12/16 10:49
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-1
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	0.287		0.0896	0.0933	1.00	0.0922	pCi/L	09/23/16 18:22	10/18/16 06:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		40 - 110					09/23/16 18:22	10/18/16 06:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.437		0.239	0.242	1.00	0.356	pCi/L	09/23/16 20:52	10/12/16 13:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.3		40 - 110					09/23/16 20:52	10/12/16 13:22	1
Y Carrier	89.3		40 - 110					09/23/16 20:52	10/12/16 13:22	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.724		0.255	0.259	5.00	0.356	pCi/L		10/20/16 09:46	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
SDG: NAMU

Client Sample ID: MW-12
Date Collected: 09/13/16 06:44
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-2
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	0.535		0.119	0.128	1.00	0.103	pCi/L	09/23/16 18:22	10/18/16 06:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					09/23/16 18:22	10/18/16 06:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.12		0.323	0.339	1.00	0.422	pCi/L	09/23/16 20:52	10/12/16 13:22	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.3		40 - 110					09/23/16 20:52	10/12/16 13:22	1
Y Carrier	89.7		40 - 110					09/23/16 20:52	10/12/16 13:22	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.65		0.344	0.362	5.00	0.422	pCi/L		10/20/16 09:46	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
SDG: NAMU

Client Sample ID: MW-13
Date Collected: 09/13/16 07:40
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-3
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	0.384		0.0990	0.105	1.00	0.0831	pCi/L	09/23/16 18:22	10/18/16 06:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					09/23/16 18:22	10/18/16 06:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.766		0.277	0.285	1.00	0.379	pCi/L	09/23/16 20:52	10/12/16 13:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.4		40 - 110					09/23/16 20:52	10/12/16 13:32	1
Y Carrier	89.0		40 - 110					09/23/16 20:52	10/12/16 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	1.15		0.294	0.304	5.00	0.379	pCi/L		10/20/16 09:46	1

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
 SDG: NAMU

Client Sample ID: MW-14
Date Collected: 09/12/16 09:15
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-4
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	0.424		0.114	0.120	1.00	0.120	pCi/L	09/23/16 18:22	10/18/16 06:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					09/23/16 18:22	10/18/16 06:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.712		0.256	0.264	1.00	0.342	pCi/L	09/23/16 20:52	10/12/16 13:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.9		40 - 110					09/23/16 20:52	10/12/16 13:32	1
Y Carrier	90.1		40 - 110					09/23/16 20:52	10/12/16 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	1.14		0.280	0.290	5.00	0.342	pCi/L		10/20/16 09:46	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
SDG: NAMU

Client Sample ID: MW-15
Date Collected: 09/12/16 08:36
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-5
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	0.326		0.0904	0.0951	1.00	0.0828	pCi/L	09/23/16 18:22	10/18/16 06:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.7		40 - 110					09/23/16 18:22	10/18/16 06:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.454		0.223	0.227	1.00	0.321	pCi/L	09/23/16 20:52	10/12/16 13:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.7		40 - 110					09/23/16 20:52	10/12/16 13:32	1
Y Carrier	87.9		40 - 110					09/23/16 20:52	10/12/16 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	0.780		0.240	0.246	5.00	0.321	pCi/L		10/20/16 09:46	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
SDG: NAMU

Client Sample ID: MW-16
Date Collected: 09/13/16 08:31
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-6
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	0.271		0.0837	0.0872	1.00	0.0803	pCi/L	09/23/16 18:22	10/18/16 06:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.2		40 - 110					09/23/16 18:22	10/18/16 06:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.652		0.296	0.302	1.00	0.434	pCi/L	09/23/16 20:52	10/12/16 13:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.2		40 - 110					09/23/16 20:52	10/12/16 13:32	1
Y Carrier	84.9		40 - 110					09/23/16 20:52	10/12/16 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	0.923		0.308	0.314	5.00	0.434	pCi/L		10/20/16 09:46	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
SDG: NAMU

Client Sample ID: MW-17
Date Collected: 09/12/16 13:42
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-7
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	0.210		0.0858	0.0879	1.00	0.0963	pCi/L	09/23/16 18:22	10/18/16 06:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.2		40 - 110					09/23/16 18:22	10/18/16 06:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.349		0.224	0.226	1.00	0.341	pCi/L	09/23/16 20:52	10/12/16 13:32	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.2		40 - 110					09/23/16 20:52	10/12/16 13:32	1
Y Carrier	86.0		40 - 110					09/23/16 20:52	10/12/16 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	0.558		0.240	0.243	5.00	0.341	pCi/L		10/20/16 09:46	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
SDG: NAMU

Client Sample ID: MW-18
Date Collected: 09/12/16 12:40
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-8
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	0.434		0.103	0.110	1.00	0.0777	pCi/L	09/23/16 18:22	10/18/16 06:58	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					09/23/16 18:22	10/18/16 06:58	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.460		0.249	0.253	1.00	0.370	pCi/L	09/23/16 20:52	10/12/16 13:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					09/23/16 20:52	10/12/16 13:33	1
Y Carrier	89.0		40 - 110					09/23/16 20:52	10/12/16 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	0.894		0.270	0.276	5.00	0.370	pCi/L		10/20/16 09:46	1

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
 SDG: NAMU

Client Sample ID: FD-02
Date Collected: 09/12/16 08:15
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-9
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	0.611		0.119	0.131	1.00	0.0884	pCi/L	09/23/16 18:22	10/18/16 06:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.3		40 - 110					09/23/16 18:22	10/18/16 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	0.159	U	0.222	0.222	1.00	0.370	pCi/L	09/23/16 20:52	10/12/16 13:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	98.3		40 - 110					09/23/16 20:52	10/12/16 13:33	1
Y Carrier	87.5		40 - 110					09/23/16 20:52	10/12/16 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	0.770		0.252	0.258	5.00	0.370	pCi/L		10/20/16 09:46	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
SDG: NAMU

Client Sample ID: EB-02
Date Collected: 09/13/16 08:40
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-10
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	0.0639	U	0.0688	0.0690	1.00	0.112	pCi/L	09/23/16 18:22	10/18/16 06:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					09/23/16 18:22	10/18/16 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	0.431		0.244	0.247	1.00	0.367	pCi/L	09/23/16 20:52	10/12/16 13:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.2		40 - 110					09/23/16 20:52	10/12/16 13:33	1
Y Carrier	92.0		40 - 110					09/23/16 20:52	10/12/16 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	0.495		0.253	0.256	5.00	0.367	pCi/L		10/20/16 09:46	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
SDG: NAMU

Client Sample ID: FB-02
Date Collected: 09/13/16 07:50
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-11
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	0.0143	U	0.0519	0.0519	1.00	0.0960	pCi/L	09/23/16 18:22	10/18/16 06:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.7		40 - 110					09/23/16 18:22	10/18/16 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	0.469		0.250	0.254	1.00	0.373	pCi/L	09/23/16 20:52	10/12/16 13:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.7		40 - 110					09/23/16 20:52	10/12/16 13:33	1
Y Carrier	89.3		40 - 110					09/23/16 20:52	10/12/16 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	0.483		0.255	0.259	5.00	0.373	pCi/L		10/20/16 09:46	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
SDG: NAMU

Client Sample ID: MW-19
Date Collected: 09/12/16 15:20
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-12
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	0.207		0.0917	0.0935	1.00	0.121	pCi/L	09/23/16 20:07	10/18/16 06:59	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.6		40 - 110					09/23/16 20:07	10/18/16 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	0.313	U	0.235	0.236	1.00	0.369	pCi/L	09/23/16 20:52	10/12/16 13:33	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	96.3		40 - 110					09/23/16 20:52	10/12/16 13:33	1
Y Carrier	88.6		40 - 110					09/23/16 20:52	10/12/16 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	0.520		0.252	0.254	5.00	0.369	pCi/L		10/20/16 09:46	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
SDG: NAMU

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

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
SDG: NAMU

Client Sample ID: MW-11
Date Collected: 09/12/16 10:49
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			271447	09/23/16 18:22	MCJ	TAL SL
Total/NA	Analysis	9315		1	274964	10/18/16 06:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			271449	09/23/16 20:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	274191	10/12/16 13:22	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275238	10/20/16 09:46	RTM	TAL SL

Client Sample ID: MW-12
Date Collected: 09/13/16 06:44
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			271447	09/23/16 18:22	MCJ	TAL SL
Total/NA	Analysis	9315		1	274964	10/18/16 06:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			271449	09/23/16 20:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	274191	10/12/16 13:22	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275238	10/20/16 09:46	RTM	TAL SL

Client Sample ID: MW-13
Date Collected: 09/13/16 07:40
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			271447	09/23/16 18:22	MCJ	TAL SL
Total/NA	Analysis	9315		1	274964	10/18/16 06:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			271449	09/23/16 20:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	274195	10/12/16 13:32	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275238	10/20/16 09:46	RTM	TAL SL

Client Sample ID: MW-14
Date Collected: 09/12/16 09:15
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			271447	09/23/16 18:22	MCJ	TAL SL
Total/NA	Analysis	9315		1	274964	10/18/16 06:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			271449	09/23/16 20:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	274195	10/12/16 13:32	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275238	10/20/16 09:46	RTM	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
SDG: NAMU

Client Sample ID: MW-15

Date Collected: 09/12/16 08:36

Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			271447	09/23/16 18:22	MCJ	TAL SL
Total/NA	Analysis	9315		1	274964	10/18/16 06:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			271449	09/23/16 20:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	274195	10/12/16 13:32	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275238	10/20/16 09:46	RTM	TAL SL

Client Sample ID: MW-16

Date Collected: 09/13/16 08:31

Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			271447	09/23/16 18:22	MCJ	TAL SL
Total/NA	Analysis	9315		1	274964	10/18/16 06:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			271449	09/23/16 20:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	274195	10/12/16 13:32	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275238	10/20/16 09:46	RTM	TAL SL

Client Sample ID: MW-17

Date Collected: 09/12/16 13:42

Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			271447	09/23/16 18:22	MCJ	TAL SL
Total/NA	Analysis	9315		1	274964	10/18/16 06:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			271449	09/23/16 20:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	274195	10/12/16 13:32	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275238	10/20/16 09:46	RTM	TAL SL

Client Sample ID: MW-18

Date Collected: 09/12/16 12:40

Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			271447	09/23/16 18:22	MCJ	TAL SL
Total/NA	Analysis	9315		1	274964	10/18/16 06:58	RTM	TAL SL
Total/NA	Prep	PrecSep_0			271449	09/23/16 20:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	274195	10/12/16 13:33	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275238	10/20/16 09:46	RTM	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
SDG: NAMU

Client Sample ID: FD-02
Date Collected: 09/12/16 08:15
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			271447	09/23/16 18:22	MCJ	TAL SL
Total/NA	Analysis	9315		1	274964	10/18/16 06:59	RTM	TAL SL
Total/NA	Prep	PrecSep_0			271449	09/23/16 20:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	274195	10/12/16 13:33	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275238	10/20/16 09:46	RTM	TAL SL

Client Sample ID: EB-02
Date Collected: 09/13/16 08:40
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			271447	09/23/16 18:22	MCJ	TAL SL
Total/NA	Analysis	9315		1	274964	10/18/16 06:59	RTM	TAL SL
Total/NA	Prep	PrecSep_0			271449	09/23/16 20:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	274195	10/12/16 13:33	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275238	10/20/16 09:46	RTM	TAL SL

Client Sample ID: FB-02
Date Collected: 09/13/16 07:50
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			271447	09/23/16 18:22	MCJ	TAL SL
Total/NA	Analysis	9315		1	274964	10/18/16 06:59	RTM	TAL SL
Total/NA	Prep	PrecSep_0			271449	09/23/16 20:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	274195	10/12/16 13:33	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275238	10/20/16 09:46	RTM	TAL SL

Client Sample ID: MW-19
Date Collected: 09/12/16 15:20
Date Received: 09/14/16 08:19

Lab Sample ID: 400-127141-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			271447	09/23/16 20:07	MCJ	TAL SL
Total/NA	Analysis	9315		1	274964	10/18/16 06:59	RTM	TAL SL
Total/NA	Prep	PrecSep_0			271449	09/23/16 20:52	MCJ	TAL SL
Total/NA	Analysis	9320		1	274195	10/12/16 13:33	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	275238	10/20/16 09:46	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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
SDG: NAMU

Rad

Prep Batch: 271447

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127141-1	MW-11	Total/NA	Water	PrecSep-21	
400-127141-2	MW-12	Total/NA	Water	PrecSep-21	
400-127141-3	MW-13	Total/NA	Water	PrecSep-21	
400-127141-4	MW-14	Total/NA	Water	PrecSep-21	
400-127141-5	MW-15	Total/NA	Water	PrecSep-21	
400-127141-6	MW-16	Total/NA	Water	PrecSep-21	
400-127141-7	MW-17	Total/NA	Water	PrecSep-21	
400-127141-8	MW-18	Total/NA	Water	PrecSep-21	
400-127141-9	FD-02	Total/NA	Water	PrecSep-21	
400-127141-10	EB-02	Total/NA	Water	PrecSep-21	
400-127141-11	FB-02	Total/NA	Water	PrecSep-21	
400-127141-12	MW-19	Total/NA	Water	PrecSep-21	
MB 160-271447/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-271447/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
490-111758-A-9-E MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	
490-111758-B-9-B MS	Matrix Spike	Total/NA	Water	PrecSep-21	

Prep Batch: 271449

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-127141-1	MW-11	Total/NA	Water	PrecSep_0	
400-127141-2	MW-12	Total/NA	Water	PrecSep_0	
400-127141-3	MW-13	Total/NA	Water	PrecSep_0	
400-127141-4	MW-14	Total/NA	Water	PrecSep_0	
400-127141-5	MW-15	Total/NA	Water	PrecSep_0	
400-127141-6	MW-16	Total/NA	Water	PrecSep_0	
400-127141-7	MW-17	Total/NA	Water	PrecSep_0	
400-127141-8	MW-18	Total/NA	Water	PrecSep_0	
400-127141-9	FD-02	Total/NA	Water	PrecSep_0	
400-127141-10	EB-02	Total/NA	Water	PrecSep_0	
400-127141-11	FB-02	Total/NA	Water	PrecSep_0	
400-127141-12	MW-19	Total/NA	Water	PrecSep_0	
MB 160-271449/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-271449/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
490-111758-A-9-D MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	
490-111758-B-9-C MS	Matrix Spike	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
SDG: NAMU

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-271447/1-A
Matrix: Water
Analysis Batch: 274963

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 271447

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.008449	U	0.0527	0.0527	1.00	0.0997	pCi/L	09/23/16 18:22	10/18/16 06:54	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					09/23/16 18:22	10/18/16 06:54	1

Lab Sample ID: LCS 160-271447/2-A
Matrix: Water
Analysis Batch: 274963

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 271447

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	11.1	14.81		1.44	1.00	0.0819	pCi/L	133	68 - 137
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	92.0		40 - 110						

Lab Sample ID: 490-111758-A-9-E MSD
Matrix: Water
Analysis Batch: 274963

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 271447

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	0.293		11.1	13.76		1.35	1.00	0.0964	pCi/L	121	75 - 138	0.14	1
Carrier	MSD %Yield	MSD Qualifier	Limits										
Ba Carrier	94.0		40 - 110										

Lab Sample ID: 490-111758-B-9-B MS
Matrix: Water
Analysis Batch: 274963

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 271447

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	0.293		11.1	13.38		1.32	1.00	0.0875	pCi/L	118	75 - 138
Carrier	MS %Yield	MS Qualifier	Limits								
Ba Carrier	91.2		40 - 110								

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
SDG: NAMU

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-271449/1-A
Matrix: Water
Analysis Batch: 274191

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 271449

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.4223	U	0.310	0.312	1.00	0.490	pCi/L	09/23/16 20:52	10/12/16 13:19	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					09/23/16 20:52	10/12/16 13:19	1
Y Carrier	86.0		40 - 110					09/23/16 20:52	10/12/16 13:19	1

Lab Sample ID: LCS 160-271449/2-A
Matrix: Water
Analysis Batch: 274191

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 271449

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	14.4	17.62		1.86	1.00	0.419	pCi/L	122	56 - 140
Carrier	%Yield	Qualifier	Limits						
Ba Carrier	92.0		40 - 110						
Y Carrier	86.0		40 - 110						

Lab Sample ID: 490-111758-A-9-D MSD
Matrix: Water
Analysis Batch: 274191

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 271449

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	0.469		14.4	17.26		1.83	1.00	0.455	pCi/L	116	45 - 150	0.10	1
Carrier	%Yield	Qualifier	Limits										
Ba Carrier	94.0		40 - 110										
Y Carrier	84.5		40 - 110										

Lab Sample ID: 490-111758-B-9-C MS
Matrix: Water
Analysis Batch: 274191

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 271449

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	0.469		14.4	17.64		1.87	1.00	0.409	pCi/L	119	45 - 150
Carrier	%Yield	Qualifier	Limits								
Ba Carrier	91.2		40 - 110								
Y Carrier	84.1		40 - 110								

Chain of Custody Record

Client Information Client Contact: Mr. Cale Sellers Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: 205-992-7762(Tel) Email: CBSSELLER@SOUTHERNCO.COM Project Name: CCR -Plant Daniel Site: NAMU		Lab PVI: Whitnire, Cheyenne R E-Mail: cheyenne.whitnire@testamericainc.com		Carrier Tracking No(s): COC No: 400-55446-23825.2 Page: 1-2 Job #: 1-2	
Due Date Requested: TAT Requested (days): PO #: Purchase Order not required WO #: Project #: 40006621 SSOW#:		Analysis Requested Field Sampling Parameters Mercury 6020 - Sb, As, Ba, Be, Cd, Cr, Co, Pb, Li, Mo, Se, Ti, 7470A - 5M4500_C, E - Chloride, 5M4500_SO4_F - Sulfate, 2640C - 9316_Ra226, 9320_Ra228, Ra226Ra228_GFPC Performance/MS/MSD (Yes or No) Field Filtered Sample (Yes or No)			
Sample Identification Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (W=water, S=solid, O=wastewater, BT=tissue, A=air) Preservation Code: MW-11 MW-12 MW-13 MW-14 MW-15 MW-16 MW-17 MW-18 Dup - 02 EO Blank-02 FB-Blank-02		Total Number of Containers Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2OAS Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 X - EDTA L - EDA Other: Special Instructions/Note: 400-127141 COC			
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months			
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:			
Empty Kit Relinquished by: Relinquished by: Relinquished by: Relinquished by:		Method of Shipment: Date/Time: Date/Time: Date/Time: Date/Time: 09/14/16 0819 Company: TA Company: TA Company: TA			
Custody Seal No.: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks: 1.7°C, 2.2°C, 1.6°C, IRC			



Chain of Custody Record

Client Information Client Contact: Brent Swales Mr. Cale Sellers Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: 205-992-7762(Tel) Email: CBSSELLER@SOUTHERNCO.COM Project Name: CCR -Plant Daniel Site: NAMU		Lab PIV: Whitnire, Cheyenne R E-Mail: cheyenne.whitnire@testamericainc.com Carrier Tracking No(s): COC No: 400-55446-23825.2 Page: 2-2 Job #:	
Due Date Requested: TAT Requested (days): PO #: Purchase Order not required WO #:		Analysis Requested Field Sampling Parameters Mercury 6020 Sb,As,Ba,Bi,Cd,Cr,Cu,Pb,LI,Mo,Se,Tl,7470A - SM4500, Cl, E - Chloride, SM4500, SO4, E - Sulfate, 2640 - 9315, Ra226, 9320, Ra228, Ra228Ra228, GPPC Perform MS/MD (Yes or No)	
Sample Identification MW-12 MW-13 MW-14 MW-15 MW-16 MW-17 MW-18		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> YES Matrix (W=Water, S=Soil, O=Water/Oil, I=Ice, T=TSN, A=Air) Sample Type (C=Comp, G=grab) G Sample Time 1520 Sample Date 9/12/16 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-Na2SO3, S-H2SO4, T-TSP Dodecahydrate, U-Acetone, V-MCAA, W-ph 4-5, X-EDA, Z-other (specify)	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/Note: Total Number of Containers:	
Empty Kit Relinquished by: [Signature] Relinquished by: [Signature] Relinquished by: [Signature]		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Date/Time: 9/14/16 0819 Date/Time: Date/Time:		Method of Shipment: Date/Time: Date/Time: Date/Time: 09/14/16 0819 Company: [Signature]	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:	



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-127141-2

SDG Number: NAMU

Login Number: 127141

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.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.6°C , 1.7°C , 2.2°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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
SDG: NAMU

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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-127141-2
SDG: NAMU

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.

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: 400-130406-1

TestAmerica Sample Delivery Group: NAMU

Client Project/Site: CCR -Plant Daniel

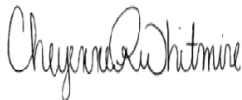
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:

1/3/2017 2:10:52 PM

Cheyenne Whitmire, Project Manager II

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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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Job ID: 400-130406-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-130406-1

General Chemistry

Method(s) SM 4500 Cl- E: The method blank for analytical batch 334236 contained Chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) SM 4500 Cl- E: The method blank for analytical batch 334307 contained Chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) SM 4500 Cl- E: The method blank for analytical batch 335036 contained Chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) SM 4500 SO4 E: Due to the high concentration of Sulfate, the matrix spike / matrix spike duplicate (MS/MSD) for analytical batch 334308 could not be evaluated for accuracy and precision. The associated laboratory control sample (LCS) met acceptance criteria.



Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Client Sample ID: MW-11

Lab Sample ID: 400-130406-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0011	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.082		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.00045	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Calcium	2.0		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0017	J	0.0025	0.0011	mg/L	5		6020	Total Recoverable
Cobalt	0.0061		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lead	0.00089	J	0.0013	0.00035	mg/L	5		6020	Total Recoverable
Lithium	0.0038	J	0.0050	0.0032	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	82		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	14	B	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	5.4		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.65				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-12

Lab Sample ID: 400-130406-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.16		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.00059	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Boron	0.031	J	0.050	0.021	mg/L	5		6020	Total Recoverable
Cobalt	0.0031		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lead	0.00037	J	0.0013	0.00035	mg/L	5		6020	Total Recoverable
Lithium	0.0048	J	0.0050	0.0032	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	50		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	17	B	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.24		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	11		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	3.87				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-13

Lab Sample ID: 400-130406-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.10		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.29		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0014	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0047	J	0.0050	0.0032	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	36		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	12	B	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Client Sample ID: MW-13 (Continued)

Lab Sample ID: 400-130406-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	5.7		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.41				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-14

Lab Sample ID: 400-130406-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.095		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	4.8		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0014	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	76		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	12	B	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	1.7	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	5.05				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-15

Lab Sample ID: 400-130406-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.056		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.3		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0013	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	44		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	8.9	B	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.46				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-16

Lab Sample ID: 400-130406-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.034		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.75		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0010	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	20		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	7.3	B	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.6				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-17

Lab Sample ID: 400-130406-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00091	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.038		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.0		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0010	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Client Sample ID: MW-17 (Continued)

Lab Sample ID: 400-130406-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	16		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	8.2	B	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	1.5	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.82				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-18

Lab Sample ID: 400-130406-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.051		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.41		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00099	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	10		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	8.5	B	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	4.2	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.52				SU	1		Field Sampling	Total/NA

Client Sample ID: DUP-02

Lab Sample ID: 400-130406-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.034		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.44		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00086	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	8.0		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	6.8	B	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: EB-02

Lab Sample ID: 400-130406-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.2	J B	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: FB-02

Lab Sample ID: 400-130406-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	1.3	J B	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: MW-19

Lab Sample ID: 400-130406-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.0016		0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.032		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.68		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00058	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	14		5.0	3.4	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
 SDG: NAMU

Client Sample ID: MW-19 (Continued)

Lab Sample ID: 400-130406-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	6.3	B	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	5.14				SU	1		Field Sampling	Total/NA

Client Sample ID: DUP-03

Lab Sample ID: 400-130406-13

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00054	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.051		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.77		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0011	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	24		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	8.6	B	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	4.7	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola



Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
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
Field Sampling	Field Sampling	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-130406-1	MW-11	Water	11/18/16 15:16	11/19/16 10:09
400-130406-2	MW-12	Water	11/18/16 08:31	11/19/16 10:09
400-130406-3	MW-13	Water	11/18/16 07:43	11/19/16 10:09
400-130406-4	MW-14	Water	11/19/16 07:12	11/19/16 10:09
400-130406-5	MW-15	Water	11/19/16 08:01	11/19/16 10:09
400-130406-6	MW-16	Water	11/17/16 14:23	11/19/16 10:09
400-130406-7	MW-17	Water	11/18/16 10:36	11/19/16 10:09
400-130406-8	MW-18	Water	11/18/16 11:21	11/19/16 10:09
400-130406-9	DUP-02	Water	11/17/16 13:23	11/19/16 10:09
400-130406-10	EB-02	Water	11/19/16 07:20	11/19/16 10:09
400-130406-11	FB-02	Water	11/19/16 08:10	11/19/16 10:09
400-130406-12	MW-19	Water	11/18/16 09:19	11/19/16 10:09
400-130406-13	DUP-03	Water	11/18/16 10:21	11/19/16 10:09

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Client Sample ID: MW-11
Date Collected: 11/18/16 15:16
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-1
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		11/22/16 13:05	11/25/16 17:19	5
Arsenic	0.0011	J	0.0013	0.00046	mg/L		11/22/16 13:05	11/25/16 17:19	5
Barium	0.082		0.0025	0.00049	mg/L		11/22/16 13:05	11/25/16 17:19	5
Beryllium	0.00045	J	0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 17:19	5
Boron	<0.021		0.050	0.021	mg/L		11/22/16 13:05	11/25/16 17:19	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 17:19	5
Calcium	2.0		0.25	0.13	mg/L		11/22/16 13:05	11/25/16 17:19	5
Chromium	0.0017	J	0.0025	0.0011	mg/L		11/22/16 13:05	11/25/16 17:19	5
Cobalt	0.0061		0.0025	0.00040	mg/L		11/22/16 13:05	11/25/16 17:19	5
Lead	0.00089	J	0.0013	0.00035	mg/L		11/22/16 13:05	11/25/16 17:19	5
Lithium	0.0038	J	0.0050	0.0032	mg/L		11/22/16 13:05	11/25/16 17:19	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		11/22/16 13:05	11/25/16 17:19	5
Selenium	<0.00024		0.0013	0.00024	mg/L		11/22/16 13:05	11/25/16 17:19	5
Thallium	<0.000085		0.00050	0.000085	mg/L		11/22/16 13:05	11/25/16 17:19	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		12/01/16 09:16	12/05/16 14:07	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	82		5.0	3.4	mg/L			11/23/16 17:05	1
Chloride	14	B	2.0	0.60	mg/L			12/14/16 11:54	1
Fluoride	<0.032		0.10	0.032	mg/L			12/08/16 14:34	1
Sulfate	5.4		5.0	1.4	mg/L			12/14/16 11:47	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.65				SU			11/18/16 15:16	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Client Sample ID: MW-12
Date Collected: 11/18/16 08:31
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-2
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		11/22/16 13:05	11/25/16 17:23	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		11/22/16 13:05	11/25/16 17:23	5
Barium	0.16		0.0025	0.00049	mg/L		11/22/16 13:05	11/25/16 17:23	5
Beryllium	0.00059	J	0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 17:23	5
Boron	0.031	J	0.050	0.021	mg/L		11/22/16 13:05	11/25/16 17:23	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 17:23	5
Calcium	<0.13		0.25	0.13	mg/L		11/22/16 13:05	11/25/16 17:23	5
Chromium	<0.0011		0.0025	0.0011	mg/L		11/22/16 13:05	11/25/16 17:23	5
Cobalt	0.0031		0.0025	0.00040	mg/L		11/22/16 13:05	11/25/16 17:23	5
Lead	0.00037	J	0.0013	0.00035	mg/L		11/22/16 13:05	11/25/16 17:23	5
Lithium	0.0048	J	0.0050	0.0032	mg/L		11/22/16 13:05	11/25/16 17:23	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		11/22/16 13:05	11/25/16 17:23	5
Selenium	<0.00024		0.0013	0.00024	mg/L		11/22/16 13:05	11/25/16 17:23	5
Thallium	<0.000085		0.00050	0.000085	mg/L		11/22/16 13:05	11/25/16 17:23	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		12/01/16 09:16	12/05/16 14:11	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	50		5.0	3.4	mg/L			11/23/16 15:39	1
Chloride	17	B	2.0	0.60	mg/L			12/14/16 11:54	1
Fluoride	0.24		0.10	0.032	mg/L			12/08/16 14:49	1
Sulfate	11		5.0	1.4	mg/L			12/14/16 11:47	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	3.87				SU			11/18/16 08:31	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Client Sample ID: MW-13
Date Collected: 11/18/16 07:43
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-3
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		11/22/16 13:05	11/25/16 17:28	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		11/22/16 13:05	11/25/16 17:28	5
Barium	0.10		0.0025	0.00049	mg/L		11/22/16 13:05	11/25/16 17:28	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 17:28	5
Boron	<0.021		0.050	0.021	mg/L		11/22/16 13:05	11/25/16 17:28	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 17:28	5
Calcium	0.29		0.25	0.13	mg/L		11/22/16 13:05	11/25/16 17:28	5
Chromium	<0.0011		0.0025	0.0011	mg/L		11/22/16 13:05	11/25/16 17:28	5
Cobalt	0.0014	J	0.0025	0.00040	mg/L		11/22/16 13:05	11/25/16 17:28	5
Lead	<0.00035		0.0013	0.00035	mg/L		11/22/16 13:05	11/25/16 17:28	5
Lithium	0.0047	J	0.0050	0.0032	mg/L		11/22/16 13:05	11/25/16 17:28	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		11/22/16 13:05	11/25/16 17:28	5
Selenium	<0.00024		0.0013	0.00024	mg/L		11/22/16 13:05	11/25/16 17:28	5
Thallium	<0.000085		0.00050	0.000085	mg/L		11/22/16 13:05	11/25/16 17:28	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		12/01/16 09:16	12/05/16 14:12	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	36		5.0	3.4	mg/L			11/23/16 15:39	1
Chloride	12	B	2.0	0.60	mg/L			12/14/16 11:54	1
Fluoride	<0.032		0.10	0.032	mg/L			12/08/16 14:52	1
Sulfate	5.7		5.0	1.4	mg/L			12/14/16 11:47	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.41				SU			11/18/16 07:43	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Client Sample ID: MW-14
Date Collected: 11/19/16 07:12
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-4
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		11/22/16 13:05	11/25/16 17:32	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		11/22/16 13:05	11/25/16 17:32	5
Barium	0.095		0.0025	0.00049	mg/L		11/22/16 13:05	11/25/16 17:32	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 17:32	5
Boron	<0.021		0.050	0.021	mg/L		11/22/16 13:05	11/25/16 17:32	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 17:32	5
Calcium	4.8		0.25	0.13	mg/L		11/22/16 13:05	11/25/16 17:32	5
Chromium	<0.0011		0.0025	0.0011	mg/L		11/22/16 13:05	11/25/16 17:32	5
Cobalt	0.0014	J	0.0025	0.00040	mg/L		11/22/16 13:05	11/25/16 17:32	5
Lead	<0.00035		0.0013	0.00035	mg/L		11/22/16 13:05	11/25/16 17:32	5
Lithium	<0.0032		0.0050	0.0032	mg/L		11/22/16 13:05	11/25/16 17:32	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		11/22/16 13:05	11/25/16 17:32	5
Selenium	<0.00024		0.0013	0.00024	mg/L		11/22/16 13:05	11/25/16 17:32	5
Thallium	<0.000085		0.00050	0.000085	mg/L		11/22/16 13:05	11/25/16 17:32	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		12/01/16 09:16	12/05/16 14:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	76		5.0	3.4	mg/L			11/23/16 17:05	1
Chloride	12	B	2.0	0.60	mg/L			12/14/16 11:54	1
Fluoride	<0.032		0.10	0.032	mg/L			12/08/16 14:54	1
Sulfate	1.7	J	5.0	1.4	mg/L			12/14/16 11:47	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.05				SU			11/19/16 07:12	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Client Sample ID: MW-15
Date Collected: 11/19/16 08:01
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-5
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		11/22/16 13:05	11/25/16 17:37	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		11/22/16 13:05	11/25/16 17:37	5
Barium	0.056		0.0025	0.00049	mg/L		11/22/16 13:05	11/25/16 17:37	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 17:37	5
Boron	<0.021		0.050	0.021	mg/L		11/22/16 13:05	11/25/16 17:37	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 17:37	5
Calcium	1.3		0.25	0.13	mg/L		11/22/16 13:05	11/25/16 17:37	5
Chromium	<0.0011		0.0025	0.0011	mg/L		11/22/16 13:05	11/25/16 17:37	5
Cobalt	0.0013	J	0.0025	0.00040	mg/L		11/22/16 13:05	11/25/16 17:37	5
Lead	<0.00035		0.0013	0.00035	mg/L		11/22/16 13:05	11/25/16 17:37	5
Lithium	<0.0032		0.0050	0.0032	mg/L		11/22/16 13:05	11/25/16 17:37	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		11/22/16 13:05	11/25/16 17:37	5
Selenium	<0.00024		0.0013	0.00024	mg/L		11/22/16 13:05	11/25/16 17:37	5
Thallium	<0.000085		0.00050	0.000085	mg/L		11/22/16 13:05	11/25/16 17:37	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		12/01/16 09:16	12/05/16 14:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	44		5.0	3.4	mg/L			11/23/16 17:05	1
Chloride	8.9	B	2.0	0.60	mg/L			12/08/16 14:54	1
Fluoride	<0.032		0.10	0.032	mg/L			12/08/16 14:56	1
Sulfate	<1.4		5.0	1.4	mg/L			12/08/16 15:00	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.46				SU			11/19/16 08:01	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Client Sample ID: MW-16
Date Collected: 11/17/16 14:23
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-6
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		11/22/16 13:05	11/25/16 17:41	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		11/22/16 13:05	11/25/16 17:41	5
Barium	0.034		0.0025	0.00049	mg/L		11/22/16 13:05	11/25/16 17:41	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 17:41	5
Boron	<0.021		0.050	0.021	mg/L		11/22/16 13:05	11/25/16 17:41	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 17:41	5
Calcium	0.75		0.25	0.13	mg/L		11/22/16 13:05	11/25/16 17:41	5
Chromium	<0.0011		0.0025	0.0011	mg/L		11/22/16 13:05	11/25/16 17:41	5
Cobalt	0.0010	J	0.0025	0.00040	mg/L		11/22/16 13:05	11/25/16 17:41	5
Lead	<0.00035		0.0013	0.00035	mg/L		11/22/16 13:05	11/25/16 17:41	5
Lithium	<0.0032		0.0050	0.0032	mg/L		11/22/16 13:05	11/25/16 17:41	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		11/22/16 13:05	11/25/16 17:41	5
Selenium	<0.00024		0.0013	0.00024	mg/L		11/22/16 13:05	11/25/16 17:41	5
Thallium	<0.000085		0.00050	0.000085	mg/L		11/22/16 13:05	11/25/16 17:41	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		12/01/16 09:16	12/05/16 14:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	20		5.0	3.4	mg/L			11/23/16 15:39	1
Chloride	7.3	B	2.0	0.60	mg/L			12/08/16 14:54	1
Fluoride	<0.032		0.10	0.032	mg/L			12/08/16 15:03	1
Sulfate	<1.4		5.0	1.4	mg/L			12/08/16 15:00	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.6				SU			11/17/16 14:23	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Client Sample ID: MW-17
Date Collected: 11/18/16 10:36
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-7
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		11/22/16 13:05	11/25/16 17:46	5
Arsenic	0.00091	J	0.0013	0.00046	mg/L		11/22/16 13:05	11/25/16 17:46	5
Barium	0.038		0.0025	0.00049	mg/L		11/22/16 13:05	11/25/16 17:46	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 17:46	5
Boron	<0.021		0.050	0.021	mg/L		11/22/16 13:05	11/25/16 17:46	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 17:46	5
Calcium	1.0		0.25	0.13	mg/L		11/22/16 13:05	11/25/16 17:46	5
Chromium	<0.0011		0.0025	0.0011	mg/L		11/22/16 13:05	11/25/16 17:46	5
Cobalt	0.0010	J	0.0025	0.00040	mg/L		11/22/16 13:05	11/25/16 17:46	5
Lead	<0.00035		0.0013	0.00035	mg/L		11/22/16 13:05	11/25/16 17:46	5
Lithium	<0.0032		0.0050	0.0032	mg/L		11/22/16 13:05	11/25/16 17:46	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		11/22/16 13:05	11/25/16 17:46	5
Selenium	<0.00024		0.0013	0.00024	mg/L		11/22/16 13:05	11/25/16 17:46	5
Thallium	<0.000085		0.00050	0.000085	mg/L		11/22/16 13:05	11/25/16 17:46	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		12/01/16 09:16	12/05/16 14:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	16		5.0	3.4	mg/L			11/23/16 15:39	1
Chloride	8.2	B	2.0	0.60	mg/L			12/08/16 14:54	1
Fluoride	<0.032		0.10	0.032	mg/L			12/08/16 15:08	1
Sulfate	1.5	J	5.0	1.4	mg/L			12/08/16 15:00	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.82				SU			11/18/16 10:36	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Client Sample ID: MW-18
Date Collected: 11/18/16 11:21
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-8
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		11/22/16 13:05	11/25/16 18:13	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		11/22/16 13:05	11/25/16 18:13	5
Barium	0.051		0.0025	0.00049	mg/L		11/22/16 13:05	11/25/16 18:13	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 18:13	5
Boron	<0.021		0.050	0.021	mg/L		11/22/16 13:05	11/25/16 18:13	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 18:13	5
Calcium	0.41		0.25	0.13	mg/L		11/22/16 13:05	11/25/16 18:13	5
Chromium	<0.0011		0.0025	0.0011	mg/L		11/22/16 13:05	11/25/16 18:13	5
Cobalt	0.00099	J	0.0025	0.00040	mg/L		11/22/16 13:05	11/25/16 18:13	5
Lead	<0.00035		0.0013	0.00035	mg/L		11/22/16 13:05	11/25/16 18:13	5
Lithium	<0.0032		0.0050	0.0032	mg/L		11/22/16 13:05	11/25/16 18:13	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		11/22/16 13:05	11/25/16 18:13	5
Selenium	<0.00024		0.0013	0.00024	mg/L		11/22/16 13:05	11/25/16 18:13	5
Thallium	<0.000085		0.00050	0.000085	mg/L		11/22/16 13:05	11/25/16 18:13	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		12/01/16 09:16	12/05/16 14:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	10		5.0	3.4	mg/L			11/23/16 15:39	1
Chloride	8.5	B	2.0	0.60	mg/L			12/08/16 14:54	1
Fluoride	<0.032		0.10	0.032	mg/L			12/08/16 15:11	1
Sulfate	4.2	J	5.0	1.4	mg/L			12/08/16 15:00	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.52				SU			11/18/16 11:21	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Client Sample ID: DUP-02
Date Collected: 11/17/16 13:23
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-9
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		11/22/16 13:05	11/25/16 18:17	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		11/22/16 13:05	11/25/16 18:17	5
Barium	0.034		0.0025	0.00049	mg/L		11/22/16 13:05	11/25/16 18:17	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 18:17	5
Boron	<0.021		0.050	0.021	mg/L		11/22/16 13:05	11/25/16 18:17	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 18:17	5
Calcium	0.44		0.25	0.13	mg/L		11/22/16 13:05	11/25/16 18:17	5
Chromium	<0.0011		0.0025	0.0011	mg/L		11/22/16 13:05	11/25/16 18:17	5
Cobalt	0.00086	J	0.0025	0.00040	mg/L		11/22/16 13:05	11/25/16 18:17	5
Lead	<0.00035		0.0013	0.00035	mg/L		11/22/16 13:05	11/25/16 18:17	5
Lithium	<0.0032		0.0050	0.0032	mg/L		11/22/16 13:05	11/25/16 18:17	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		11/22/16 13:05	11/25/16 18:17	5
Selenium	<0.00024		0.0013	0.00024	mg/L		11/22/16 13:05	11/25/16 18:17	5
Thallium	<0.000085		0.00050	0.000085	mg/L		11/22/16 13:05	11/25/16 18:17	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		12/01/16 09:16	12/05/16 14:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	8.0		5.0	3.4	mg/L			11/23/16 15:39	1
Chloride	6.8	B	2.0	0.60	mg/L			12/08/16 10:13	1
Fluoride	<0.032		0.10	0.032	mg/L			12/08/16 15:14	1
Sulfate	<1.4		5.0	1.4	mg/L			12/08/16 15:00	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Client Sample ID: EB-02
Date Collected: 11/19/16 07:20
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-10
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		11/22/16 13:05	11/25/16 18:22	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		11/22/16 13:05	11/25/16 18:22	5
Barium	<0.00049		0.0025	0.00049	mg/L		11/22/16 13:05	11/25/16 18:22	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 18:22	5
Boron	<0.021		0.050	0.021	mg/L		11/22/16 13:05	11/25/16 18:22	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 18:22	5
Chromium	<0.0011		0.0025	0.0011	mg/L		11/22/16 13:05	11/25/16 18:22	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		11/22/16 13:05	11/25/16 18:22	5
Lead	<0.00035		0.0013	0.00035	mg/L		11/22/16 13:05	11/25/16 18:22	5
Lithium	<0.0032		0.0050	0.0032	mg/L		11/22/16 13:05	11/25/16 18:22	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		11/22/16 13:05	11/25/16 18:22	5
Selenium	<0.00024		0.0013	0.00024	mg/L		11/22/16 13:05	11/25/16 18:22	5
Thallium	<0.000085		0.00050	0.000085	mg/L		11/22/16 13:05	11/25/16 18:22	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.13		0.25	0.13	mg/L		11/22/16 13:05	11/28/16 12:10	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		12/01/16 09:16	12/05/16 14:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			11/23/16 17:05	1
Chloride	1.2	J B	2.0	0.60	mg/L			12/14/16 11:54	1
Fluoride	<0.032		0.10	0.032	mg/L			12/08/16 15:17	1
Sulfate	<1.4		5.0	1.4	mg/L			12/14/16 11:47	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Client Sample ID: FB-02
Date Collected: 11/19/16 08:10
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-11
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		11/22/16 13:05	11/25/16 18:26	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		11/22/16 13:05	11/25/16 18:26	5
Barium	<0.00049		0.0025	0.00049	mg/L		11/22/16 13:05	11/25/16 18:26	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 18:26	5
Boron	<0.021		0.050	0.021	mg/L		11/22/16 13:05	11/25/16 18:26	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 18:26	5
Chromium	<0.0011		0.0025	0.0011	mg/L		11/22/16 13:05	11/25/16 18:26	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		11/22/16 13:05	11/25/16 18:26	5
Lead	<0.00035		0.0013	0.00035	mg/L		11/22/16 13:05	11/25/16 18:26	5
Lithium	<0.0032		0.0050	0.0032	mg/L		11/22/16 13:05	11/25/16 18:26	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		11/22/16 13:05	11/25/16 18:26	5
Selenium	<0.00024		0.0013	0.00024	mg/L		11/22/16 13:05	11/25/16 18:26	5
Thallium	<0.000085		0.00050	0.000085	mg/L		11/22/16 13:05	11/25/16 18:26	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.13		0.25	0.13	mg/L		11/22/16 13:05	11/28/16 12:15	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		11/30/16 10:17	12/01/16 14:30	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			11/23/16 17:05	1
Chloride	1.3	J B	2.0	0.60	mg/L			12/14/16 11:54	1
Fluoride	<0.032		0.10	0.032	mg/L			12/08/16 15:20	1
Sulfate	<1.4		5.0	1.4	mg/L			12/14/16 11:47	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Client Sample ID: MW-19
Date Collected: 11/18/16 09:19
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-12
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		11/23/16 08:20	11/25/16 18:44	5
Arsenic	0.0016		0.0013	0.00046	mg/L		11/23/16 08:20	11/25/16 18:44	5
Barium	0.032		0.0025	0.00049	mg/L		11/23/16 08:20	11/25/16 18:44	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		11/23/16 08:20	11/25/16 18:44	5
Boron	<0.021		0.050	0.021	mg/L		11/23/16 08:20	11/25/16 18:44	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		11/23/16 08:20	11/25/16 18:44	5
Calcium	0.68		0.25	0.13	mg/L		11/23/16 08:20	11/25/16 18:44	5
Chromium	<0.0011		0.0025	0.0011	mg/L		11/23/16 08:20	11/25/16 18:44	5
Cobalt	0.00058	J	0.0025	0.00040	mg/L		11/23/16 08:20	11/25/16 18:44	5
Lead	<0.00035		0.0013	0.00035	mg/L		11/23/16 08:20	11/25/16 18:44	5
Lithium	<0.0032		0.0050	0.0032	mg/L		11/23/16 08:20	11/25/16 18:44	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		11/23/16 08:20	11/25/16 18:44	5
Selenium	<0.00024		0.0013	0.00024	mg/L		11/23/16 08:20	11/25/16 18:44	5
Thallium	<0.000085		0.00050	0.000085	mg/L		11/23/16 08:20	11/25/16 18:44	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		11/30/16 10:17	12/01/16 14:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	14		5.0	3.4	mg/L			11/23/16 15:39	1
Chloride	6.3	B	2.0	0.60	mg/L			12/14/16 11:54	1
Fluoride	<0.032		0.10	0.032	mg/L			12/08/16 15:22	1
Sulfate	<1.4		5.0	1.4	mg/L			12/14/16 11:47	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.14				SU			11/18/16 09:19	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Client Sample ID: DUP-03

Date Collected: 11/18/16 10:21

Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-13

Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		11/23/16 08:20	11/25/16 18:49	5
Arsenic	0.00054	J	0.0013	0.00046	mg/L		11/23/16 08:20	11/25/16 18:49	5
Barium	0.051		0.0025	0.00049	mg/L		11/23/16 08:20	11/25/16 18:49	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		11/23/16 08:20	11/25/16 18:49	5
Boron	<0.021		0.050	0.021	mg/L		11/23/16 08:20	11/25/16 18:49	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		11/23/16 08:20	11/25/16 18:49	5
Calcium	0.77		0.25	0.13	mg/L		11/23/16 08:20	11/25/16 18:49	5
Chromium	<0.0011		0.0025	0.0011	mg/L		11/23/16 08:20	11/25/16 18:49	5
Cobalt	0.0011	J	0.0025	0.00040	mg/L		11/23/16 08:20	11/25/16 18:49	5
Lead	<0.00035		0.0013	0.00035	mg/L		11/23/16 08:20	11/25/16 18:49	5
Lithium	<0.0032		0.0050	0.0032	mg/L		11/23/16 08:20	11/25/16 18:49	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		11/23/16 08:20	11/25/16 18:49	5
Selenium	<0.00024		0.0013	0.00024	mg/L		11/23/16 08:20	11/25/16 18:49	5
Thallium	<0.000085		0.00050	0.000085	mg/L		11/23/16 08:20	11/25/16 18:49	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		11/30/16 10:17	12/01/16 14:33	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	24		5.0	3.4	mg/L			11/23/16 15:39	1
Chloride	8.6	B	2.0	0.60	mg/L			12/14/16 11:54	1
Fluoride	<0.032		0.10	0.032	mg/L			12/08/16 15:25	1
Sulfate	4.7	J	5.0	1.4	mg/L			12/14/16 11:47	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Qualifiers

Metals

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.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
F1	MS and/or MSD Recovery is outside acceptance limits.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Client Sample ID: MW-11

Date Collected: 11/18/16 15:16

Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			332156	11/22/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	332706	11/25/16 17:19	AJR	TAL PEN
Total/NA	Prep	7470A			333269	12/01/16 09:16	JAP	TAL PEN
Total/NA	Analysis	7470A		1	333750	12/05/16 14:07	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	332381	11/23/16 17:05	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	335036	12/14/16 11:54	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	334299	12/08/16 14:34	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	335039	12/14/16 11:47	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	337162	11/18/16 15:16	BWS	TAL PEN

Client Sample ID: MW-12

Date Collected: 11/18/16 08:31

Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			332156	11/22/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	332706	11/25/16 17:23	AJR	TAL PEN
Total/NA	Prep	7470A			333269	12/01/16 09:16	JAP	TAL PEN
Total/NA	Analysis	7470A		1	333750	12/05/16 14:11	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	332379	11/23/16 15:39	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	335036	12/14/16 11:54	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	334299	12/08/16 14:49	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	335039	12/14/16 11:47	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	337162	11/18/16 08:31	BWS	TAL PEN

Client Sample ID: MW-13

Date Collected: 11/18/16 07:43

Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			332156	11/22/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	332706	11/25/16 17:28	AJR	TAL PEN
Total/NA	Prep	7470A			333269	12/01/16 09:16	JAP	TAL PEN
Total/NA	Analysis	7470A		1	333750	12/05/16 14:12	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	332379	11/23/16 15:39	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	335036	12/14/16 11:54	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	334299	12/08/16 14:52	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	335039	12/14/16 11:47	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	337162	11/18/16 07:43	BWS	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Client Sample ID: MW-14

Date Collected: 11/19/16 07:12

Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			332156	11/22/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	332706	11/25/16 17:32	AJR	TAL PEN
Total/NA	Prep	7470A			333269	12/01/16 09:16	JAP	TAL PEN
Total/NA	Analysis	7470A		1	333750	12/05/16 14:14	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	332381	11/23/16 17:05	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	335036	12/14/16 11:54	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	334299	12/08/16 14:54	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	335039	12/14/16 11:47	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	337162	11/19/16 07:12	BWS	TAL PEN

Client Sample ID: MW-15

Date Collected: 11/19/16 08:01

Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			332156	11/22/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	332706	11/25/16 17:37	AJR	TAL PEN
Total/NA	Prep	7470A			333269	12/01/16 09:16	JAP	TAL PEN
Total/NA	Analysis	7470A		1	333750	12/05/16 14:15	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	332381	11/23/16 17:05	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	334307	12/08/16 14:54	SEH	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	334299	12/08/16 14:56	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	334308	12/08/16 15:00	SEH	TAL PEN
Total/NA	Analysis	Field Sampling		1	337162	11/19/16 08:01	BWS	TAL PEN

Client Sample ID: MW-16

Date Collected: 11/17/16 14:23

Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			332156	11/22/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	332706	11/25/16 17:41	AJR	TAL PEN
Total/NA	Prep	7470A			333269	12/01/16 09:16	JAP	TAL PEN
Total/NA	Analysis	7470A		1	333750	12/05/16 14:16	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	332379	11/23/16 15:39	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	334307	12/08/16 14:54	SEH	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	334299	12/08/16 15:03	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	334308	12/08/16 15:00	SEH	TAL PEN
Total/NA	Analysis	Field Sampling		1	337162	11/17/16 14:23	BWS	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Client Sample ID: MW-17

Date Collected: 11/18/16 10:36

Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			332156	11/22/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	332706	11/25/16 17:46	AJR	TAL PEN
Total/NA	Prep	7470A			333269	12/01/16 09:16	JAP	TAL PEN
Total/NA	Analysis	7470A		1	333750	12/05/16 14:17	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	332379	11/23/16 15:39	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	334307	12/08/16 14:54	SEH	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	334299	12/08/16 15:08	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	334308	12/08/16 15:00	SEH	TAL PEN
Total/NA	Analysis	Field Sampling		1	337162	11/18/16 10:36	BWS	TAL PEN

Client Sample ID: MW-18

Date Collected: 11/18/16 11:21

Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			332156	11/22/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	332706	11/25/16 18:13	AJR	TAL PEN
Total/NA	Prep	7470A			333269	12/01/16 09:16	JAP	TAL PEN
Total/NA	Analysis	7470A		1	333750	12/05/16 14:29	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	332379	11/23/16 15:39	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	334307	12/08/16 14:54	SEH	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	334299	12/08/16 15:11	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	334308	12/08/16 15:00	SEH	TAL PEN
Total/NA	Analysis	Field Sampling		1	337162	11/18/16 11:21	BWS	TAL PEN

Client Sample ID: DUP-02

Date Collected: 11/17/16 13:23

Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			332156	11/22/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	332706	11/25/16 18:17	AJR	TAL PEN
Total/NA	Prep	7470A			333269	12/01/16 09:16	JAP	TAL PEN
Total/NA	Analysis	7470A		1	333750	12/05/16 14:31	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	332379	11/23/16 15:39	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	334236	12/08/16 10:13	SEH	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	334299	12/08/16 15:14	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	334308	12/08/16 15:00	SEH	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Client Sample ID: EB-02

Lab Sample ID: 400-130406-10

Date Collected: 11/19/16 07:20

Matrix: Water

Date Received: 11/19/16 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			332156	11/22/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	332706	11/25/16 18:22	AJR	TAL PEN
Total Recoverable	Prep	3005A	RA		332156	11/22/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	332823	11/28/16 12:10	AJR	TAL PEN
Total/NA	Prep	7470A			333269	12/01/16 09:16	JAP	TAL PEN
Total/NA	Analysis	7470A		1	333750	12/05/16 14:32	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	332381	11/23/16 17:05	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	335036	12/14/16 11:54	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	334299	12/08/16 15:17	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	335039	12/14/16 11:47	BJB	TAL PEN

Client Sample ID: FB-02

Lab Sample ID: 400-130406-11

Date Collected: 11/19/16 08:10

Matrix: Water

Date Received: 11/19/16 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			332156	11/22/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	332706	11/25/16 18:26	AJR	TAL PEN
Total Recoverable	Prep	3005A	RA		332156	11/22/16 13:05	RJB	TAL PEN
Total Recoverable	Analysis	6020	RA	5	332823	11/28/16 12:15	AJR	TAL PEN
Total/NA	Prep	7470A			333102	11/30/16 10:17	JAP	TAL PEN
Total/NA	Analysis	7470A		1	333380	12/01/16 14:30	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	332381	11/23/16 17:05	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	335036	12/14/16 11:54	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	334299	12/08/16 15:20	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	335039	12/14/16 11:47	BJB	TAL PEN

Client Sample ID: MW-19

Lab Sample ID: 400-130406-12

Date Collected: 11/18/16 09:19

Matrix: Water

Date Received: 11/19/16 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			332162	11/23/16 08:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	332706	11/25/16 18:44	AJR	TAL PEN
Total/NA	Prep	7470A			333102	11/30/16 10:17	JAP	TAL PEN
Total/NA	Analysis	7470A		1	333380	12/01/16 14:32	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	332379	11/23/16 15:39	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	335036	12/14/16 11:54	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	334299	12/08/16 15:22	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	335039	12/14/16 11:47	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	337162	11/18/16 09:19	BWS	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Client Sample ID: DUP-03

Lab Sample ID: 400-130406-13

Date Collected: 11/18/16 10:21

Matrix: Water

Date Received: 11/19/16 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			332162	11/23/16 08:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	332706	11/25/16 18:49	AJR	TAL PEN
Total/NA	Prep	7470A			333102	11/30/16 10:17	JAP	TAL PEN
Total/NA	Analysis	7470A		1	333380	12/01/16 14:33	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	332379	11/23/16 15:39	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	335036	12/14/16 11:54	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	334299	12/08/16 15:25	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	335039	12/14/16 11:47	BJB	TAL PEN

Laboratory References:

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

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Metals

Prep Batch: 332156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130406-1	MW-11	Total Recoverable	Water	3005A	
400-130406-2	MW-12	Total Recoverable	Water	3005A	
400-130406-3	MW-13	Total Recoverable	Water	3005A	
400-130406-4	MW-14	Total Recoverable	Water	3005A	
400-130406-5	MW-15	Total Recoverable	Water	3005A	
400-130406-6	MW-16	Total Recoverable	Water	3005A	
400-130406-7	MW-17	Total Recoverable	Water	3005A	
400-130406-8	MW-18	Total Recoverable	Water	3005A	
400-130406-9	DUP-02	Total Recoverable	Water	3005A	
400-130406-10 - RA	EB-02	Total Recoverable	Water	3005A	
400-130406-10	EB-02	Total Recoverable	Water	3005A	
400-130406-11 - RA	FB-02	Total Recoverable	Water	3005A	
400-130406-11	FB-02	Total Recoverable	Water	3005A	
MB 400-332156/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-332156/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-130400-B-2-B MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-130400-B-2-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Prep Batch: 332162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130406-12	MW-19	Total Recoverable	Water	3005A	
400-130406-13	DUP-03	Total Recoverable	Water	3005A	
MB 400-332162/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-332162/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-130417-B-4-B MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-130417-B-4-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 332706

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130406-1	MW-11	Total Recoverable	Water	6020	332156
400-130406-2	MW-12	Total Recoverable	Water	6020	332156
400-130406-3	MW-13	Total Recoverable	Water	6020	332156
400-130406-4	MW-14	Total Recoverable	Water	6020	332156
400-130406-5	MW-15	Total Recoverable	Water	6020	332156
400-130406-6	MW-16	Total Recoverable	Water	6020	332156
400-130406-7	MW-17	Total Recoverable	Water	6020	332156
400-130406-8	MW-18	Total Recoverable	Water	6020	332156
400-130406-9	DUP-02	Total Recoverable	Water	6020	332156
400-130406-10	EB-02	Total Recoverable	Water	6020	332156
400-130406-11	FB-02	Total Recoverable	Water	6020	332156
400-130406-12	MW-19	Total Recoverable	Water	6020	332162
400-130406-13	DUP-03	Total Recoverable	Water	6020	332162
MB 400-332156/1-A ^5	Method Blank	Total Recoverable	Water	6020	332156
MB 400-332162/1-A ^5	Method Blank	Total Recoverable	Water	6020	332162
LCS 400-332156/2-A	Lab Control Sample	Total Recoverable	Water	6020	332156
LCS 400-332162/2-A	Lab Control Sample	Total Recoverable	Water	6020	332162
400-130400-B-2-B MS ^5	Matrix Spike	Total Recoverable	Water	6020	332156
400-130400-B-2-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	332156
400-130417-B-4-B MS ^5	Matrix Spike	Total Recoverable	Water	6020	332162
400-130417-B-4-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	332162

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
 SDG: NAMU

Metals (Continued)

Analysis Batch: 332823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130406-10 - RA	EB-02	Total Recoverable	Water	6020	332156
400-130406-11 - RA	FB-02	Total Recoverable	Water	6020	332156

Prep Batch: 333102

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130406-11	FB-02	Total/NA	Water	7470A	
400-130406-12	MW-19	Total/NA	Water	7470A	
400-130406-13	DUP-03	Total/NA	Water	7470A	
MB 400-333102/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-333102/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-130612-B-1-B MS	Matrix Spike	Total/NA	Water	7470A	
400-130612-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Prep Batch: 333269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130406-1	MW-11	Total/NA	Water	7470A	
400-130406-2	MW-12	Total/NA	Water	7470A	
400-130406-3	MW-13	Total/NA	Water	7470A	
400-130406-4	MW-14	Total/NA	Water	7470A	
400-130406-5	MW-15	Total/NA	Water	7470A	
400-130406-6	MW-16	Total/NA	Water	7470A	
400-130406-7	MW-17	Total/NA	Water	7470A	
400-130406-8	MW-18	Total/NA	Water	7470A	
400-130406-9	DUP-02	Total/NA	Water	7470A	
400-130406-10	EB-02	Total/NA	Water	7470A	
MB 400-333269/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-333269/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-130406-1 MS	MW-11	Total/NA	Water	7470A	
400-130406-1 MSD	MW-11	Total/NA	Water	7470A	

Analysis Batch: 333380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130406-11	FB-02	Total/NA	Water	7470A	333102
400-130406-12	MW-19	Total/NA	Water	7470A	333102
400-130406-13	DUP-03	Total/NA	Water	7470A	333102
MB 400-333102/14-A	Method Blank	Total/NA	Water	7470A	333102
LCS 400-333102/15-A	Lab Control Sample	Total/NA	Water	7470A	333102
400-130612-B-1-B MS	Matrix Spike	Total/NA	Water	7470A	333102
400-130612-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	333102

Analysis Batch: 333750

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130406-1	MW-11	Total/NA	Water	7470A	333269
400-130406-2	MW-12	Total/NA	Water	7470A	333269
400-130406-3	MW-13	Total/NA	Water	7470A	333269
400-130406-4	MW-14	Total/NA	Water	7470A	333269
400-130406-5	MW-15	Total/NA	Water	7470A	333269
400-130406-6	MW-16	Total/NA	Water	7470A	333269
400-130406-7	MW-17	Total/NA	Water	7470A	333269
400-130406-8	MW-18	Total/NA	Water	7470A	333269
400-130406-9	DUP-02	Total/NA	Water	7470A	333269

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Metals (Continued)

Analysis Batch: 333750 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130406-10	EB-02	Total/NA	Water	7470A	333269
MB 400-333269/14-A	Method Blank	Total/NA	Water	7470A	333269
LCS 400-333269/15-A	Lab Control Sample	Total/NA	Water	7470A	333269
400-130406-1 MS	MW-11	Total/NA	Water	7470A	333269
400-130406-1 MSD	MW-11	Total/NA	Water	7470A	333269

General Chemistry

Analysis Batch: 332379

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130406-2	MW-12	Total/NA	Water	SM 2540C	
400-130406-3	MW-13	Total/NA	Water	SM 2540C	
400-130406-6	MW-16	Total/NA	Water	SM 2540C	
400-130406-7	MW-17	Total/NA	Water	SM 2540C	
400-130406-8	MW-18	Total/NA	Water	SM 2540C	
400-130406-9	DUP-02	Total/NA	Water	SM 2540C	
400-130406-12	MW-19	Total/NA	Water	SM 2540C	
400-130406-13	DUP-03	Total/NA	Water	SM 2540C	
MB 400-332379/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-332379/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-130400-A-8 DU	Duplicate	Total/NA	Water	SM 2540C	
400-130401-A-2 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 332381

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130406-1	MW-11	Total/NA	Water	SM 2540C	
400-130406-4	MW-14	Total/NA	Water	SM 2540C	
400-130406-5	MW-15	Total/NA	Water	SM 2540C	
400-130406-10	EB-02	Total/NA	Water	SM 2540C	
400-130406-11	FB-02	Total/NA	Water	SM 2540C	
MB 400-332381/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-332381/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-130406-1 DU	MW-11	Total/NA	Water	SM 2540C	
400-130406-5 DU	MW-15	Total/NA	Water	SM 2540C	

Analysis Batch: 334236

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130406-9	DUP-02	Total/NA	Water	SM 4500 CI- E	
MB 400-334236/6	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 400-334236/7	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
MRL 400-334236/3	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
400-130361-A-1 MS	Matrix Spike	Total/NA	Water	SM 4500 CI- E	
400-130361-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 334299

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130406-1	MW-11	Total/NA	Water	SM 4500 F C	
400-130406-2	MW-12	Total/NA	Water	SM 4500 F C	
400-130406-3	MW-13	Total/NA	Water	SM 4500 F C	
400-130406-4	MW-14	Total/NA	Water	SM 4500 F C	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

General Chemistry (Continued)

Analysis Batch: 334299 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130406-5	MW-15	Total/NA	Water	SM 4500 F C	
400-130406-6	MW-16	Total/NA	Water	SM 4500 F C	
400-130406-7	MW-17	Total/NA	Water	SM 4500 F C	
400-130406-8	MW-18	Total/NA	Water	SM 4500 F C	
400-130406-9	DUP-02	Total/NA	Water	SM 4500 F C	
400-130406-10	EB-02	Total/NA	Water	SM 4500 F C	
400-130406-11	FB-02	Total/NA	Water	SM 4500 F C	
400-130406-12	MW-19	Total/NA	Water	SM 4500 F C	
400-130406-13	DUP-03	Total/NA	Water	SM 4500 F C	
MB 400-334299/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-334299/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-130406-1 MS	MW-11	Total/NA	Water	SM 4500 F C	
400-130406-1 MSD	MW-11	Total/NA	Water	SM 4500 F C	
400-130406-6 DU	MW-16	Total/NA	Water	SM 4500 F C	

Analysis Batch: 334307

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130406-5	MW-15	Total/NA	Water	SM 4500 CI- E	
400-130406-6	MW-16	Total/NA	Water	SM 4500 CI- E	
400-130406-7	MW-17	Total/NA	Water	SM 4500 CI- E	
400-130406-8	MW-18	Total/NA	Water	SM 4500 CI- E	
MB 400-334307/6	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 400-334307/7	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
MRL 400-334307/3	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
400-130406-6 MS	MW-16	Total/NA	Water	SM 4500 CI- E	
400-130406-6 MSD	MW-16	Total/NA	Water	SM 4500 CI- E	

Analysis Batch: 334308

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130406-5	MW-15	Total/NA	Water	SM 4500 SO4 E	
400-130406-6	MW-16	Total/NA	Water	SM 4500 SO4 E	
400-130406-7	MW-17	Total/NA	Water	SM 4500 SO4 E	
400-130406-8	MW-18	Total/NA	Water	SM 4500 SO4 E	
400-130406-9	DUP-02	Total/NA	Water	SM 4500 SO4 E	
MB 400-334308/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-334308/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-334308/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-130679-G-1 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-130679-G-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 335036

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130406-1	MW-11	Total/NA	Water	SM 4500 CI- E	
400-130406-2	MW-12	Total/NA	Water	SM 4500 CI- E	
400-130406-3	MW-13	Total/NA	Water	SM 4500 CI- E	
400-130406-4	MW-14	Total/NA	Water	SM 4500 CI- E	
400-130406-10	EB-02	Total/NA	Water	SM 4500 CI- E	
400-130406-11	FB-02	Total/NA	Water	SM 4500 CI- E	
400-130406-12	MW-19	Total/NA	Water	SM 4500 CI- E	
400-130406-13	DUP-03	Total/NA	Water	SM 4500 CI- E	
MB 400-335036/6	Method Blank	Total/NA	Water	SM 4500 CI- E	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

General Chemistry (Continued)

Analysis Batch: 335036 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-335036/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
LCSD 400-335036/41	Lab Control Sample Dup	Total/NA	Water	SM 4500 Cl- E	
LCSD 400-335036/42	Lab Control Sample Dup	Total/NA	Water	SM 4500 Cl- E	
LCSD 400-335036/43	Lab Control Sample Dup	Total/NA	Water	SM 4500 Cl- E	
MRL 400-335036/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-130406-13 MS	DUP-03	Total/NA	Water	SM 4500 Cl- E	
400-130406-13 MSD	DUP-03	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 335039

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130406-1	MW-11	Total/NA	Water	SM 4500 SO4 E	
400-130406-2	MW-12	Total/NA	Water	SM 4500 SO4 E	
400-130406-3	MW-13	Total/NA	Water	SM 4500 SO4 E	
400-130406-4	MW-14	Total/NA	Water	SM 4500 SO4 E	
400-130406-10	EB-02	Total/NA	Water	SM 4500 SO4 E	
400-130406-11	FB-02	Total/NA	Water	SM 4500 SO4 E	
400-130406-12	MW-19	Total/NA	Water	SM 4500 SO4 E	
400-130406-13	DUP-03	Total/NA	Water	SM 4500 SO4 E	
MB 400-335039/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-335039/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
LCSD 400-335039/44	Lab Control Sample Dup	Total/NA	Water	SM 4500 SO4 E	
LCSD 400-335039/45	Lab Control Sample Dup	Total/NA	Water	SM 4500 SO4 E	
LCSD 400-335039/46	Lab Control Sample Dup	Total/NA	Water	SM 4500 SO4 E	
MRL 400-335039/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-130406-13 MS	DUP-03	Total/NA	Water	SM 4500 SO4 E	
400-130406-13 MSD	DUP-03	Total/NA	Water	SM 4500 SO4 E	

Field Service / Mobile Lab

Analysis Batch: 337162

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130406-1	MW-11	Total/NA	Water	Field Sampling	
400-130406-2	MW-12	Total/NA	Water	Field Sampling	
400-130406-3	MW-13	Total/NA	Water	Field Sampling	
400-130406-4	MW-14	Total/NA	Water	Field Sampling	
400-130406-5	MW-15	Total/NA	Water	Field Sampling	
400-130406-6	MW-16	Total/NA	Water	Field Sampling	
400-130406-7	MW-17	Total/NA	Water	Field Sampling	
400-130406-8	MW-18	Total/NA	Water	Field Sampling	
400-130406-12	MW-19	Total/NA	Water	Field Sampling	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-332156/1-A ^5
Matrix: Water
Analysis Batch: 332706

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 332156

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		11/22/16 13:05	11/25/16 14:50	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		11/22/16 13:05	11/25/16 14:50	5
Barium	<0.00049		0.0025	0.00049	mg/L		11/22/16 13:05	11/25/16 14:50	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 14:50	5
Boron	<0.021		0.050	0.021	mg/L		11/22/16 13:05	11/25/16 14:50	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		11/22/16 13:05	11/25/16 14:50	5
Calcium	<0.13		0.25	0.13	mg/L		11/22/16 13:05	11/25/16 14:50	5
Chromium	<0.0011		0.0025	0.0011	mg/L		11/22/16 13:05	11/25/16 14:50	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		11/22/16 13:05	11/25/16 14:50	5
Lead	<0.00035		0.0013	0.00035	mg/L		11/22/16 13:05	11/25/16 14:50	5
Lithium	<0.0032		0.0050	0.0032	mg/L		11/22/16 13:05	11/25/16 14:50	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		11/22/16 13:05	11/25/16 14:50	5
Selenium	<0.00024		0.0013	0.00024	mg/L		11/22/16 13:05	11/25/16 14:50	5
Thallium	<0.000085		0.00050	0.000085	mg/L		11/22/16 13:05	11/25/16 14:50	5

Lab Sample ID: LCS 400-332156/2-A
Matrix: Water
Analysis Batch: 332706

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 332156

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0506		mg/L		101	80 - 120
Arsenic	0.0500	0.0516		mg/L		103	80 - 120
Barium	0.0500	0.0504		mg/L		101	80 - 120
Beryllium	0.0500	0.0489		mg/L		98	80 - 120
Boron	0.100	0.0947		mg/L		95	80 - 120
Cadmium	0.0500	0.0499		mg/L		100	80 - 120
Calcium	5.00	4.88		mg/L		98	80 - 120
Chromium	0.0500	0.0486		mg/L		97	80 - 120
Cobalt	0.0500	0.0496		mg/L		99	80 - 120
Lead	0.0500	0.0490		mg/L		98	80 - 120
Lithium	0.0500	0.0518		mg/L		104	80 - 120
Molybdenum	0.0500	0.0500		mg/L		100	80 - 120
Selenium	0.0500	0.0500		mg/L		100	80 - 120
Thallium	0.0100	0.00999		mg/L		100	80 - 120

Lab Sample ID: 400-130400-B-2-B MS ^5
Matrix: Water
Analysis Batch: 332706

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 332156

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0010		0.0500	0.0527		mg/L		105	75 - 125
Arsenic	<0.00046		0.0500	0.0532		mg/L		106	75 - 125
Barium	0.0027		0.0500	0.0537		mg/L		102	75 - 125
Beryllium	<0.00034		0.0500	0.0501		mg/L		100	75 - 125
Boron	<0.021		0.100	0.110		mg/L		110	75 - 125
Cadmium	<0.00034		0.0500	0.0525		mg/L		105	75 - 125
Calcium	3.5		5.00	8.33		mg/L		97	75 - 125
Chromium	<0.0011		0.0500	0.0501		mg/L		100	75 - 125

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 400-130400-B-2-B MS ^5
Matrix: Water
Analysis Batch: 332706

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 332156

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	Limits
	Result	Qualifier	Added	Result	Qualifier					
Cobalt	<0.00040		0.0500	0.0513		mg/L		103	75 - 125	
Lead	<0.00035		0.0500	0.0496		mg/L		99	75 - 125	
Lithium	<0.0032		0.0500	0.0564		mg/L		113	75 - 125	
Molybdenum	<0.00085		0.0500	0.0505		mg/L		101	75 - 125	
Selenium	<0.00024		0.0500	0.0501		mg/L		100	75 - 125	
Thallium	<0.000085		0.0100	0.0102		mg/L		102	75 - 125	

Lab Sample ID: 400-130400-B-2-C MSD ^5
Matrix: Water
Analysis Batch: 332706

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 332156

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
Antimony	<0.0010		0.0500	0.0515		mg/L		103	75 - 125	2	20	
Arsenic	<0.00046		0.0500	0.0528		mg/L		106	75 - 125	1	20	
Barium	0.0027		0.0500	0.0544		mg/L		103	75 - 125	1	20	
Beryllium	<0.00034		0.0500	0.0501		mg/L		100	75 - 125	0	20	
Boron	<0.021		0.100	0.104		mg/L		104	75 - 125	5	20	
Cadmium	<0.00034		0.0500	0.0520		mg/L		104	75 - 125	1	20	
Calcium	3.5		5.00	8.43		mg/L		99	75 - 125	1	20	
Chromium	<0.0011		0.0500	0.0500		mg/L		100	75 - 125	0	20	
Cobalt	<0.00040		0.0500	0.0503		mg/L		101	75 - 125	2	20	
Lead	<0.00035		0.0500	0.0497		mg/L		99	75 - 125	0	20	
Lithium	<0.0032		0.0500	0.0542		mg/L		108	75 - 125	4	20	
Molybdenum	<0.00085		0.0500	0.0510		mg/L		102	75 - 125	1	20	
Selenium	<0.00024		0.0500	0.0513		mg/L		103	75 - 125	2	20	
Thallium	<0.000085		0.0100	0.0101		mg/L		101	75 - 125	0	20	

Lab Sample ID: MB 400-332162/1-A ^5
Matrix: Water
Analysis Batch: 332706

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 332162

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Antimony	<0.0010		0.0025	0.0010	mg/L		11/23/16 08:20	11/25/16 14:59	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		11/23/16 08:20	11/25/16 14:59	5
Barium	<0.00049		0.0025	0.00049	mg/L		11/23/16 08:20	11/25/16 14:59	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		11/23/16 08:20	11/25/16 14:59	5
Boron	<0.021		0.050	0.021	mg/L		11/23/16 08:20	11/25/16 14:59	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		11/23/16 08:20	11/25/16 14:59	5
Calcium	<0.13		0.25	0.13	mg/L		11/23/16 08:20	11/25/16 14:59	5
Chromium	<0.0011		0.0025	0.0011	mg/L		11/23/16 08:20	11/25/16 14:59	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		11/23/16 08:20	11/25/16 14:59	5
Lead	<0.00035		0.0013	0.00035	mg/L		11/23/16 08:20	11/25/16 14:59	5
Lithium	<0.0032		0.0050	0.0032	mg/L		11/23/16 08:20	11/25/16 14:59	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		11/23/16 08:20	11/25/16 14:59	5
Selenium	<0.00024		0.0013	0.00024	mg/L		11/23/16 08:20	11/25/16 14:59	5
Thallium	<0.000085		0.00050	0.000085	mg/L		11/23/16 08:20	11/25/16 14:59	5

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 400-332162/2-A
Matrix: Water
Analysis Batch: 332706

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 332162

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.0500	0.0508		mg/L		102	80 - 120
Arsenic	0.0500	0.0509		mg/L		102	80 - 120
Barium	0.0500	0.0497		mg/L		99	80 - 120
Beryllium	0.0500	0.0484		mg/L		97	80 - 120
Boron	0.100	0.0953		mg/L		95	80 - 120
Cadmium	0.0500	0.0494		mg/L		99	80 - 120
Calcium	5.00	4.78		mg/L		96	80 - 120
Chromium	0.0500	0.0484		mg/L		97	80 - 120
Cobalt	0.0500	0.0490		mg/L		98	80 - 120
Lead	0.0500	0.0487		mg/L		97	80 - 120
Lithium	0.0500	0.0535		mg/L		107	80 - 120
Molybdenum	0.0500	0.0492		mg/L		98	80 - 120
Selenium	0.0500	0.0495		mg/L		99	80 - 120
Thallium	0.0100	0.00995		mg/L		100	80 - 120

Lab Sample ID: 400-130417-B-4-B MS ^5
Matrix: Water
Analysis Batch: 332706

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 332162

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Antimony	<0.0010		0.0500	0.0509		mg/L		102	75 - 125
Arsenic	0.0013		0.0500	0.0533		mg/L		104	75 - 125
Barium	0.012		0.0500	0.0616		mg/L		100	75 - 125
Beryllium	<0.00034		0.0500	0.0497		mg/L		99	75 - 125
Boron	0.024	J	0.100	0.131		mg/L		107	75 - 125
Cadmium	<0.00034		0.0500	0.0517		mg/L		103	75 - 125
Calcium	2.7		5.00	7.54		mg/L		97	75 - 125
Chromium	0.0011	J	0.0500	0.0511		mg/L		100	75 - 125
Cobalt	0.0012	J	0.0500	0.0519		mg/L		101	75 - 125
Lead	0.00042	J	0.0500	0.0505		mg/L		100	75 - 125
Lithium	0.026		0.0500	0.0784		mg/L		105	75 - 125
Molybdenum	<0.00085		0.0500	0.0507		mg/L		101	75 - 125
Selenium	<0.00024		0.0500	0.0514		mg/L		103	75 - 125
Thallium	<0.00085		0.0100	0.0101		mg/L		101	75 - 125

Lab Sample ID: 400-130417-B-4-C MSD ^5
Matrix: Water
Analysis Batch: 332706

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 332162

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	<0.0010		0.0500	0.0509		mg/L		102	75 - 125	0	20
Arsenic	0.0013		0.0500	0.0537		mg/L		105	75 - 125	1	20
Barium	0.012		0.0500	0.0630		mg/L		103	75 - 125	2	20
Beryllium	<0.00034		0.0500	0.0502		mg/L		100	75 - 125	1	20
Boron	0.024	J	0.100	0.130		mg/L		106	75 - 125	1	20
Cadmium	<0.00034		0.0500	0.0515		mg/L		103	75 - 125	1	20
Calcium	2.7		5.00	7.67		mg/L		100	75 - 125	2	20
Chromium	0.0011	J	0.0500	0.0506		mg/L		99	75 - 125	1	20

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 400-130417-B-4-C MSD ^5
Matrix: Water
Analysis Batch: 332706

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 332162

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	
Cobalt	0.0012	J	0.0500	0.0519		mg/L		101	75 - 125	0	20
Lead	0.00042	J	0.0500	0.0502		mg/L		100	75 - 125	1	20
Lithium	0.026		0.0500	0.0792		mg/L		107	75 - 125	1	20
Molybdenum	<0.00085		0.0500	0.0504		mg/L		101	75 - 125	0	20
Selenium	<0.00024		0.0500	0.0507		mg/L		101	75 - 125	1	20
Thallium	<0.000085		0.0100	0.0102		mg/L		102	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-333102/14-A
Matrix: Water
Analysis Batch: 333380

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 333102

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.000070		0.00020	0.000070	mg/L		11/30/16 09:28	12/01/16 13:41	1

Lab Sample ID: LCS 400-333102/15-A
Matrix: Water
Analysis Batch: 333380

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 333102

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	%Rec.
		Result	Qualifier				Limits
Mercury	0.00101	0.000990		mg/L		98	80 - 120

Lab Sample ID: 400-130612-B-1-B MS
Matrix: Water
Analysis Batch: 333380

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 333102

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				Limits
Mercury	<0.000070		0.00201	0.00185		mg/L		92	80 - 120

Lab Sample ID: 400-130612-B-1-C MSD
Matrix: Water
Analysis Batch: 333380

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 333102

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier				Limits	RPD	
Mercury	<0.000070		0.00201	0.00184		mg/L		91	80 - 120	1	20

Lab Sample ID: MB 400-333269/14-A
Matrix: Water
Analysis Batch: 333750

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 333269

Analyte	MB	MB	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Mercury	<0.000070		0.00020	0.000070	mg/L		12/01/16 09:14	12/05/16 13:50	1

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 400-333269/15-A
Matrix: Water
Analysis Batch: 333750

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 333269

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00101	0.000930		mg/L		92	80 - 120

Lab Sample ID: 400-130406-1 MS
Matrix: Water
Analysis Batch: 333750

Client Sample ID: MW-11
Prep Type: Total/NA
Prep Batch: 333269

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.000070		0.00201	0.00191		mg/L		95	80 - 120

Lab Sample ID: 400-130406-1 MSD
Matrix: Water
Analysis Batch: 333750

Client Sample ID: MW-11
Prep Type: Total/NA
Prep Batch: 333269

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	<0.000070		0.00201	0.00180		mg/L		89	80 - 120	6	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 400-332379/1
Matrix: Water
Analysis Batch: 332379

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			11/23/16 15:39	1

Lab Sample ID: LCS 400-332379/2
Matrix: Water
Analysis Batch: 332379

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Total Dissolved Solids	293	264		mg/L		90	78 - 122

Lab Sample ID: 400-130400-A-8 DU
Matrix: Water
Analysis Batch: 332379

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	74		74.0		mg/L		0	5

Lab Sample ID: 400-130401-A-2 DU
Matrix: Water
Analysis Batch: 332379

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	110		116		mg/L		2	5

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: MB 400-332381/1
Matrix: Water
Analysis Batch: 332381

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			11/23/16 17:05	1

Lab Sample ID: LCS 400-332381/2
Matrix: Water
Analysis Batch: 332381

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	272		mg/L		93	78 - 122

Lab Sample ID: 400-130406-1 DU
Matrix: Water
Analysis Batch: 332381

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	82		82.0		mg/L		0	5

Lab Sample ID: 400-130406-5 DU
Matrix: Water
Analysis Batch: 332381

Client Sample ID: MW-15
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	44		44.0		mg/L		0	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-334236/6
Matrix: Water
Analysis Batch: 334236

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.907	J	2.0	0.60	mg/L			12/08/16 08:43	1

Lab Sample ID: LCS 400-334236/7
Matrix: Water
Analysis Batch: 334236

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	30.5		mg/L		102	90 - 110

Lab Sample ID: MRL 400-334236/3
Matrix: Water
Analysis Batch: 334236

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	2.76		mg/L		138	50 - 150

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: 400-130361-A-1 MS

Matrix: Water

Analysis Batch: 334236

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	7.9	B	10.0	18.8		mg/L		108	73 - 120

Lab Sample ID: 400-130361-A-1 MSD

Matrix: Water

Analysis Batch: 334236

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	7.9	B	10.0	18.4		mg/L		105	73 - 120	2	8

Lab Sample ID: MB 400-334307/6

Matrix: Water

Analysis Batch: 334307

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.653	J	2.0	0.60	mg/L			12/08/16 13:38	1

Lab Sample ID: LCS 400-334307/7

Matrix: Water

Analysis Batch: 334307

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	32.1		mg/L		107	90 - 110

Lab Sample ID: MRL 400-334307/3

Matrix: Water

Analysis Batch: 334307

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	2.89		mg/L		144	50 - 150

Lab Sample ID: 400-130406-6 MS

Matrix: Water

Analysis Batch: 334307

Client Sample ID: MW-16

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	7.3	B	10.0	18.0		mg/L		108	73 - 120

Lab Sample ID: 400-130406-6 MSD

Matrix: Water

Analysis Batch: 334307

Client Sample ID: MW-16

Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	7.3	B	10.0	17.8		mg/L		105	73 - 120	1	8

Lab Sample ID: MB 400-335036/6

Matrix: Water

Analysis Batch: 335036

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.794	J	2.0	0.60	mg/L			12/14/16 11:05	1

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
 SDG: NAMU

Lab Sample ID: LCS 400-335036/7
Matrix: Water
Analysis Batch: 335036

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	30.4		mg/L		101	90 - 110

Lab Sample ID: LCSD 400-335036/41
Matrix: Water
Analysis Batch: 335036

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	30.0	30.5		mg/L		102	90 - 110	0	8

Lab Sample ID: LCSD 400-335036/42
Matrix: Water
Analysis Batch: 335036

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	30.0	30.4		mg/L		101	90 - 110	0	8

Lab Sample ID: LCSD 400-335036/43
Matrix: Water
Analysis Batch: 335036

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	30.0	30.3		mg/L		101	90 - 110	0	8

Lab Sample ID: MRL 400-335036/3
Matrix: Water
Analysis Batch: 335036

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	3.00		mg/L		150	50 - 150

Lab Sample ID: 400-130406-13 MS
Matrix: Water
Analysis Batch: 335036

Client Sample ID: DUP-03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	8.6	B	10.0	18.9		mg/L		103	73 - 120

Lab Sample ID: 400-130406-13 MSD
Matrix: Water
Analysis Batch: 335036

Client Sample ID: DUP-03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	8.6	B	10.0	19.0		mg/L		104	73 - 120	0	8

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-334299/3
Matrix: Water
Analysis Batch: 334299

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			12/08/16 14:25	1

Lab Sample ID: LCS 400-334299/4
Matrix: Water
Analysis Batch: 334299

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	4.11		mg/L		103	90 - 110

Lab Sample ID: 400-130406-1 MS
Matrix: Water
Analysis Batch: 334299

Client Sample ID: MW-11
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	0.960		mg/L		96	75 - 125

Lab Sample ID: 400-130406-1 MSD
Matrix: Water
Analysis Batch: 334299

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	<0.032		1.00	0.960		mg/L		96	75 - 125	0	4

Lab Sample ID: 400-130406-6 DU
Matrix: Water
Analysis Batch: 334299

Client Sample ID: MW-16
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 400-334308/6
Matrix: Water
Analysis Batch: 334308

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			12/08/16 13:40	1

Lab Sample ID: LCS 400-334308/7
Matrix: Water
Analysis Batch: 334308

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	15.2		mg/L		101	90 - 110

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: MRL 400-334308/3
Matrix: Water
Analysis Batch: 334308

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	4.44	J	mg/L		89	50 - 150

Lab Sample ID: 400-130679-G-1 MS
Matrix: Water
Analysis Batch: 334308

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	40	F1	20.0	48.2	F1	mg/L		42	77 - 128

Lab Sample ID: 400-130679-G-1 MSD
Matrix: Water
Analysis Batch: 334308

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	40	F1	20.0	49.4	F1	mg/L		48	77 - 128	3	5

Lab Sample ID: MB 400-335039/6
Matrix: Water
Analysis Batch: 335039

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			12/14/16 11:07	1

Lab Sample ID: LCS 400-335039/7
Matrix: Water
Analysis Batch: 335039

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	15.1		mg/L		101	90 - 110

Lab Sample ID: LCSD 400-335039/44
Matrix: Water
Analysis Batch: 335039

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	15.0	15.0		mg/L		100	90 - 110	1	5

Lab Sample ID: LCSD 400-335039/45
Matrix: Water
Analysis Batch: 335039

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	15.0	15.1		mg/L		101	90 - 110	0	5

Lab Sample ID: LCSD 400-335039/46
Matrix: Water
Analysis Batch: 335039

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

Analyte	Spike Added	LCSD Result	LCSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	15.0	14.9		mg/L		100	90 - 110	1	5

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
 SDG: NAMU

Lab Sample ID: MRL 400-335039/3
Matrix: Water
Analysis Batch: 335039

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	4.83	J	mg/L		97	50 - 150

Lab Sample ID: 400-130406-13 MS
Matrix: Water
Analysis Batch: 335039

Client Sample ID: DUP-03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	4.7	J	10.0	15.4		mg/L		107	77 - 128


Lab Sample ID: 400-130406-13 MSD
Matrix: Water
Analysis Batch: 335039

Client Sample ID: DUP-03
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	4.7	J	10.0	15.3		mg/L		106	77 - 128	0	5

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Chain of Custody Record

Client Information Sampler: <u>Brett Surles</u> Lab P#1: <u>Whitmire, Cheyenne R</u> Phone: <u>850 380 3458</u> E-Mail: <u>cheyenne.whitmire@testamericainc.com</u>		Carrier Tracking No(s): COC No: <u>400-55446-23825.2</u> Page: <u>1-2</u> Job #:	
Due Date Requested: TAT Requested (days): PO #: <u>Purchase Order not required</u> WO #:		Analysis Requested Field Sampling Parameters Mercury 6020 - Sp,As,Ba,B,Be,Cd,Cr,Cu,Pb,Li,Mn,Se,Tl,7470A - 5M4500 Cl, E - Chloride, 5M4500, S04 F, Sulfate, 2540C - 9315 Ra226, 9320 Ra228, Ra226Ra228_GFPc Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> <input type="checkbox"/> Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> <input type="checkbox"/>	
Project #: <u>40006621</u> SSOW#:		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:	
City: <u>Birmingham</u> State, Zip: <u>AL, 35291</u> Phone: <u>205-992-7762(Tel)</u> Email: <u>CSSELLER@SOUTHERNCO.COM</u>		Matrix (W=water, S=solid, O=waste/oil, P=Trace Analy) Sample Type (C=Comp, G=grab) Sample Date Sample Time Preservation Code	
Address: <u>PO BOX 2641 GSC8</u> City: <u>Birmingham</u> State, Zip: <u>AL, 35291</u> Project Name: <u>CCR - Plant Daniel</u> Site: <u>NAMU</u>		Special Instructions/Note: 400-130406 COC 	
Total Number of Containers:		Total Number of Containers:	
MW-11 MW-12 MW-13 MW-14 MW-15 MW-16 MW-17 MW-18 Dup - 02 ES - 02 EP - 02		MW-11 MW-12 MW-13 MW-14 MW-15 MW-16 MW-17 MW-18 Dup - 02 ES - 02 EP - 02	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:	
Empty Kit Relinquished by:		Method of Shipment:	
Relinquished by: <u>Daniel</u> Date/Time: <u>11/19/16 1009</u> Company: <u>POH</u>		Received by: <u>[Signature]</u> Date/Time: <u>11/19/16 1009</u> Company: <u>JA</u>	
Relinquished by:		Received by:	
Relinquished by:		Received by:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks: <u>1.2°C, 0.0°C, 2.1°C, IFG</u>	



Chain of Custody Record

Client Information Client Contact: Mr. Cale Sellers Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: 205-992-7762(Tel) Email: CBSSELLER@SOUTHERNCO.COM Project Name: CCR -Plant Daniel Site: NAMU		Lab PVI: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com Sampler: Brett Sellers Phone: 850 380 3458		Carrier Tracking No(s): COC No: 400-55446-23825.2 Page: 2-2 Job #:	
Due Date Requested: TAT Requested (days): PO #: Purchase Order not required WO #:		Analysis Requested Field Sampling Parameters Mercury 6020 - Sp,As,Ba,Bi,Be,Ca,Cd,Cr,Cu,Pb,Li,Mn,Se,Tl,7470A - Total Dissolved Solids, 4500 F-C-Fluoride SM4500 Cl, E - Chloride, SM4500, SO4 F - Sulfate, 2540C - 9315_Ra226, 9320_Ra228, Ra226Ra228_GFPc Perform MS/MSD (Yes or No)			
Sample Identification MW-19 Dvp-03		Field Filtered Sample (Yes or No)			
Sample Date 11/18/16 11/18/16		Sample Time 0919 1021		Sample Type (C=comp, G=grab) G G	
Matrix (W=water, S=solid, O=wastewater, BT=Tissue, A=Air) Water Water Water Water Water Water Water Water Water Water		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:			
Special Instructions/Note: Total Number of Containers		Special Instructions/Note: Total Number of Containers			
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Special Instructions/QC Requirements:					
Empty Kit Relinquished by: <i>[Signature]</i> Relinquished by: <i>[Signature]</i> Relinquished by: Relinquished by:		Method of Shipment: Date/Time: 11/19/16 1009 Date/Time: Date/Time:			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks: 1.2°C, 2.1°C, 0.0°C IRG			



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-130406-1

SDG Number: NAMU

Login Number: 130406

List Number: 1

Creator: Hughes, Nicholas T

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, 2.1°C, 1.2°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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-1
SDG: NAMU

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	01-31-17
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

* Certification renewal pending - certification considered valid.



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-130406-2

TestAmerica Sample Delivery Group: NAMU

Client Project/Site: CCR -Plant Daniel

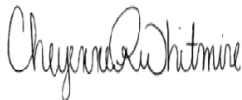
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:

12/31/2016 3:10:40 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

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

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

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

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Case Narrative

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

Job ID: 400-130406-2

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-130406-2

RAD

Method(s) 9320: Radium-228 Batch: 281426: The following sample did not meet the radium-228 detection goal due to the reduced sample volume, which can be attributed to matrix interferences (see Prep NCM 101456). The data have been qualified and reported. MW-11 (400-130406-1)

Method(s) 904.0, 9320: Radium-228 Batch: 281426: The following sample has a yttrium carrier recovery above the 110% QC limit: (500-120174-J-17-B DU) (117%). The LCS (laboratory control sample) has an acceptable spike recovery demonstrating acceptable sample preparation and instrument performance. The samples and QC associated with the batch have acceptable carrier recoveries, indicating the presence of matrix interference. The sample has been truncated to 100% to reduce any potential bias a high carrier recovery may have. Duplicate precision is demonstrated with an acceptable RER with or without truncation. The data have been qualified and reported. (500-120174-J-17-B DU).

Method(s) PrecSep_0: Radium-228 Prep Batch 160-281426: The following sample was prepared at a reduced aliquot due to sediment MW-11 (400-130406-1) .

Method(s) PrecSep-21: Radium-226 Prep Batch 160-281418: The following sample was prepared at a reduced aliquot due to sediment MW-11 (400-130406-1) .

Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-130406-1	MW-11	Water	11/18/16 15:16	11/19/16 10:09
400-130406-2	MW-12	Water	11/18/16 08:31	11/19/16 10:09
400-130406-3	MW-13	Water	11/18/16 07:43	11/19/16 10:09
400-130406-4	MW-14	Water	11/19/16 07:12	11/19/16 10:09
400-130406-5	MW-15	Water	11/19/16 08:01	11/19/16 10:09
400-130406-6	MW-16	Water	11/17/16 14:23	11/19/16 10:09
400-130406-7	MW-17	Water	11/18/16 10:36	11/19/16 10:09
400-130406-8	MW-18	Water	11/18/16 11:21	11/19/16 10:09
400-130406-9	DUP-02	Water	11/17/16 13:23	11/19/16 10:09
400-130406-10	EB-02	Water	11/19/16 07:20	11/19/16 10:09
400-130406-11	FB-02	Water	11/19/16 08:10	11/19/16 10:09
400-130406-12	MW-19	Water	11/18/16 09:19	11/19/16 10:09
400-130406-13	DUP-03	Water	11/18/16 10:21	11/19/16 10:09

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

Client Sample ID: MW-11
Date Collected: 11/18/16 15:16
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-1
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	0.534	U	0.539	0.541	1.00	0.845	pCi/L	11/29/16 11:03	12/30/16 07:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	65.5		40 - 110					11/29/16 11:03	12/30/16 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	0.405	U G	0.713	0.714	1.00	1.21	pCi/L	11/29/16 11:37	12/29/16 18:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	65.5		40 - 110					11/29/16 11:37	12/29/16 18:38	1
Y Carrier	92.3		40 - 110					11/29/16 11:37	12/29/16 18:38	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.939	U	0.894	0.896	5.00	1.21	pCi/L		12/30/16 15:38	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

Client Sample ID: MW-12
Date Collected: 11/18/16 08:31
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-2
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	0.779		0.318	0.326	1.00	0.346	pCi/L	11/29/16 11:03	12/30/16 07:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.5		40 - 110					11/29/16 11:03	12/30/16 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	1.38		0.358	0.380	1.00	0.446	pCi/L	11/29/16 11:37	12/29/16 18:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.5		40 - 110					11/29/16 11:37	12/29/16 18:38	1
Y Carrier	89.3		40 - 110					11/29/16 11:37	12/29/16 18:38	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.16		0.479	0.500	5.00	0.446	pCi/L		12/30/16 15:38	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

Client Sample ID: MW-13
Date Collected: 11/18/16 07:43
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-3
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	0.526		0.256	0.260	1.00	0.287	pCi/L	11/29/16 11:03	12/30/16 07:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		40 - 110					11/29/16 11:03	12/30/16 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	0.0901	U	0.283	0.283	1.00	0.490	pCi/L	11/29/16 11:37	12/29/16 18:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.0		40 - 110					11/29/16 11:37	12/29/16 18:38	1
Y Carrier	84.9		40 - 110					11/29/16 11:37	12/29/16 18:38	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.616		0.382	0.385	5.00	0.490	pCi/L		12/30/16 15:38	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

Client Sample ID: MW-14
Date Collected: 11/19/16 07:12
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-4
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	0.656		0.304	0.309	1.00	0.365	pCi/L	11/29/16 11:03	12/30/16 07:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		40 - 110					11/29/16 11:03	12/30/16 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	0.865		0.338	0.347	1.00	0.473	pCi/L	11/29/16 11:37	12/29/16 18:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.2		40 - 110					11/29/16 11:37	12/29/16 18:38	1
Y Carrier	81.9		40 - 110					11/29/16 11:37	12/29/16 18:38	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.52		0.454	0.465	5.00	0.473	pCi/L		12/30/16 15:38	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

Client Sample ID: MW-15
Date Collected: 11/19/16 08:01
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-5
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	0.367		0.245	0.247	1.00	0.340	pCi/L	11/29/16 11:03	12/30/16 07:10	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.1		40 - 110					11/29/16 11:03	12/30/16 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	0.356	U	0.248	0.250	1.00	0.384	pCi/L	11/29/16 11:37	12/29/16 18:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.1		40 - 110					11/29/16 11:37	12/29/16 18:38	1
Y Carrier	97.6		40 - 110					11/29/16 11:37	12/29/16 18:38	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.723		0.348	0.351	5.00	0.384	pCi/L		12/30/16 15:38	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

Client Sample ID: MW-16
Date Collected: 11/17/16 14:23
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-6
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	0.203	U	0.226	0.226	1.00	0.364	pCi/L	11/29/16 11:03	12/30/16 07:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.8		40 - 110					11/29/16 11:03	12/30/16 07:14	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.292	U	0.263	0.264	1.00	0.422	pCi/L	11/29/16 11:37	12/29/16 18:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.8		40 - 110					11/29/16 11:37	12/29/16 18:38	1
Y Carrier	91.2		40 - 110					11/29/16 11:37	12/29/16 18:38	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.496		0.346	0.348	5.00	0.422	pCi/L		12/30/16 15:38	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

Client Sample ID: MW-17
Date Collected: 11/18/16 10:36
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-7
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	0.136	U	0.218	0.218	1.00	0.377	pCi/L	11/29/16 11:03	12/30/16 07:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.0		40 - 110					11/29/16 11:03	12/30/16 07:14	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.333	U	0.263	0.265	1.00	0.415	pCi/L	11/29/16 11:37	12/29/16 18:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.0		40 - 110					11/29/16 11:37	12/29/16 18:39	1
Y Carrier	87.9		40 - 110					11/29/16 11:37	12/29/16 18:39	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.469		0.342	0.343	5.00	0.415	pCi/L		12/30/16 15:38	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

Client Sample ID: MW-18
Date Collected: 11/18/16 11:21
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-8
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	0.427		0.262	0.265	1.00	0.339	pCi/L	11/29/16 11:03	12/30/16 07:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.3		40 - 110					11/29/16 11:03	12/30/16 07:14	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.218	U	0.269	0.270	1.00	0.445	pCi/L	11/29/16 11:37	12/29/16 18:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.3		40 - 110					11/29/16 11:37	12/29/16 18:39	1
Y Carrier	84.9		40 - 110					11/29/16 11:37	12/29/16 18:39	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.646		0.376	0.378	5.00	0.445	pCi/L		12/30/16 15:38	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

Client Sample ID: DUP-02

Date Collected: 11/17/16 13:23

Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-9

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	0.237	U	0.225	0.226	1.00	0.347	pCi/L	11/29/16 11:03	12/30/16 07:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.9		40 - 110					11/29/16 11:03	12/30/16 07:14	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.155	U	0.260	0.261	1.00	0.440	pCi/L	11/29/16 11:37	12/29/16 18:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.9		40 - 110					11/29/16 11:37	12/29/16 18:39	1
Y Carrier	86.4		40 - 110					11/29/16 11:37	12/29/16 18:39	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.391	U	0.344	0.345	5.00	0.440	pCi/L		12/30/16 15:38	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

Client Sample ID: EB-02
Date Collected: 11/19/16 07:20
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-10
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	-0.00268	U	0.186	0.186	1.00	0.388	pCi/L	11/29/16 11:03	12/30/16 07:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.2		40 - 110					11/29/16 11:03	12/30/16 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	0.0320	U	0.249	0.249	1.00	0.444	pCi/L	11/29/16 11:37	12/29/16 18:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	73.2		40 - 110					11/29/16 11:37	12/29/16 18:39	1
Y Carrier	93.1		40 - 110					11/29/16 11:37	12/29/16 18:39	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0294	U	0.311	0.311	5.00	0.444	pCi/L		12/30/16 15:38	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

Client Sample ID: FB-02
Date Collected: 11/19/16 08:10
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-11
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	0.0859	U	0.214	0.214	1.00	0.398	pCi/L	11/29/16 11:03	12/30/16 07:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	68.9		40 - 110					11/29/16 11:03	12/30/16 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	0.169	U	0.284	0.284	1.00	0.482	pCi/L	11/29/16 11:37	12/29/16 18:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	68.9		40 - 110					11/29/16 11:37	12/29/16 18:39	1
Y Carrier	86.0		40 - 110					11/29/16 11:37	12/29/16 18:39	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.255	U	0.356	0.356	5.00	0.482	pCi/L		12/30/16 15:38	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

Client Sample ID: MW-19
Date Collected: 11/18/16 09:19
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-12
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	0.267	U	0.262	0.263	1.00	0.411	pCi/L	11/29/16 11:03	12/30/16 07:15	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.9		40 - 110					11/29/16 11:03	12/30/16 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	0.324	U	0.275	0.276	1.00	0.437	pCi/L	11/29/16 11:37	12/29/16 18:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.9		40 - 110					11/29/16 11:37	12/29/16 18:39	1
Y Carrier	83.4		40 - 110					11/29/16 11:37	12/29/16 18:39	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.591		0.379	0.381	5.00	0.437	pCi/L		12/30/16 15:38	1

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
 SDG: NAMU

Client Sample ID: DUP-03

Lab Sample ID: 400-130406-13

Date Collected: 11/18/16 10:21

Matrix: Water

Date Received: 11/19/16 10:09

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.354		0.246	0.248	1.00	0.339	pCi/L	11/29/16 11:03	12/30/16 09:17	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.1		40 - 110					11/29/16 11:03	12/30/16 09:17	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.180	U	0.265	0.265	1.00	0.444	pCi/L	11/29/16 11:37	12/29/16 18:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.1		40 - 110					11/29/16 11:37	12/29/16 18:39	1
Y Carrier	94.2		40 - 110					11/29/16 11:37	12/29/16 18:39	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.534		0.361	0.363	5.00	0.444	pCi/L		12/30/16 15:38	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

Qualifiers

Rad

Qualifier	Qualifier Description
G	The Sample MDC is greater than the requested RL.
U	Result is less than the sample detection limit.
X	Carrier is outside acceptance limits.

Glossary

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

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

Client Sample ID: MW-11
Date Collected: 11/18/16 15:16
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			281418	11/29/16 11:03	AS	TAL SL
Total/NA	Analysis	9315		1	285872	12/30/16 07:10	RTM	TAL SL
Total/NA	Prep	PrecSep_0			281426	11/29/16 11:37	AS	TAL SL
Total/NA	Analysis	9320		1	285756	12/29/16 18:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	285942	12/30/16 15:38	RTM	TAL SL

Client Sample ID: MW-12
Date Collected: 11/18/16 08:31
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			281418	11/29/16 11:03	AS	TAL SL
Total/NA	Analysis	9315		1	285872	12/30/16 07:10	RTM	TAL SL
Total/NA	Prep	PrecSep_0			281426	11/29/16 11:37	AS	TAL SL
Total/NA	Analysis	9320		1	285756	12/29/16 18:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	285942	12/30/16 15:38	RTM	TAL SL

Client Sample ID: MW-13
Date Collected: 11/18/16 07:43
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			281418	11/29/16 11:03	AS	TAL SL
Total/NA	Analysis	9315		1	285872	12/30/16 07:10	RTM	TAL SL
Total/NA	Prep	PrecSep_0			281426	11/29/16 11:37	AS	TAL SL
Total/NA	Analysis	9320		1	285756	12/29/16 18:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	285942	12/30/16 15:38	RTM	TAL SL

Client Sample ID: MW-14
Date Collected: 11/19/16 07:12
Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-4
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			281418	11/29/16 11:03	AS	TAL SL
Total/NA	Analysis	9315		1	285872	12/30/16 07:10	RTM	TAL SL
Total/NA	Prep	PrecSep_0			281426	11/29/16 11:37	AS	TAL SL
Total/NA	Analysis	9320		1	285756	12/29/16 18:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	285942	12/30/16 15:38	RTM	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

Client Sample ID: MW-15

Date Collected: 11/19/16 08:01

Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			281418	11/29/16 11:03	AS	TAL SL
Total/NA	Analysis	9315		1	285872	12/30/16 07:10	RTM	TAL SL
Total/NA	Prep	PrecSep_0			281426	11/29/16 11:37	AS	TAL SL
Total/NA	Analysis	9320		1	285756	12/29/16 18:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	285942	12/30/16 15:38	RTM	TAL SL

Client Sample ID: MW-16

Date Collected: 11/17/16 14:23

Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			281418	11/29/16 11:03	AS	TAL SL
Total/NA	Analysis	9315		1	285901	12/30/16 07:14	RTM	TAL SL
Total/NA	Prep	PrecSep_0			281426	11/29/16 11:37	AS	TAL SL
Total/NA	Analysis	9320		1	285756	12/29/16 18:38	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	285942	12/30/16 15:38	RTM	TAL SL

Client Sample ID: MW-17

Date Collected: 11/18/16 10:36

Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			281418	11/29/16 11:03	AS	TAL SL
Total/NA	Analysis	9315		1	285901	12/30/16 07:14	RTM	TAL SL
Total/NA	Prep	PrecSep_0			281426	11/29/16 11:37	AS	TAL SL
Total/NA	Analysis	9320		1	285756	12/29/16 18:39	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	285942	12/30/16 15:38	RTM	TAL SL

Client Sample ID: MW-18

Date Collected: 11/18/16 11:21

Date Received: 11/19/16 10:09

Lab Sample ID: 400-130406-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			281418	11/29/16 11:03	AS	TAL SL
Total/NA	Analysis	9315		1	285901	12/30/16 07:14	RTM	TAL SL
Total/NA	Prep	PrecSep_0			281426	11/29/16 11:37	AS	TAL SL
Total/NA	Analysis	9320		1	285756	12/29/16 18:39	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	285942	12/30/16 15:38	RTM	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

Client Sample ID: DUP-02

Lab Sample ID: 400-130406-9

Date Collected: 11/17/16 13:23

Matrix: Water

Date Received: 11/19/16 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			281418	11/29/16 11:03	AS	TAL SL
Total/NA	Analysis	9315		1	285901	12/30/16 07:14	RTM	TAL SL
Total/NA	Prep	PrecSep_0			281426	11/29/16 11:37	AS	TAL SL
Total/NA	Analysis	9320		1	285756	12/29/16 18:39	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	285942	12/30/16 15:38	RTM	TAL SL

Client Sample ID: EB-02

Lab Sample ID: 400-130406-10

Date Collected: 11/19/16 07:20

Matrix: Water

Date Received: 11/19/16 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			281418	11/29/16 11:03	AS	TAL SL
Total/NA	Analysis	9315		1	285901	12/30/16 07:15	RTM	TAL SL
Total/NA	Prep	PrecSep_0			281426	11/29/16 11:37	AS	TAL SL
Total/NA	Analysis	9320		1	285756	12/29/16 18:39	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	285942	12/30/16 15:38	RTM	TAL SL

Client Sample ID: FB-02

Lab Sample ID: 400-130406-11

Date Collected: 11/19/16 08:10

Matrix: Water

Date Received: 11/19/16 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			281418	11/29/16 11:03	AS	TAL SL
Total/NA	Analysis	9315		1	285901	12/30/16 07:15	RTM	TAL SL
Total/NA	Prep	PrecSep_0			281426	11/29/16 11:37	AS	TAL SL
Total/NA	Analysis	9320		1	285756	12/29/16 18:39	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	285942	12/30/16 15:38	RTM	TAL SL

Client Sample ID: MW-19

Lab Sample ID: 400-130406-12

Date Collected: 11/18/16 09:19

Matrix: Water

Date Received: 11/19/16 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			281418	11/29/16 11:03	AS	TAL SL
Total/NA	Analysis	9315		1	285901	12/30/16 07:15	RTM	TAL SL
Total/NA	Prep	PrecSep_0			281426	11/29/16 11:37	AS	TAL SL
Total/NA	Analysis	9320		1	285756	12/29/16 18:39	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	285942	12/30/16 15:38	RTM	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

Client Sample ID: DUP-03

Lab Sample ID: 400-130406-13

Date Collected: 11/18/16 10:21

Matrix: Water

Date Received: 11/19/16 10:09

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			281418	11/29/16 11:03	AS	TAL SL
Total/NA	Analysis	9315		1	285871	12/30/16 09:17	RTM	TAL SL
Total/NA	Prep	PrecSep_0			281426	11/29/16 11:37	AS	TAL SL
Total/NA	Analysis	9320		1	285756	12/29/16 18:39	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	285942	12/30/16 15:38	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: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
 SDG: NAMU

Rad

Prep Batch: 281418

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130406-1	MW-11	Total/NA	Water	PrecSep-21	
400-130406-2	MW-12	Total/NA	Water	PrecSep-21	
400-130406-3	MW-13	Total/NA	Water	PrecSep-21	
400-130406-4	MW-14	Total/NA	Water	PrecSep-21	
400-130406-5	MW-15	Total/NA	Water	PrecSep-21	
400-130406-6	MW-16	Total/NA	Water	PrecSep-21	
400-130406-7	MW-17	Total/NA	Water	PrecSep-21	
400-130406-8	MW-18	Total/NA	Water	PrecSep-21	
400-130406-9	DUP-02	Total/NA	Water	PrecSep-21	
400-130406-10	EB-02	Total/NA	Water	PrecSep-21	
400-130406-11	FB-02	Total/NA	Water	PrecSep-21	
400-130406-12	MW-19	Total/NA	Water	PrecSep-21	
400-130406-13	DUP-03	Total/NA	Water	PrecSep-21	
MB 160-281418/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-281418/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
500-120174-J-17-A DU	Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 281426

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-130406-1	MW-11	Total/NA	Water	PrecSep_0	
400-130406-2	MW-12	Total/NA	Water	PrecSep_0	
400-130406-3	MW-13	Total/NA	Water	PrecSep_0	
400-130406-4	MW-14	Total/NA	Water	PrecSep_0	
400-130406-5	MW-15	Total/NA	Water	PrecSep_0	
400-130406-6	MW-16	Total/NA	Water	PrecSep_0	
400-130406-7	MW-17	Total/NA	Water	PrecSep_0	
400-130406-8	MW-18	Total/NA	Water	PrecSep_0	
400-130406-9	DUP-02	Total/NA	Water	PrecSep_0	
400-130406-10	EB-02	Total/NA	Water	PrecSep_0	
400-130406-11	FB-02	Total/NA	Water	PrecSep_0	
400-130406-12	MW-19	Total/NA	Water	PrecSep_0	
400-130406-13	DUP-03	Total/NA	Water	PrecSep_0	
MB 160-281426/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-281426/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
500-120174-J-17-B DU	Duplicate	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-281418/1-A
Matrix: Water
Analysis Batch: 285872

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 281418

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1886	U	0.209	0.209	1.00	0.335	pCi/L	11/29/16 11:03	12/30/16 07:09	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.5		40 - 110					11/29/16 11:03	12/30/16 07:09	1

Lab Sample ID: LCS 160-281418/2-A
Matrix: Water
Analysis Batch: 285871

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 281418

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	11.1	13.56		1.71	1.00	0.406	pCi/L	122	68 - 137
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	70.7		40 - 110						

Lab Sample ID: 500-120174-J-17-A DU
Matrix: Water
Analysis Batch: 285901

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 281418

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.296	U	0.3109	U	0.236	1.00	0.333	pCi/L	0.03	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	77.8		40 - 110							

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-281426/1-A
Matrix: Water
Analysis Batch: 285756

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 281426

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3065	U	0.292	0.293	1.00	0.471	pCi/L	11/29/16 11:37	12/29/16 18:38	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.5		40 - 110					11/29/16 11:37	12/29/16 18:38	1
Y Carrier	83.7		40 - 110					11/29/16 11:37	12/29/16 18:38	1

QC Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
 SDG: NAMU

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

Lab Sample ID: LCS 160-281426/2-A
Matrix: Water
Analysis Batch: 285756

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 281426

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	14.1	16.95		1.85	1.00	0.498	pCi/L	121	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	70.7		40 - 110
Y Carrier	95.7		40 - 110


Lab Sample ID: 500-120174-J-17-B DU
Matrix: Water
Analysis Batch: 285756

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 281426

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	0.242	U	-0.1372	U	0.298	1.00	0.544	pCi/L	0.67	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	77.8		40 - 110
Y Carrier	118	X	40 - 110

Chain of Custody Record

Client Information Sampler: <u>Brett Surles</u> Lab P#1: <u>Whitmire, Cheyenne R</u> Phone: <u>850 380 3458</u> E-Mail: <u>cheyenne.whitmire@testamericainc.com</u>		Carrier Tracking No(s): COC No: <u>400-55446-23825.2</u> Page: <u>1-2</u> Job #:	
Due Date Requested: TAT Requested (days): PO #: <u>Purchase Order not required</u> WO #: Project #: <u>40006621</u> SSOW#:		Analysis Requested Field Sampling Parameters Mercury 6020 - Sp,As,Ba,B,Be,Cd,Cr,Cu,Pb,Li,Mn,Se,Tl,7470A - 5M4500 Cl, E - Chloride, 5M4500, S04 F, Sulfate, 2540C - 9315 Ra226, 9320 Ra228, Ra226Ra228_GFPc Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/>	
City: <u>Birmingham</u> State, Zip: <u>AL, 35291</u> Phone: <u>205-992-7762(Tel)</u> Email: <u>CBSELLER@SOUTHERNCO.COM</u> Project Name: <u>CCR - Plant Daniel</u> Site: <u>NAMU</u>		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 X - EDTA Z - other (specify)	
Sample Identification Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (W=water, S=solid, O=waste/oil, B=Trace Analy)		Special Instructions/Note: 400-130406 COC 	
MW-11 MW-12 MW-13 MW-14 MW-15 MW-16 MW-17 MW-18 Dup - 02 ES - 02 EP - 02	11/18/16 11/18/16 11/18/16 11/19/16 11/19/16 11/17/16 11/18/16 11/18/16 11/17/16 11/19/16 11/19/16 11/19/16	1316 0831 0743 0712 0801 1423 1030 1121 1323 0720 0810	Water Water Water Water Water Water Water Water Water Water Water Water
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological			
Deliverable Requested: I, II, III, IV, Other (specify):			
Relinquished by: <u>Daniel Daniel</u> Relinquished by: Relinquished by:		Date: <u>11/19/16</u> Date/Time: <u>1009</u> Date/Time: Date/Time:	
Empty Kit Relinquished by:		Method of Shipment:	
Relinquished by: <u>Daniel Daniel</u> Relinquished by: Relinquished by:		Date/Time: <u>11/19/16</u> Date/Time: <u>1009</u> Date/Time: Date/Time:	
Custody Seals Intact: <u>Yes</u>		Cooler Temperature(s) °C and Other Remarks: <u>1.2°C, 0.0°C, 2.1°C, IFG</u>	



Chain of Custody Record

Client Information Client Contact: Mr. Cale Sellers Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: 205-992-7762(Tel) Email: CBSSELLER@SOUTHERNCO.COM Project Name: CCR -Plant Daniel Site: NAMU		Lab PVI: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com Sampler: Brett Scales Phone: 850 380 3458		Carrier Tracking No(s): COC No: 400-55446-23825.2 Page: 2-2 Job #:	
Due Date Requested: TAT Requested (days): PO #: Purchase Order not required WO #:		Analysis Requested Field Sampling Parameters Mercury 6020 - Sp,As,Ba,Bi,Be,Ca,Cd,Cr,Cu,Pb,Li,Mn,Se,Tl,7470A - Total Dissolved Solids, 4500 F-C-Fluoride SM4500 CL E-Chloride, SM4500, SO4 E-Sulfate, 2540C - 9315_Ra226, 9320_Ra228, Ra226Ra228_GFPc Perform MS/MSD (Yes or No)			
Sample Identification MW-19 Dvp-03		Field Filtered Sample (Yes or No)			
Sample Date 11/18/16 11/18/16		Sample Time 0919 1021		Matrix Water Water Water Water Water Water Water Water Water	
Sample Type (C=comp, G=grab) G G		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:			
Special Instructions/Note: Total Number of Containers		Special Instructions/Note: Total Number of Containers			
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological					
Deliverable Requested: I, II, III, IV, Other (specify)					
Empty Kit Relinquished by: <i>[Signature]</i> Date: 11/19/16 1009 Relinquished by: <i>[Signature]</i> Date/Time: 11/19/16 1009 Company: JTA Relinquished by: Date/Time: Company: Relinquished by: Date/Time: Company:					
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Cooler Temperature(s) °C and Other Remarks: 1.2°C, 2.1°C, 0.0°C IRG					



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-130406-2

SDG Number: NAMU

Login Number: 130406

List Number: 1

Creator: Hughes, Nicholas T

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C, 2.1°C, 1.2°C IR-6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Certification Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

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	01-31-17
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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-130406-2
SDG: NAMU

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.

TestAmerica Pensacola

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: 400-132733-3

TestAmerica Sample Delivery Group: NAMU

Client Project/Site: CCR -Plant Daniel


For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:

3/28/2017 2:46:09 PM

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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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Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-11

Lab Sample ID: 400-132733-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.081		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.00034	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Calcium	1.8		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0047		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.000078	J	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	32		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	13		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.77				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-12

Lab Sample ID: 400-132733-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.14		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.00040	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Boron	0.024	J	0.050	0.021	mg/L	5		6020	Total Recoverable
Cobalt	0.0024	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0033	J	0.0050	0.0032	mg/L	5		6020	Total Recoverable
Chloride	15		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.28		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	9.4		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.35				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-13

Lab Sample ID: 400-132733-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.11		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.00034	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Calcium	0.55		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0013	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0058		0.0050	0.0032	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	60		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	13		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	5.5		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.7				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-14

Lab Sample ID: 400-132733-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.11		0.0025	0.00049	mg/L	5		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-14 (Continued)

Lab Sample ID: 400-132733-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	3.8		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0012	J	0.0025	0.0011	mg/L	5		6020	Total Recoverable
Cobalt	0.0016	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lead	0.00049	J	0.0013	0.00035	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	48		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	11		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	5.11				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-15

Lab Sample ID: 400-132733-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.063		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.3		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0012	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.000079	J	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	26		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	8.3		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.65				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-16

Lab Sample ID: 400-132733-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.032		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.58		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00072	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	18		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	6.3		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.68				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-17

Lab Sample ID: 400-132733-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.038		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.0		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00090	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	32		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	7.4		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	1.5	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	5.02				SU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-18

Lab Sample ID: 400-132733-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.062		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.81		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0011	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	30		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	9.2		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	3.8	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.63				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-19

Lab Sample ID: 400-132733-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00075	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.033		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.64		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0011	J	0.0025	0.0011	mg/L	5		6020	Total Recoverable
Cobalt	0.00043	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	20		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	5.3		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	5.27				SU	1		Field Sampling	Total/NA

Client Sample ID: DUP-03

Lab Sample ID: 400-132733-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00063	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.035		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.66		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00052	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.000076	J	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	24		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	5.1		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: EB-03

Lab Sample ID: 400-132733-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.00013	J	0.00020	0.000070	mg/L	1		7470A	Total/NA

Client Sample ID: FB-03

Lab Sample ID: 400-132733-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.00015	J	0.00020	0.000070	mg/L	1		7470A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: DUP-04

Lab Sample ID: 400-132733-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.065		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.3		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0013	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0033	J	0.0050	0.0032	mg/L	5		6020	Total Recoverable
Selenium	0.00036	J	0.0013	0.00024	mg/L	5		6020	Total Recoverable
Mercury	0.00013	J	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	18		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	8.5		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola



Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
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
Field Sampling	Field Sampling	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-132733-14	MW-11	Water	01/19/17 12:54	01/19/17 15:05
400-132733-15	MW-12	Water	01/19/17 09:50	01/19/17 15:05
400-132733-16	MW-13	Water	01/19/17 10:55	01/19/17 15:05
400-132733-17	MW-14	Water	01/18/17 14:15	01/19/17 15:05
400-132733-18	MW-15	Water	01/19/17 09:03	01/19/17 15:05
400-132733-19	MW-16	Water	01/18/17 09:35	01/19/17 15:05
400-132733-20	MW-17	Water	01/18/17 11:21	01/19/17 15:05
400-132733-21	MW-18	Water	01/18/17 12:08	01/19/17 15:05
400-132733-22	MW-19	Water	01/18/17 10:10	01/19/17 15:05
400-132733-23	DUP-03	Water	01/18/17 09:10	01/19/17 15:05
400-132733-24	EB-03	Water	01/19/17 13:05	01/19/17 15:05
400-132733-25	FB-03	Water	01/19/17 10:15	01/19/17 15:05
400-132733-26	DUP-04	Water	01/19/17 08:03	01/19/17 15:05

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-11
Date Collected: 01/19/17 12:54
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-14
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 17:09	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 17:09	5
Barium	0.081		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 17:09	5
Beryllium	0.00034	J	0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 17:09	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 17:09	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 17:09	5
Calcium	1.8		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 17:09	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 17:09	5
Cobalt	0.0047		0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 17:09	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 17:09	5
Lithium	<0.0032		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 17:09	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 17:09	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 17:09	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 17:09	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000078	J	0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 14:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	32		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	13		2.0	0.60	mg/L			01/24/17 15:15	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 16:12	1
Sulfate	<1.4		5.0	1.4	mg/L			01/25/17 09:44	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.77				SU			01/19/17 12:54	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-12
Date Collected: 01/19/17 09:50
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-15
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 17:54	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 17:54	5
Barium	0.14		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 17:54	5
Beryllium	0.00040	J	0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 17:54	5
Boron	0.024	J	0.050	0.021	mg/L		01/23/17 09:20	01/24/17 17:54	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 17:54	5
Calcium	<0.13		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 17:54	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 17:54	5
Cobalt	0.0024	J	0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 17:54	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 17:54	5
Lithium	0.0033	J	0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 17:54	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 17:54	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 17:54	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 17:54	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 14:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	15		2.0	0.60	mg/L			01/24/17 15:15	1
Fluoride	0.28		0.10	0.032	mg/L			01/31/17 16:15	1
Sulfate	9.4		5.0	1.4	mg/L			01/25/17 09:44	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.35				SU			01/19/17 09:50	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-13
Date Collected: 01/19/17 10:55
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-16
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 17:59	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 17:59	5
Barium	0.11		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 17:59	5
Beryllium	0.00034	J	0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 17:59	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 17:59	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 17:59	5
Calcium	0.55		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 17:59	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 17:59	5
Cobalt	0.0013	J	0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 17:59	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 17:59	5
Lithium	0.0058		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 17:59	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 17:59	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 17:59	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 17:59	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 14:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	60		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	13		2.0	0.60	mg/L			01/24/17 15:45	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 16:30	1
Sulfate	5.5		5.0	1.4	mg/L			01/25/17 09:44	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.7				SU			01/19/17 10:55	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-14
Date Collected: 01/18/17 14:15
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-17
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 18:03	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 18:03	5
Barium	0.11		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 18:03	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:03	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 18:03	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:03	5
Calcium	3.8		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 18:03	5
Chromium	0.0012	J	0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 18:03	5
Cobalt	0.0016	J	0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 18:03	5
Lead	0.00049	J	0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 18:03	5
Lithium	<0.0032		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 18:03	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 18:03	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 18:03	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 18:03	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 14:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	48		5.0	3.4	mg/L			01/21/17 14:05	1
Chloride	11		2.0	0.60	mg/L			01/24/17 15:45	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 17:03	1
Sulfate	<1.4		5.0	1.4	mg/L			01/25/17 09:44	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.11				SU			01/18/17 14:15	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-15
Date Collected: 01/19/17 09:03
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-18
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 18:08	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 18:08	5
Barium	0.063		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 18:08	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:08	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 18:08	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:08	5
Calcium	1.3		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 18:08	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 18:08	5
Cobalt	0.0012	J	0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 18:08	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 18:08	5
Lithium	<0.0032		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 18:08	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 18:08	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 18:08	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 18:08	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000079	J	0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 15:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	26		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	8.3		2.0	0.60	mg/L			01/24/17 15:45	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 17:09	1
Sulfate	<1.4		5.0	1.4	mg/L			01/25/17 09:44	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.65				SU			01/19/17 09:03	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-16
Date Collected: 01/18/17 09:35
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-19
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 18:12	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 18:12	5
Barium	0.032		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 18:12	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:12	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 18:12	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:12	5
Calcium	0.58		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 18:12	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 18:12	5
Cobalt	0.00072 J		0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 18:12	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 18:12	5
Lithium	<0.0032		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 18:12	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 18:12	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 18:12	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 18:12	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 15:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	18		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	6.3		2.0	0.60	mg/L			01/24/17 15:45	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 17:12	1
Sulfate	<1.4		5.0	1.4	mg/L			01/25/17 09:44	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.68				SU			01/18/17 09:35	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-17
Date Collected: 01/18/17 11:21
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-20
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 18:17	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 18:17	5
Barium	0.038		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 18:17	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:17	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 18:17	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:17	5
Calcium	1.0		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 18:17	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 18:17	5
Cobalt	0.00090	J	0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 18:17	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 18:17	5
Lithium	<0.0032		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 18:17	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 18:17	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 18:17	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 18:17	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 15:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	32		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	7.4		2.0	0.60	mg/L			01/24/17 15:45	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 17:14	1
Sulfate	1.5	J	5.0	1.4	mg/L			01/25/17 09:47	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.02				SU			01/18/17 11:21	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-18
Date Collected: 01/18/17 12:08
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-21
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 18:21	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 18:21	5
Barium	0.062		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 18:21	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:21	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 18:21	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:21	5
Calcium	0.81		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 18:21	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 18:21	5
Cobalt	0.0011	J	0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 18:21	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 18:21	5
Lithium	<0.0032		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 18:21	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 18:21	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 18:21	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 18:21	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 15:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	30		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	9.2		2.0	0.60	mg/L			01/25/17 09:10	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 17:18	1
Sulfate	3.8	J	5.0	1.4	mg/L			01/25/17 09:47	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.63				SU			01/18/17 12:08	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-19
Date Collected: 01/18/17 10:10
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-22
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 18:26	5
Arsenic	0.00075	J	0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 18:26	5
Barium	0.033		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 18:26	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:26	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 18:26	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:26	5
Calcium	0.64		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 18:26	5
Chromium	0.0011	J	0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 18:26	5
Cobalt	0.00043	J	0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 18:26	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 18:26	5
Lithium	<0.0032		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 18:26	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 18:26	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 18:26	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 18:26	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 15:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	20		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	5.3		2.0	0.60	mg/L			01/25/17 09:10	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 17:20	1
Sulfate	<1.4		5.0	1.4	mg/L			01/25/17 09:47	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.27				SU			01/18/17 10:10	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: DUP-03

Date Collected: 01/18/17 09:10

Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-23

Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 18:53	5
Arsenic	0.00063	J	0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 18:53	5
Barium	0.035		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 18:53	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:53	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 18:53	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:53	5
Calcium	0.66		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 18:53	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 18:53	5
Cobalt	0.00052	J	0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 18:53	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 18:53	5
Lithium	<0.0032		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 18:53	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 18:53	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 18:53	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 18:53	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000076	J	0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 15:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	24		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	5.1		2.0	0.60	mg/L			01/25/17 09:10	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 17:22	1
Sulfate	<1.4		5.0	1.4	mg/L			01/25/17 09:47	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: EB-03
Date Collected: 01/19/17 13:05
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-24
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 18:57	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 18:57	5
Barium	<0.00049		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 18:57	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:57	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 18:57	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:57	5
Calcium	<0.13		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 18:57	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 18:57	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 18:57	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 18:57	5
Lithium	<0.0032		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 18:57	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 18:57	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 18:57	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 18:57	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00013	J	0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	<0.60		2.0	0.60	mg/L			01/25/17 10:12	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 17:25	1
Sulfate	<1.4		5.0	1.4	mg/L			01/25/17 10:19	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: FB-03
Date Collected: 01/19/17 10:15
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-25
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 19:02	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 19:02	5
Barium	<0.00049		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 19:02	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 19:02	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 19:02	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 19:02	5
Calcium	<0.13		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 19:02	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 19:02	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 19:02	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 19:02	5
Lithium	<0.0032		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 19:02	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 19:02	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 19:02	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 19:02	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	J	0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 15:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	<0.60		2.0	0.60	mg/L			01/25/17 10:12	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 17:33	1
Sulfate	<1.4		5.0	1.4	mg/L			01/25/17 10:19	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: DUP-04

Date Collected: 01/19/17 08:03

Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-26

Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 19:06	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 19:06	5
Barium	0.065		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 19:06	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 19:06	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 19:06	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 19:06	5
Calcium	1.3		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 19:06	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 19:06	5
Cobalt	0.0013	J	0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 19:06	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 19:06	5
Lithium	0.0033	J	0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 19:06	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 19:06	5
Selenium	0.00036	J	0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 19:06	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 19:06	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00013	J	0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 15:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	18		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	8.5		2.0	0.60	mg/L			01/25/17 10:12	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 17:36	1
Sulfate	<1.4		5.0	1.4	mg/L			01/25/17 10:19	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Qualifiers

Metals

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.

General Chemistry

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

Glossary

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

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-11

Date Collected: 01/19/17 12:54

Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 17:09	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 14:55	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339649	01/24/17 15:15	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 16:12	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 09:44	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	343304	01/19/17 12:54	BWS	TAL PEN

Client Sample ID: MW-12

Date Collected: 01/19/17 09:50

Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 17:54	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 14:56	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339649	01/24/17 15:15	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 16:15	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 09:44	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	343304	01/19/17 09:50	BWS	TAL PEN

Client Sample ID: MW-13

Date Collected: 01/19/17 10:55

Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 17:59	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 14:57	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339649	01/24/17 15:45	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 16:30	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 09:44	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	343304	01/19/17 10:55	BWS	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-14

Lab Sample ID: 400-132733-17

Date Collected: 01/18/17 14:15

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 18:03	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 14:59	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339296	01/21/17 14:05	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339649	01/24/17 15:45	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 17:03	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 09:44	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	343304	01/18/17 14:15	BWS	TAL PEN

Client Sample ID: MW-15

Lab Sample ID: 400-132733-18

Date Collected: 01/19/17 09:03

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 18:08	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 15:00	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339649	01/24/17 15:45	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 17:09	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 09:44	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	343304	01/19/17 09:03	BWS	TAL PEN

Client Sample ID: MW-16

Lab Sample ID: 400-132733-19

Date Collected: 01/18/17 09:35

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 18:12	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 15:01	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339649	01/24/17 15:45	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 17:12	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 09:44	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	343304	01/18/17 09:35	BWS	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-17

Lab Sample ID: 400-132733-20

Date Collected: 01/18/17 11:21

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 18:17	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 15:02	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339649	01/24/17 15:45	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 17:14	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 09:47	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	343304	01/18/17 11:21	BWS	TAL PEN

Client Sample ID: MW-18

Lab Sample ID: 400-132733-21

Date Collected: 01/18/17 12:08

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 18:21	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 15:04	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339727	01/25/17 09:10	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 17:18	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 09:47	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	343304	01/18/17 12:08	BWS	TAL PEN

Client Sample ID: MW-19

Lab Sample ID: 400-132733-22

Date Collected: 01/18/17 10:10

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 18:26	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 15:05	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339727	01/25/17 09:10	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 17:20	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 09:47	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	343304	01/18/17 10:10	BWS	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: DUP-03

Lab Sample ID: 400-132733-23

Date Collected: 01/18/17 09:10

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 18:53	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 15:15	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339727	01/25/17 09:10	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 17:22	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 09:47	BJB	TAL PEN

Client Sample ID: EB-03

Lab Sample ID: 400-132733-24

Date Collected: 01/19/17 13:05

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 18:57	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 15:16	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339727	01/25/17 10:12	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 17:25	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 10:19	BJB	TAL PEN

Client Sample ID: FB-03

Lab Sample ID: 400-132733-25

Date Collected: 01/19/17 10:15

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 19:02	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 15:17	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339727	01/25/17 10:12	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 17:33	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 10:19	BJB	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: DUP-04

Lab Sample ID: 400-132733-26

Date Collected: 01/19/17 08:03

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 19:06	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 15:19	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339727	01/25/17 10:12	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 17:36	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 10:19	BJB	TAL PEN

Laboratory References:

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

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Metals

Prep Batch: 339359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-14	MW-11	Total Recoverable	Water	3005A	
400-132733-15	MW-12	Total Recoverable	Water	3005A	
400-132733-16	MW-13	Total Recoverable	Water	3005A	
400-132733-17	MW-14	Total Recoverable	Water	3005A	
400-132733-18	MW-15	Total Recoverable	Water	3005A	
400-132733-19	MW-16	Total Recoverable	Water	3005A	
400-132733-20	MW-17	Total Recoverable	Water	3005A	
400-132733-21	MW-18	Total Recoverable	Water	3005A	
400-132733-22	MW-19	Total Recoverable	Water	3005A	
400-132733-23	DUP-03	Total Recoverable	Water	3005A	
400-132733-24	EB-03	Total Recoverable	Water	3005A	
400-132733-25	FB-03	Total Recoverable	Water	3005A	
400-132733-26	DUP-04	Total Recoverable	Water	3005A	
MB 400-339359/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-339359/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-132733-14 MS	MW-11	Total Recoverable	Water	3005A	
400-132733-14 MSD	MW-11	Total Recoverable	Water	3005A	

Prep Batch: 339546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-14	MW-11	Total/NA	Water	7470A	
400-132733-15	MW-12	Total/NA	Water	7470A	
400-132733-16	MW-13	Total/NA	Water	7470A	
400-132733-17	MW-14	Total/NA	Water	7470A	
400-132733-18	MW-15	Total/NA	Water	7470A	
400-132733-19	MW-16	Total/NA	Water	7470A	
400-132733-20	MW-17	Total/NA	Water	7470A	
400-132733-21	MW-18	Total/NA	Water	7470A	
400-132733-22	MW-19	Total/NA	Water	7470A	
400-132733-23	DUP-03	Total/NA	Water	7470A	
400-132733-24	EB-03	Total/NA	Water	7470A	
400-132733-25	FB-03	Total/NA	Water	7470A	
400-132733-26	DUP-04	Total/NA	Water	7470A	
MB 400-339546/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-339546/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-132957-A-5-B MS	Matrix Spike	Total/NA	Water	7470A	
400-132957-A-5-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 339677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-14	MW-11	Total Recoverable	Water	6020	339359
400-132733-15	MW-12	Total Recoverable	Water	6020	339359
400-132733-16	MW-13	Total Recoverable	Water	6020	339359
400-132733-17	MW-14	Total Recoverable	Water	6020	339359
400-132733-18	MW-15	Total Recoverable	Water	6020	339359
400-132733-19	MW-16	Total Recoverable	Water	6020	339359
400-132733-20	MW-17	Total Recoverable	Water	6020	339359
400-132733-21	MW-18	Total Recoverable	Water	6020	339359
400-132733-22	MW-19	Total Recoverable	Water	6020	339359
400-132733-23	DUP-03	Total Recoverable	Water	6020	339359
400-132733-24	EB-03	Total Recoverable	Water	6020	339359

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Metals (Continued)

Analysis Batch: 339677 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-25	FB-03	Total Recoverable	Water	6020	339359
400-132733-26	DUP-04	Total Recoverable	Water	6020	339359
MB 400-339359/1-A ^5	Method Blank	Total Recoverable	Water	6020	339359
LCS 400-339359/2-A	Lab Control Sample	Total Recoverable	Water	6020	339359
400-132733-14 MS	MW-11	Total Recoverable	Water	6020	339359
400-132733-14 MSD	MW-11	Total Recoverable	Water	6020	339359

Analysis Batch: 339947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-14	MW-11	Total/NA	Water	7470A	339546
400-132733-15	MW-12	Total/NA	Water	7470A	339546
400-132733-16	MW-13	Total/NA	Water	7470A	339546
400-132733-17	MW-14	Total/NA	Water	7470A	339546
400-132733-18	MW-15	Total/NA	Water	7470A	339546
400-132733-19	MW-16	Total/NA	Water	7470A	339546
400-132733-20	MW-17	Total/NA	Water	7470A	339546
400-132733-21	MW-18	Total/NA	Water	7470A	339546
400-132733-22	MW-19	Total/NA	Water	7470A	339546
400-132733-23	DUP-03	Total/NA	Water	7470A	339546
400-132733-24	EB-03	Total/NA	Water	7470A	339546
400-132733-25	FB-03	Total/NA	Water	7470A	339546
400-132733-26	DUP-04	Total/NA	Water	7470A	339546
MB 400-339546/14-A	Method Blank	Total/NA	Water	7470A	339546
LCS 400-339546/15-A	Lab Control Sample	Total/NA	Water	7470A	339546
400-132957-A-5-B MS	Matrix Spike	Total/NA	Water	7470A	339546
400-132957-A-5-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	339546

Analysis Batch: 339962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132957-A-5-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	339546

General Chemistry

Analysis Batch: 339296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-17	MW-14	Total/NA	Water	SM 2540C	
MB 400-339296/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-339296/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-132810-A-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 339298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-14	MW-11	Total/NA	Water	SM 2540C	
400-132733-15	MW-12	Total/NA	Water	SM 2540C	
400-132733-16	MW-13	Total/NA	Water	SM 2540C	
400-132733-18	MW-15	Total/NA	Water	SM 2540C	
400-132733-19	MW-16	Total/NA	Water	SM 2540C	
400-132733-20	MW-17	Total/NA	Water	SM 2540C	
400-132733-21	MW-18	Total/NA	Water	SM 2540C	
400-132733-22	MW-19	Total/NA	Water	SM 2540C	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

General Chemistry (Continued)

Analysis Batch: 339298 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-23	DUP-03	Total/NA	Water	SM 2540C	
400-132733-24	EB-03	Total/NA	Water	SM 2540C	
400-132733-25	FB-03	Total/NA	Water	SM 2540C	
400-132733-26	DUP-04	Total/NA	Water	SM 2540C	
MB 400-339298/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-339298/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-132733-14 DU	MW-11	Total/NA	Water	SM 2540C	

Analysis Batch: 339649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-14	MW-11	Total/NA	Water	SM 4500 Cl- E	
400-132733-15	MW-12	Total/NA	Water	SM 4500 Cl- E	
400-132733-16	MW-13	Total/NA	Water	SM 4500 Cl- E	
400-132733-17	MW-14	Total/NA	Water	SM 4500 Cl- E	
400-132733-18	MW-15	Total/NA	Water	SM 4500 Cl- E	
400-132733-19	MW-16	Total/NA	Water	SM 4500 Cl- E	
400-132733-20	MW-17	Total/NA	Water	SM 4500 Cl- E	
MB 400-339649/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-339649/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-339649/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-132913-B-3 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-132913-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 339727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-21	MW-18	Total/NA	Water	SM 4500 Cl- E	
400-132733-22	MW-19	Total/NA	Water	SM 4500 Cl- E	
400-132733-23	DUP-03	Total/NA	Water	SM 4500 Cl- E	
400-132733-24	EB-03	Total/NA	Water	SM 4500 Cl- E	
400-132733-25	FB-03	Total/NA	Water	SM 4500 Cl- E	
400-132733-26	DUP-04	Total/NA	Water	SM 4500 Cl- E	
MB 400-339727/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-339727/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-339727/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-132733-21 MS	MW-18	Total/NA	Water	SM 4500 Cl- E	
400-132733-21 MSD	MW-18	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 339729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-14	MW-11	Total/NA	Water	SM 4500 SO4 E	
400-132733-15	MW-12	Total/NA	Water	SM 4500 SO4 E	
400-132733-16	MW-13	Total/NA	Water	SM 4500 SO4 E	
400-132733-17	MW-14	Total/NA	Water	SM 4500 SO4 E	
400-132733-18	MW-15	Total/NA	Water	SM 4500 SO4 E	
400-132733-19	MW-16	Total/NA	Water	SM 4500 SO4 E	
400-132733-20	MW-17	Total/NA	Water	SM 4500 SO4 E	
400-132733-21	MW-18	Total/NA	Water	SM 4500 SO4 E	
400-132733-22	MW-19	Total/NA	Water	SM 4500 SO4 E	
400-132733-23	DUP-03	Total/NA	Water	SM 4500 SO4 E	
400-132733-24	EB-03	Total/NA	Water	SM 4500 SO4 E	
400-132733-25	FB-03	Total/NA	Water	SM 4500 SO4 E	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

General Chemistry (Continued)

Analysis Batch: 339729 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-26	DUP-04	Total/NA	Water	SM 4500 SO4 E	
MB 400-339729/8	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-339729/9	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-339729/5	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-132733-21 MS	MW-18	Total/NA	Water	SM 4500 SO4 E	
400-132733-21 MSD	MW-18	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 340526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-14	MW-11	Total/NA	Water	SM 4500 F C	
400-132733-15	MW-12	Total/NA	Water	SM 4500 F C	
400-132733-16	MW-13	Total/NA	Water	SM 4500 F C	
400-132733-17	MW-14	Total/NA	Water	SM 4500 F C	
400-132733-18	MW-15	Total/NA	Water	SM 4500 F C	
400-132733-19	MW-16	Total/NA	Water	SM 4500 F C	
400-132733-20	MW-17	Total/NA	Water	SM 4500 F C	
400-132733-21	MW-18	Total/NA	Water	SM 4500 F C	
400-132733-22	MW-19	Total/NA	Water	SM 4500 F C	
400-132733-23	DUP-03	Total/NA	Water	SM 4500 F C	
400-132733-24	EB-03	Total/NA	Water	SM 4500 F C	
400-132733-25	FB-03	Total/NA	Water	SM 4500 F C	
400-132733-26	DUP-04	Total/NA	Water	SM 4500 F C	
MB 400-340526/2	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-340526/3	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-132810-A-5 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-132810-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-132733-17 DU	MW-14	Total/NA	Water	SM 4500 F C	

Field Service / Mobile Lab

Analysis Batch: 343304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-14	MW-11	Total/NA	Water	Field Sampling	
400-132733-15	MW-12	Total/NA	Water	Field Sampling	
400-132733-16	MW-13	Total/NA	Water	Field Sampling	
400-132733-17	MW-14	Total/NA	Water	Field Sampling	
400-132733-18	MW-15	Total/NA	Water	Field Sampling	
400-132733-19	MW-16	Total/NA	Water	Field Sampling	
400-132733-20	MW-17	Total/NA	Water	Field Sampling	
400-132733-21	MW-18	Total/NA	Water	Field Sampling	
400-132733-22	MW-19	Total/NA	Water	Field Sampling	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-339359/1-A ^5
Matrix: Water
Analysis Batch: 339677

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 339359

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 16:56	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 16:56	5
Barium	<0.00049		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 16:56	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 16:56	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 16:56	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 16:56	5
Calcium	<0.13		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 16:56	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 16:56	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 16:56	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 16:56	5
Lithium	<0.0032		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 16:56	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 16:56	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 16:56	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 16:56	5

Lab Sample ID: LCS 400-339359/2-A
Matrix: Water
Analysis Batch: 339677

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 339359

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0533		mg/L		107	80 - 120
Arsenic	0.0500	0.0508		mg/L		102	80 - 120
Barium	0.0500	0.0529		mg/L		106	80 - 120
Beryllium	0.0500	0.0546		mg/L		109	80 - 120
Boron	0.100	0.0986		mg/L		99	80 - 120
Cadmium	0.0500	0.0523		mg/L		105	80 - 120
Calcium	5.00	4.82		mg/L		96	80 - 120
Chromium	0.0500	0.0492		mg/L		98	80 - 120
Cobalt	0.0500	0.0480		mg/L		96	80 - 120
Lead	0.0500	0.0519		mg/L		104	80 - 120
Lithium	0.0500	0.0524		mg/L		105	80 - 120
Molybdenum	0.100	0.103		mg/L		103	80 - 120
Selenium	0.0500	0.0497		mg/L		99	80 - 120
Thallium	0.0100	0.0107		mg/L		107	80 - 120

Lab Sample ID: 400-132733-14 MS
Matrix: Water
Analysis Batch: 339677

Client Sample ID: MW-11
Prep Type: Total Recoverable
Prep Batch: 339359

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0010		0.0500	0.0523		mg/L		105	75 - 125
Arsenic	<0.00046		0.0500	0.0509		mg/L		102	75 - 125
Barium	0.081		0.0500	0.134		mg/L		105	75 - 125
Beryllium	0.00034	J	0.0500	0.0577		mg/L		115	75 - 125
Boron	<0.021		0.100	0.111		mg/L		111	75 - 125
Cadmium	<0.00034		0.0500	0.0514		mg/L		103	75 - 125
Calcium	1.8		5.00	6.79		mg/L		100	75 - 125
Chromium	<0.0011		0.0500	0.0496		mg/L		99	75 - 125

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 400-132733-14 MS
Matrix: Water
Analysis Batch: 339677

Client Sample ID: MW-11
Prep Type: Total Recoverable
Prep Batch: 339359

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	0.0047		0.0500	0.0537		mg/L		98	75 - 125
Lead	<0.00035		0.0500	0.0533		mg/L		107	75 - 125
Lithium	<0.0032		0.0500	0.0565		mg/L		113	75 - 125
Molybdenum	<0.00085		0.100	0.102		mg/L		102	75 - 125
Selenium	<0.00024		0.0500	0.0497		mg/L		99	75 - 125
Thallium	<0.000085		0.0100	0.0108		mg/L		108	75 - 125

Lab Sample ID: 400-132733-14 MSD
Matrix: Water
Analysis Batch: 339677

Client Sample ID: MW-11
Prep Type: Total Recoverable
Prep Batch: 339359

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Antimony	<0.0010		0.0500	0.0536		mg/L		107	75 - 125	2	20
Arsenic	<0.00046		0.0500	0.0520		mg/L		104	75 - 125	2	20
Barium	0.081		0.0500	0.136		mg/L		109	75 - 125	1	20
Beryllium	0.00034	J	0.0500	0.0580		mg/L		115	75 - 125	1	20
Boron	<0.021		0.100	0.110		mg/L		110	75 - 125	1	20
Cadmium	<0.00034		0.0500	0.0551		mg/L		110	75 - 125	7	20
Calcium	1.8		5.00	6.83		mg/L		101	75 - 125	1	20
Chromium	<0.0011		0.0500	0.0505		mg/L		101	75 - 125	2	20
Cobalt	0.0047		0.0500	0.0543		mg/L		99	75 - 125	1	20
Lead	<0.00035		0.0500	0.0526		mg/L		105	75 - 125	1	20
Lithium	<0.0032		0.0500	0.0588		mg/L		118	75 - 125	4	20
Molybdenum	<0.00085		0.100	0.104		mg/L		104	75 - 125	2	20
Selenium	<0.00024		0.0500	0.0506		mg/L		101	75 - 125	2	20
Thallium	<0.000085		0.0100	0.0108		mg/L		108	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-339546/14-A
Matrix: Water
Analysis Batch: 339947

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 339546

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		01/24/17 10:12	01/26/17 13:46	1

Lab Sample ID: LCS 400-339546/15-A
Matrix: Water
Analysis Batch: 339947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 339546

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00101	0.00114		mg/L		113	80 - 120

Lab Sample ID: 400-132957-A-5-B MS
Matrix: Water
Analysis Batch: 339947

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 339546

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.000070		0.00201	0.00203		mg/L		101	80 - 120

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Lab Sample ID: 400-132957-A-5-C MSD
Matrix: Water
Analysis Batch: 339947

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 339546

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.000070		0.00201	0.00219		mg/L		109	80 - 120	8	20

Lab Sample ID: 400-132957-A-5-C MSD
Matrix: Water
Analysis Batch: 339962

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 339546

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.000070		0.00201	0.00210		mg/L		104	80 - 120	4	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 400-339296/1
Matrix: Water
Analysis Batch: 339296

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			01/21/17 14:05	1

Lab Sample ID: LCS 400-339296/2
Matrix: Water
Analysis Batch: 339296

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	254		mg/L		87	78 - 122

Lab Sample ID: 400-132810-A-1 DU
Matrix: Water
Analysis Batch: 339296

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	<3.4		<3.4		mg/L		NC	5

Lab Sample ID: MB 400-339298/1
Matrix: Water
Analysis Batch: 339298

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			01/21/17 14:48	1

Lab Sample ID: LCS 400-339298/2
Matrix: Water
Analysis Batch: 339298

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	234		mg/L		80	78 - 122

Lab Sample ID: 400-132733-14 DU
Matrix: Water
Analysis Batch: 339298

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	32		32.0		mg/L		0	5

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-339649/6
Matrix: Water
Analysis Batch: 339649

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			01/24/17 14:29	1

Lab Sample ID: LCS 400-339649/7
Matrix: Water
Analysis Batch: 339649

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 400-339649/3
Matrix: Water
Analysis Batch: 339649

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	2.09		mg/L		105	50 - 150

Lab Sample ID: 400-132913-B-3 MS
Matrix: Water
Analysis Batch: 339649

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	22		10.0	29.6		mg/L		80	73 - 120

Lab Sample ID: 400-132913-B-3 MSD
Matrix: Water
Analysis Batch: 339649

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	22		10.0	31.4		mg/L		98	73 - 120	6	8

Lab Sample ID: MB 400-339727/6
Matrix: Water
Analysis Batch: 339727

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			01/25/17 08:22	1

Lab Sample ID: LCS 400-339727/7
Matrix: Water
Analysis Batch: 339727

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	31.8		mg/L		106	90 - 110

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: MRL 400-339727/3
Matrix: Water
Analysis Batch: 339727

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	2.03		mg/L		101	50 - 150

Lab Sample ID: 400-132733-21 MS
Matrix: Water
Analysis Batch: 339727

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	9.2		10.0	20.0		mg/L		108	73 - 120

Lab Sample ID: 400-132733-21 MSD
Matrix: Water
Analysis Batch: 339727

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	9.2		10.0	20.0		mg/L		108	73 - 120	0	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-340526/2
Matrix: Water
Analysis Batch: 340526

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			01/31/17 15:43	1

Lab Sample ID: LCS 400-340526/3
Matrix: Water
Analysis Batch: 340526

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: 400-132810-A-5 MS
Matrix: Water
Analysis Batch: 340526

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: 400-132810-A-5 MSD
Matrix: Water
Analysis Batch: 340526

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

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: 400-132733-17 DU
Matrix: Water
Analysis Batch: 340526

Client Sample ID: MW-14
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 400-339729/8
Matrix: Water
Analysis Batch: 339729

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			01/25/17 08:28	1

Lab Sample ID: LCS 400-339729/9
Matrix: Water
Analysis Batch: 339729

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

Lab Sample ID: MRL 400-339729/5
Matrix: Water
Analysis Batch: 339729

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	4.39	J	mg/L		88	50 - 150

Lab Sample ID: 400-132733-21 MS
Matrix: Water
Analysis Batch: 339729

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	3.8	J	10.0	14.5		mg/L		106	77 - 128

Lab Sample ID: 400-132733-21 MSD
Matrix: Water
Analysis Batch: 339729

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	3.8	J	10.0	14.4		mg/L		106	77 - 128	0	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
 Client Contact: Mr. Dale Sellers
 Company: Southern Company
 Address: PO BOX 2641 GSC8
 City: Birmingham
 State, Zip: AL, 35291
 Phone: 205-992-7762(Tel)
 Email: CSSELLER@SOUTHERNCO.COM
 Project Name: CCR - Plant Daniel
 Site: Mississippi

Sample: Five Hydrocarbons / Surfer
 Lab Pk: Whitmore, Chyenne R
 Phone: 850-336-0192
 Email: chyenne.whitmore@testamerica.com

Carrier Tracking No(s):
 COC No: 400-61562-24634.1
 Page: Page 1 of 2
 Lab #:

Analysis Requested
 Due Date Requested:
 TAT Requested (days):
 PO #: SCS10328728
 MO #: 37180
 Project #: 40016521
 SSOW#:

Preservation Codes:
 A - HCL
 B - NaOH
 C - Zn Acetate
 D - Nitric Acid
 E - NaHSO4
 F - MeOH
 G - Amchlor
 H - Ascorbic Acid
 I - Ice
 J - DI Water
 K - EDTA
 L - EDA
 Other:
 M - Hexane
 N - None
 O - Aqueous
 P - Na2CO3
 Q - Na2SO3
 R - Na2S2O3
 S - H2SO4
 T - TSP Dodecylhydrate
 U - Acetone
 V - MCAA
 W - pH 4.5
 X - EDTA
 Z - other (specify)

Special Instructions (Note):

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (Element, Compound, Distribution, Preparation, Analyte)	Analysis Requested
EB-01	1-16-17	1400	Water	Water	9310, Na220, B320, Pb220, 4900, J, S - Fluoride
EB-02			Water	Water	
EB-03			Water	Water	
EB-04			Water	Water	
EB-05			Water	Water	
EB-06			Water	Water	
EB-07			Water	Water	
EB-08			Water	Water	
EB-09			Water	Water	
EB-10			Water	Water	
EB-11			Water	Water	
EB-12			Water	Water	
EB-13			Water	Water	
EB-14			Water	Water	
EB-15			Water	Water	
EB-16			Water	Water	
EB-17			Water	Water	
EB-18			Water	Water	
EB-19			Water	Water	
EB-20			Water	Water	

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant
 Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Requisitioned by:
 Requisitioned by: [Signature]
 Date: 1-17-17 1330
 Company: RAH EW

Requisitioned by:
 Requisitioned by: [Signature]
 Date: 1-17-17 1733
 Company: TA

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

Cooler Temperature(s) °C and Other Remarks: 0.0°C, 0.0°C, 0.0°C TRG

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

Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information
 Client Contact:
 Mr. Cale Sellers
 Southern Company
 PO BOX 2841 GSC8
 Birmingham
 State, Zip:
 AL, 35291
 Phone:
 205-992-7762(Tel)
 E-Mail:
 CASELLER@SOUTHERNCO.COM
 Project Name:
 CR - Plant Dental
 Sizer
 Mississippi

Carrier Tracking No(s):
 Lab Pk#
 Whittire, Cheyenne R
 E-Mail
 cheyenne.whittire@testamericainc.com

IOC# No:
 400-61562-24534.2
 Page:
 Page 2 of 2
 63 #

Analysis Requested

Preservation Codes:
 M - Hexane
 N - None
 O - As₂O₃
 P - Na₂OAS
 Q - Na₂SO₃
 R - Na₂SO₃S
 S - H₂SO₄
 T - TSP Dodecahydrate
 U - Acetone
 V - MCAA
 W - PH 4-5
 X - EDTA
 L - EDA
 Other

Sample Identification	Sample Date	Sample Time	Sample Type (C-Comp, G-grab)	Matrix (Invert, Susp, Chem, Soil, etc)	8116, 8425, 8320, R4228	SM4500, CL E, SM4500, SO4 E	602, 7470A	Zinc - Total Dissolved Solids	4500, F - Fluoride	Special Instructions/Note:
MW-1	1-16-17	1258	G	Water	X	X	X	X	X	
MW-2	1-16-17	1628	G	Water	X	X	X	X	X	
MW-3	1-16-17	0810	G	Water	X	X	X	X	X	
MW-4	1-16-17	1038	G	Water	X	X	X	X	X	
MW-5	1-16-17	1139	G	Water	X	X	X	X	X	
MW-6	1-16-17	0907	G	Water	X	X	X	X	X	
MW-7	1-16-17	1345	G	Water	X	X	X	X	X	
MW-8	1-17-17	1027	G	Water	X	X	X	X	X	
MW-9	1-17-17	0927	G	Water	X	X	X	X	X	
MW-10	1-17-17	1132	G	Water	X	X	X	X	X	

Possible Hazard Identification:
 Non-Hazard Flammable Skin Irritant
 Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by:
 Relinquished by: [Signature]
 Relinquished on: 1/17/17
 Relinquished at: [Signature]
 Relinquished by: [Signature]

Method of Shipment:
 Return To Client Disposal By Let Archive For Months

Special Instructions/CC Requirements:

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

Date/Time: 1/17/17 1330
 Date/Time: 1-17-17 1733
 Date/Time: [Signature]
 Date/Time: [Signature]

Company: EDX SW
 Company: EDX SW
 Company: EDX SW

Cooler Temperature(s) °C and Other Remarks: 0.0, 0.0, 0.0°C SR-6



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

Chain of Custody Record

TestAmerica
 METROLOGICAL TESTING

Client Information
 Client Contact: Mr. Date Sellers
 Company: Southern Company
 Address: PO BOX 2641 CSC8
 City: Birmingham
 State, Zip: AL, 35291
 Phone: 205-992-7762(Tel)
 PO #: SCS10328728
 WJ #: 37180
 Project #: 40006621
 Project Name: CCR -Plant Daniel
 Site: Mississippi

Client Information
 Sampler: Brett Surles
 Lab Pkt: Whitmore, Cherylene R
 E-Mail: cherylene.whitmore@testamericainc.com
 Phone: 850 380 3458

Analysis Requested
 3918 Pb226, 9320 Kz228
 5M4500 Cl, E, 5M4500, SO4 E
 6020, 7470A
 6240C - Total Dissolved Solids
 4900 F, C - Fluoride

Sample Identification

Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (Water, Sewage, Onwasteb, Stormwater, Air)
MW-11	1/19/17	1254	G	Water
MW-12	1/19/17	0950		Water
MW-13	1/19/17	1055		Water
MW-14	1/18/17	1415		Water
MW-15	1/19/17	0903		Water
MW-16	1/18/17	0935		Water
MW-17	1/18/17	1121		Water
MW-18	1/18/17	1208		Water
MW-19	1/18/17	1010		Water
Dup-03	1/18/17	0910		Water
EB-03	1/19/17	1305	G	Water

Special Instructions/Notes:

Preservation Codes:
 M - Hexane
 N - None
 O - Asb/O2
 P - N2/O2S
 Q - N2/O2S
 R - N2/O2S
 S - H2SO4
 T - TSP Doosepyrate
 U - Acetone
 V - MCAA
 W - pH 4.5
 Z - other (specify)

Other: _____

Carrier Tracking Info:
 COC No: 400-61559-23825.1
 Pages: 1 of 2
 Page # 1 of 2

Analysis Requested

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

Special Instructions/OC Requirements:

Received by: [Signature] Date: 1/19/17
Received by: [Signature] Date: 1/19/17
Received by: [Signature] Date: 1/19/17

Company: Southern Company
City: Birmingham
State: AL
Zip: 35291

Customer Seal No.: 57C, 51C, 3.0C IR6



SERIAL NUMBER: 83540

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001
Fax: 850-478-2671
Website: www.testamericainc.com

CLIENT: Southern Co
PROJECT NO.: 20 Box 2641 GSC 8
CLIENT PROJECT MANAGER: Benjamin A 35291
COSTUMER: CCR - Daniel
SAMPLER: RDH ENV
CLIENT PHONE: 205 992-7762
CLIENT E-MAIL OR FAX:
CONTRACT / P.O. NO.:
CLIENT CONTRACT / P.O. NO.:
CONTRACT / P.O. NO.:

ADDRESS: 20 Box 2641 GSC 8
PROJECT LOC. (STATE): MS
PRESERVATIVE: MS
CLIENT PROJECT MANAGER: Cate Sellers

DATE: 1/19/17 1015 FB-03
DATE: 1/19/17 0803 DUP 04

LAB USE ONLY - SAMPLE NUMBER

REQUESTED ANALYSIS
IDENTIFICATION
POSSIBLE HAZARD
Δ NON-HAZARD
Δ FLAMMABLE
Δ RADIOACTIVE
Δ POISON B
Δ UNKNOWN
Δ OTHER:
NO. OF COOLERS PER SHIPMENT:
SPECIAL INSTRUCTIONS/ CONDITIONS OF RECEIPT:

NUMBER OF CONTAINERS SUBMITTED
9315-R-206, R-228
SM4500-C1E, SM4500-C2
6620, 7470A
8546C-TDS
4500-F.C-Fluoride

MATRIX
Drinking Water
Aqueous GW, SW, WW
Soil, Semisolid, Sediment
Air
NonAqueous (Oil, Solvent, etc.)

PRESERVATIVE
No Preservative
HCL - Hydrochloric Acid
HNO3 - Nitric Acid
H2SO4 - Sulfuric Acid or H3PO4
NaOH - Sodium Hydroxide
CH3OH - Methanol
NAHSO4 - Sodium Bisulfate
NA2SO3 - Sodium Thiosulfate
Other:

RELINQUISHED BY: (SIGNATURE) DATE TIME
RECEIVED BY: (SIGNATURE) DATE TIME

RELINQUISHED BY: (SIGNATURE) DATE TIME
RECEIVED BY: (SIGNATURE) DATE TIME

RELINQUISHED BY: (SIGNATURE) DATE TIME
RECEIVED BY: (SIGNATURE) DATE TIME

RELINQUISHED BY: (SIGNATURE) DATE TIME
RECEIVED BY: (SIGNATURE) DATE TIME

RELINQUISHED BY: (SIGNATURE) DATE TIME
RECEIVED BY: (SIGNATURE) DATE TIME

RECEIVED FOR LABORATORY BY: DATE TIME
CUSTODY INTACT? A YES Δ NO

REMARKS:
LABORATORY USE ONLY:
CUSTODY SEAL NO.
DATE TIME: 1/19/17 1505

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-132733-3

SDG Number: NAMU

Login Number: 132733

List Number: 1

Creator: Hughes, Nicholas T

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C, 0.0°C, 0.0°C IR-6; 3.0°C, 5.1°C, 5.7°C IR-6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-17
Louisiana (DW)	NELAP Secondary AB	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-132733-4

TestAmerica Sample Delivery Group: NAMU

Client Project/Site: CCR -Plant Daniel

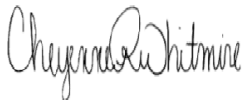
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:

3/28/2017 2:47:47 PM

Cheyenne Whitmire, Project Manager II

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

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

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Case Narrative

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Job ID: 400-132733-4

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-132733-4

RAD

Method(s) PrecSep_0: Radium-228 Prep Batch 160-288794: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: MW-13 (400-132733-16), MW-14 (400-132733-17), MW-15 (400-132733-18), MW-16 (400-132733-19), MW-17 (400-132733-20), MW-18 (400-132733-21), MW-19 (400-132733-22), DUP-03 (400-132733-23), EB-03 (400-132733-24), FB-03 (400-132733-25) and DUP-04 (400-132733-26). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method(s) PrecSep_0: Radium-228 Prep Batch 160-288784: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: MW-11 (400-132733-14) and MW-12 (400-132733-15). 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 160-288791: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: MW-13 (400-132733-16), MW-14 (400-132733-17), MW-15 (400-132733-18), MW-16 (400-132733-19), MW-17 (400-132733-20), MW-18 (400-132733-21), MW-19 (400-132733-22), DUP-03 (400-132733-23), EB-03 (400-132733-24), FB-03 (400-132733-25) and DUP-04 (400-132733-26). 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 160-288776: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: MW-11 (400-132733-14) and MW-12 (400-132733-15). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-132733-14	MW-11	Water	01/19/17 12:54	01/19/17 15:05
400-132733-15	MW-12	Water	01/19/17 09:50	01/19/17 15:05
400-132733-16	MW-13	Water	01/19/17 10:55	01/19/17 15:05
400-132733-17	MW-14	Water	01/18/17 14:15	01/19/17 15:05
400-132733-18	MW-15	Water	01/19/17 09:03	01/19/17 15:05
400-132733-19	MW-16	Water	01/18/17 09:35	01/19/17 15:05
400-132733-20	MW-17	Water	01/18/17 11:21	01/19/17 15:05
400-132733-21	MW-18	Water	01/18/17 12:08	01/19/17 15:05
400-132733-22	MW-19	Water	01/18/17 10:10	01/19/17 15:05
400-132733-23	DUP-03	Water	01/18/17 09:10	01/19/17 15:05
400-132733-24	EB-03	Water	01/19/17 13:05	01/19/17 15:05
400-132733-25	FB-03	Water	01/19/17 10:15	01/19/17 15:05
400-132733-26	DUP-04	Water	01/19/17 08:03	01/19/17 15:05

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-11
Date Collected: 01/19/17 12:54
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-14
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	0.392		0.155	0.159	1.00	0.155	pCi/L	01/23/17 15:39	02/14/17 10:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.5		40 - 110					01/23/17 15:39	02/14/17 10:39	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.733		0.301	0.308	1.00	0.428	pCi/L	01/23/17 16:11	02/10/17 12:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.5		40 - 110					01/23/17 16:11	02/10/17 12:31	1
Y Carrier	89.7		40 - 110					01/23/17 16:11	02/10/17 12:31	1

Method: Ra226_Ra228 - Combined Radium-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		0.338	0.347	5.00	0.428	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-12
Date Collected: 01/19/17 09:50
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-15
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	0.693		0.205	0.215	1.00	0.182	pCi/L	01/23/17 15:39	02/14/17 10:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.9		40 - 110					01/23/17 15:39	02/14/17 10:39	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.63		0.405	0.432	1.00	0.515	pCi/L	01/23/17 16:11	02/10/17 12:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.9		40 - 110					01/23/17 16:11	02/10/17 12:31	1
Y Carrier	87.1		40 - 110					01/23/17 16:11	02/10/17 12:31	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.33		0.454	0.482	5.00	0.515	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-13
Date Collected: 01/19/17 10:55
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-16
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	0.684		0.285	0.292	1.00	0.293	pCi/L	01/23/17 17:08	02/14/17 06:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.3		40 - 110					01/23/17 17:08	02/14/17 06:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.348	U	0.295	0.297	1.00	0.473	pCi/L	01/23/17 17:42	02/13/17 13:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.3		40 - 110					01/23/17 17:42	02/13/17 13:26	1
Y Carrier	87.9		40 - 110					01/23/17 17:42	02/13/17 13:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.03		0.411	0.416	5.00	0.473	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-14
Date Collected: 01/18/17 14:15
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-17
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	0.894		0.326	0.336	1.00	0.311	pCi/L	01/23/17 17:08	02/14/17 06:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.6		40 - 110					01/23/17 17:08	02/14/17 06:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.859		0.348	0.357	1.00	0.489	pCi/L	01/23/17 17:42	02/13/17 13:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.6		40 - 110					01/23/17 17:42	02/13/17 13:26	1
Y Carrier	84.5		40 - 110					01/23/17 17:42	02/13/17 13:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.75		0.477	0.490	5.00	0.489	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-15
Date Collected: 01/19/17 09:03
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-18
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	0.506		0.259	0.263	1.00	0.317	pCi/L	01/23/17 17:08	02/14/17 06:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.2		40 - 110					01/23/17 17:08	02/14/17 06:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.273	U	0.253	0.254	1.00	0.408	pCi/L	01/23/17 17:42	02/13/17 13:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.2		40 - 110					01/23/17 17:42	02/13/17 13:26	1
Y Carrier	87.1		40 - 110					01/23/17 17:42	02/13/17 13:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.780		0.362	0.366	5.00	0.408	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-16
Date Collected: 01/18/17 09:35
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-19
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	0.313		0.223	0.225	1.00	0.311	pCi/L	01/23/17 17:08	02/14/17 06:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.1		40 - 110					01/23/17 17:08	02/14/17 06:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.831		0.344	0.353	1.00	0.483	pCi/L	01/23/17 17:42	02/13/17 13:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.1		40 - 110					01/23/17 17:42	02/13/17 13:26	1
Y Carrier	76.3		40 - 110					01/23/17 17:42	02/13/17 13:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.14		0.410	0.418	5.00	0.483	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-17
Date Collected: 01/18/17 11:21
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-20
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	0.380		0.221	0.223	1.00	0.284	pCi/L	01/23/17 17:08	02/14/17 06:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.3		40 - 110					01/23/17 17:08	02/14/17 06:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.474		0.252	0.256	1.00	0.371	pCi/L	01/23/17 17:42	02/13/17 13:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.3		40 - 110					01/23/17 17:42	02/13/17 13:26	1
Y Carrier	88.6		40 - 110					01/23/17 17:42	02/13/17 13:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.854		0.335	0.340	5.00	0.371	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-18
Date Collected: 01/18/17 12:08
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-21
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	0.387		0.240	0.243	1.00	0.320	pCi/L	01/23/17 17:08	02/14/17 08:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.5		40 - 110					01/23/17 17:08	02/14/17 08:38	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.633		0.301	0.306	1.00	0.436	pCi/L	01/23/17 17:42	02/13/17 13:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.5		40 - 110					01/23/17 17:42	02/13/17 13:26	1
Y Carrier	87.5		40 - 110					01/23/17 17:42	02/13/17 13:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.02		0.385	0.391	5.00	0.436	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-19
Date Collected: 01/18/17 10:10
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-22
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	0.129	U	0.211	0.211	1.00	0.366	pCi/L	01/23/17 17:08	02/14/17 08:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.5		40 - 110					01/23/17 17:08	02/14/17 08:38	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.173	U	0.281	0.281	1.00	0.474	pCi/L	01/23/17 17:42	02/13/17 13:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.5		40 - 110					01/23/17 17:42	02/13/17 13:26	1
Y Carrier	85.2		40 - 110					01/23/17 17:42	02/13/17 13:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.302	U	0.351	0.352	5.00	0.474	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: DUP-03

Lab Sample ID: 400-132733-23

Date Collected: 01/18/17 09:10

Matrix: Water

Date Received: 01/19/17 15:05

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.164	U	0.177	0.178	1.00	0.281	pCi/L	01/23/17 17:08	02/14/17 08:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.3		40 - 110					01/23/17 17:08	02/14/17 08:39	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.491		0.258	0.262	1.00	0.378	pCi/L	01/23/17 17:42	02/13/17 13:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.3		40 - 110					01/23/17 17:42	02/13/17 13:26	1
Y Carrier	88.6		40 - 110					01/23/17 17:42	02/13/17 13:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.656		0.313	0.316	5.00	0.378	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
 SDG: NAMU

Client Sample ID: EB-03
Date Collected: 01/19/17 13:05
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-24
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	0.0438	U	0.165	0.165	1.00	0.317	pCi/L	01/23/17 17:08	02/14/17 08:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.6		40 - 110					01/23/17 17:08	02/14/17 08:39	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0228	U	0.222	0.222	1.00	0.403	pCi/L	01/23/17 17:42	02/13/17 13:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.6		40 - 110					01/23/17 17:42	02/13/17 13:27	1
Y Carrier	92.7		40 - 110					01/23/17 17:42	02/13/17 13:27	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0211	U	0.276	0.276	5.00	0.403	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
 SDG: NAMU

Client Sample ID: FB-03
Date Collected: 01/19/17 10:15
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-25
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	0.306		0.204	0.206	1.00	0.269	pCi/L	01/23/17 17:08	02/14/17 08:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.0		40 - 110					01/23/17 17:08	02/14/17 08:39	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.164	U	0.243	0.244	1.00	0.409	pCi/L	01/23/17 17:42	02/13/17 13:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.0		40 - 110					01/23/17 17:42	02/13/17 13:27	1
Y Carrier	88.2		40 - 110					01/23/17 17:42	02/13/17 13:27	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.469		0.318	0.319	5.00	0.409	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: DUP-04

Lab Sample ID: 400-132733-26

Date Collected: 01/19/17 08:03

Matrix: Water

Date Received: 01/19/17 15:05

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.485		0.268	0.272	1.00	0.350	pCi/L	01/23/17 17:08	02/14/17 08:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.8		40 - 110					01/23/17 17:08	02/14/17 08:40	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.304	U	0.273	0.275	1.00	0.438	pCi/L	01/23/17 17:42	02/13/17 13:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.8		40 - 110					01/23/17 17:42	02/13/17 13:27	1
Y Carrier	85.2		40 - 110					01/23/17 17:42	02/13/17 13:27	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.788		0.383	0.387	5.00	0.438	pCi/L		02/17/17 09:22	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-11

Date Collected: 01/19/17 12:54

Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288776	01/23/17 15:39	AS	TAL SL
Total/NA	Analysis	9315		1	292221	02/14/17 10:39	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288784	01/23/17 16:11	AS	TAL SL
Total/NA	Analysis	9320		1	291912	02/10/17 12:31	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Client Sample ID: MW-12

Date Collected: 01/19/17 09:50

Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288776	01/23/17 15:39	AS	TAL SL
Total/NA	Analysis	9315		1	292221	02/14/17 10:39	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288784	01/23/17 16:11	AS	TAL SL
Total/NA	Analysis	9320		1	291912	02/10/17 12:31	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Client Sample ID: MW-13

Date Collected: 01/19/17 10:55

Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288791	01/23/17 17:08	AS	TAL SL
Total/NA	Analysis	9315		1	292221	02/14/17 06:51	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288794	01/23/17 17:42	AS	TAL SL
Total/NA	Analysis	9320		1	292017	02/13/17 13:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Client Sample ID: MW-14

Date Collected: 01/18/17 14:15

Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-17

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288791	01/23/17 17:08	AS	TAL SL
Total/NA	Analysis	9315		1	292221	02/14/17 06:51	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288794	01/23/17 17:42	AS	TAL SL
Total/NA	Analysis	9320		1	292017	02/13/17 13:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-15

Lab Sample ID: 400-132733-18

Date Collected: 01/19/17 09:03

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288791	01/23/17 17:08	AS	TAL SL
Total/NA	Analysis	9315		1	292221	02/14/17 06:51	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288794	01/23/17 17:42	AS	TAL SL
Total/NA	Analysis	9320		1	292017	02/13/17 13:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Client Sample ID: MW-16

Lab Sample ID: 400-132733-19

Date Collected: 01/18/17 09:35

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288791	01/23/17 17:08	AS	TAL SL
Total/NA	Analysis	9315		1	292221	02/14/17 06:51	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288794	01/23/17 17:42	AS	TAL SL
Total/NA	Analysis	9320		1	292017	02/13/17 13:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Client Sample ID: MW-17

Lab Sample ID: 400-132733-20

Date Collected: 01/18/17 11:21

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288791	01/23/17 17:08	AS	TAL SL
Total/NA	Analysis	9315		1	292221	02/14/17 06:51	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288794	01/23/17 17:42	AS	TAL SL
Total/NA	Analysis	9320		1	292017	02/13/17 13:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Client Sample ID: MW-18

Lab Sample ID: 400-132733-21

Date Collected: 01/18/17 12:08

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288791	01/23/17 17:08	AS	TAL SL
Total/NA	Analysis	9315		1	292220	02/14/17 08:38	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288794	01/23/17 17:42	AS	TAL SL
Total/NA	Analysis	9320		1	292017	02/13/17 13:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-19

Lab Sample ID: 400-132733-22

Date Collected: 01/18/17 10:10

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288791	01/23/17 17:08	AS	TAL SL
Total/NA	Analysis	9315		1	292220	02/14/17 08:38	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288794	01/23/17 17:42	AS	TAL SL
Total/NA	Analysis	9320		1	292017	02/13/17 13:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Client Sample ID: DUP-03

Lab Sample ID: 400-132733-23

Date Collected: 01/18/17 09:10

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288791	01/23/17 17:08	AS	TAL SL
Total/NA	Analysis	9315		1	292220	02/14/17 08:39	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288794	01/23/17 17:42	AS	TAL SL
Total/NA	Analysis	9320		1	292017	02/13/17 13:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Client Sample ID: EB-03

Lab Sample ID: 400-132733-24

Date Collected: 01/19/17 13:05

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288791	01/23/17 17:08	AS	TAL SL
Total/NA	Analysis	9315		1	292220	02/14/17 08:39	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288794	01/23/17 17:42	AS	TAL SL
Total/NA	Analysis	9320		1	292017	02/13/17 13:27	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Client Sample ID: FB-03

Lab Sample ID: 400-132733-25

Date Collected: 01/19/17 10:15

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288791	01/23/17 17:08	AS	TAL SL
Total/NA	Analysis	9315		1	292220	02/14/17 08:39	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288794	01/23/17 17:42	AS	TAL SL
Total/NA	Analysis	9320		1	292017	02/13/17 13:27	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: DUP-04

Lab Sample ID: 400-132733-26

Date Collected: 01/19/17 08:03

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288791	01/23/17 17:08	AS	TAL SL
Total/NA	Analysis	9315		1	292221	02/14/17 08:40	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288794	01/23/17 17:42	AS	TAL SL
Total/NA	Analysis	9320		1	292017	02/13/17 13:27	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Rad

Prep Batch: 288776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-14	MW-11	Total/NA	Water	PrecSep-21	
400-132733-15	MW-12	Total/NA	Water	PrecSep-21	

Prep Batch: 288784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-14	MW-11	Total/NA	Water	PrecSep_0	
400-132733-15	MW-12	Total/NA	Water	PrecSep_0	

Prep Batch: 288791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-16	MW-13	Total/NA	Water	PrecSep-21	
400-132733-17	MW-14	Total/NA	Water	PrecSep-21	
400-132733-18	MW-15	Total/NA	Water	PrecSep-21	
400-132733-19	MW-16	Total/NA	Water	PrecSep-21	
400-132733-20	MW-17	Total/NA	Water	PrecSep-21	
400-132733-21	MW-18	Total/NA	Water	PrecSep-21	
400-132733-22	MW-19	Total/NA	Water	PrecSep-21	
400-132733-23	DUP-03	Total/NA	Water	PrecSep-21	
400-132733-24	EB-03	Total/NA	Water	PrecSep-21	
400-132733-25	FB-03	Total/NA	Water	PrecSep-21	
400-132733-26	DUP-04	Total/NA	Water	PrecSep-21	
MB 160-288791/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-288791/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-288791/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 288794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-16	MW-13	Total/NA	Water	PrecSep_0	
400-132733-17	MW-14	Total/NA	Water	PrecSep_0	
400-132733-18	MW-15	Total/NA	Water	PrecSep_0	
400-132733-19	MW-16	Total/NA	Water	PrecSep_0	
400-132733-20	MW-17	Total/NA	Water	PrecSep_0	
400-132733-21	MW-18	Total/NA	Water	PrecSep_0	
400-132733-22	MW-19	Total/NA	Water	PrecSep_0	
400-132733-23	DUP-03	Total/NA	Water	PrecSep_0	
400-132733-24	EB-03	Total/NA	Water	PrecSep_0	
400-132733-25	FB-03	Total/NA	Water	PrecSep_0	
400-132733-26	DUP-04	Total/NA	Water	PrecSep_0	
MB 160-288794/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-288794/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-288794/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-288791/1-A
Matrix: Water
Analysis Batch: 292221

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 288791

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1040	U	0.176	0.176	1.00	0.310	pCi/L	01/23/17 17:08	02/14/17 06:51	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.1		40 - 110					01/23/17 17:08	02/14/17 06:51	1

Lab Sample ID: LCS 160-288791/2-A
Matrix: Water
Analysis Batch: 292777

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 288791

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	6.01	6.572		0.848	1.00	0.224	pCi/L	109	68 - 137
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	79.5		40 - 110						

Lab Sample ID: LCSD 160-288791/3-A
Matrix: Water
Analysis Batch: 292777

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 288791

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	6.01	6.794		0.876	1.00	0.214	pCi/L	113	68 - 137	0.13	1
Carrier	LCSD %Yield	LCSD Qualifier	Limits								
Ba Carrier	79.5		40 - 110								

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-288794/1-A
Matrix: Water
Analysis Batch: 292017

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 288794

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.3625	U	0.268	0.270	1.00	0.532	pCi/L	01/23/17 17:42	02/13/17 13:25	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.1		40 - 110					01/23/17 17:42	02/13/17 13:25	1
Y Carrier	89.7		40 - 110					01/23/17 17:42	02/13/17 13:25	1

QC Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
 SDG: NAMU

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

Lab Sample ID: LCS 160-288794/2-A
Matrix: Water
Analysis Batch: 292017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 288794

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	13.9	15.06		1.65	1.00	0.488	pCi/L	109	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	79.5		40 - 110
Y Carrier	89.7		40 - 110

Lab Sample ID: LCSD 160-288794/3-A
Matrix: Water
Analysis Batch: 292017

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 288794

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	13.9	17.63		1.89	1.00	0.483	pCi/L	127	56 - 140	0.73	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	79.5		40 - 110
Y Carrier	87.5		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
 Client Contact: *Michelle Ayers/Surfer*
 Address: *850-336-0192*
 Southern Company
 Address: *PO BOX 2641 GSC8*
 City: *Birmingham*
 State, Zip: *AL, 35291*
 Phone: *205-992-7762(Tel)*
 Email: *CSSELLER@SOUTHERNCO.COM*
 Project Name: *CCR - Plant Daniel*
 Site: *Mississippi*

Due Date Requested:
 TAT Requested (days):
 PO #: *SCS10328728*
 MO #: *37180*
 Project #: *40016521*
 SSOW#: *SSOW#*

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (Element, Compound, Distribution, or Particulate, AWP)
EB-01	1-16-17	1400	Water	Water
EB-02			Water	Water
EB-03			Water	Water
EB-04	1-16-17	1335	Water	Water
EB-05			Water	Water
EB-06			Water	Water
DUP-01	1-16-17	0710	Water	Water
DUP-02			Water	Water
DUP-03			Water	Water

Analysis Requested	Matrix	Sample Type	Sample Date	Sample Time	Matrix
9310, Na220, B320, Pb220	Water	Water	1-16-17	1400	Water
9M4500, Cl, E, S, M4500, SO4, E	Water	Water	1-16-17	1335	Water
6020, Y470A	Water	Water	1-16-17	1400	Water
2540C - Total Dissolved Solids	Water	Water	1-16-17	1400	Water
4500, F, P - Fluoride	Water	Water	1-16-17	1400	Water

Preservation Codes:
 A - HCL, B - NaOH, C - Zn Acetate, D - Nitric Acid, E - NaHSO4, F - MeOH, G - Amchlor, H - Ascorbic Acid, I - Ice, J - DI Water, K - EDTA, L - EDA, Other:
 M - Hexane, N - None, O - AsHCO2, P - Na2CO3, Q - Na2SO3, R - Na2S2O3, S - H2SO4, T - TSP Dodecylhydrate, U - Acetone, V - MCAA, W - pH 4.5, X - EDTA, Z - other (specify)

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

Special Instructions (QC Requirements):
 Poison B Unknown Microbiological

Empty Kit Requisitioned by: *[Signature]*
 Requisitioned by: *[Signature]*
 Requisitioned by: *[Signature]*
 Requisitioned by: *[Signature]*

Date: 1-17-17 1330
 Date: 1-17-17 1733
 Date: 1-17-17 1330
 Date: 1-17-17 1733

Company: *RAH EW*
 Company: *RAH EW*
 Company: *TA*
 Company: *TA*

Cooler Temperature(s) °C and Other Remarks: *0.0°C, 0.0°C, 0.0°C TRG*

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 Pensacola, FL 32514
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Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information
 Client Contact: Mr. Cale Sellers
 Address: Southern Company
 PO BOX 2841 GSC8
 Birmingham
 State, Zip: AL, 35291
 Phone: 205-992-7762(Tel)
 E-Mail: CESELLER@SOUTHERNCO.COM
 Project Name: CR - Plant Dental
 Sizer: Mississippi

Carrier Tracking No(s):
 Lab Pk# 1
 Whittire, Cheyenne R
 E-Mail: cheyenne.whittire@testamericainc.com

IOOC No: 400-61562-24534.2
 Page: Page 2 of 2
 SS #:

Analysis Requested

Preservation Codes:
 M - Hexane
 N - None
 O - As₂O₃
 P - Na₂OAS
 Q - Na₂SO₃
 R - Na₂SO₃S
 S - H₂SO₄
 T - TSP Dodecahydrate
 U - Acetone
 V - MCAA
 W - PH 4.5
 X - EDTA
 L - EDA
 Other:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (Inorganic, Organic, Chemical, Other)	8919, 8920, 8920, 8920, 8920, 8920	SM4500, CL, E, SM4500, SO4, E	6020, 7470A	Zinc - Total Dissolved Solids	4500, F - Fluoride	Special Instructions/Note:
MW-1	1-16-17	1258	G	Water	X	X	X	X	X	
MW-2	1-16-17	1628	G	Water	X	X	X	X	X	
MW-3	1-16-17	0810	G	Water	X	X	X	X	X	
MW-4	1-16-17	1038	G	Water	X	X	X	X	X	
MW-5	1-16-17	1139	G	Water	X	X	X	X	X	
MW-6	1-16-17	0907	G	Water	X	X	X	X	X	
MW-7	1-16-17	1345	G	Water	X	X	X	X	X	
MW-8	1-17-17	1027	G	Water	X	X	X	X	X	
MW-9	1-17-17	0927	G	Water	X	X	X	X	X	
MW-10	1-17-17	1132	G	Water	X	X	X	X	X	

Possible Hazard Identification:
 Non-Hazard Flammable Skin Irritant
 Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by:
 Relinquished by: [Signature]
 Relinquished on: 1/17/17
 Relinquished at: [Signature]
 Relinquished by: [Signature]

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

Special Instructions/CC Requirements:

Method of Shipment: [Signature]
 Date/Time: 1/17/17 1330
 Company: KDH Env
 Date/Time: 1-17-17 1733
 Company: [Signature]
 Date/Time: [Signature]
 Company: [Signature]

Cooler Temperature(s) °C and Other Remarks: 0.0, 0.0, 0.0°C SR-6



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 Pensacola, FL 32514
 Phone (850) 474-1001 Fax (850) 478-2871

Chain of Custody Record

TestAmerica
 METROLOGICAL TESTING

Client Information
 Client Contact: Mr. Dale Sellers
 Company: Southern Company
 Address: PO BOX 2641 CSC8
 City: Birmingham
 State, Zip: AL, 35291
 Phone: 205-992-7762(Tel)
 PO #: SCS10328728
 WJ #: 37180
 Project #: 40006621
 Project Name: CCR -Plant Daniel
 Site: Mississippi

Client Information
 Sampler: Brett Surles
 Lab Pkt: Whitmore, Cheryenne R
 E-Mail: cheryenne.whitmore@testamericainc.com
 Phone: 850 380 3458

Analysis Requested
 3918 Pb226, 9320 Kz228
 5M4500 Cl, E, 5M4500, SO4 E
 6020, 7470A
 620C - Total Dissolved Solids
 4900 F, C - Fluoride

Sample Identification

Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (Water, Sewage, Onwater, Other)	Analysis Requested	Special Instructions/Notes
MW-11	1/19/17	1254	G	Water	3918 Pb226, 9320 Kz228	
MW-12	1/19/17	0950	G	Water	5M4500 Cl, E, 5M4500, SO4 E	
MW-13	1/19/17	1055	G	Water	6020, 7470A	
MW-14	1/18/17	1415	G	Water	620C - Total Dissolved Solids	
MW-15	1/19/17	0903	G	Water	4900 F, C - Fluoride	
MW-16	1/18/17	0935	G	Water		
MW-17	1/18/17	1121	G	Water		
MW-18	1/18/17	1208	G	Water		
MW-19	1/18/17	1010	G	Water		
Dup-03	1/18/17	0910	G	Water		
EB-03	1/19/17	1305	G	Water		

Preservation Codes:
 M - Hexane
 N - None
 O - Asb/O2
 P - N2/OAS
 Q - N2/SO3
 R - N2/S2O3
 S - H2SO4
 T - TSP Doosep/yrain
 U - Acetone
 V - MCAA
 W - pH 4.5
 Z - other (specify)

Other:

Special Instructions/Notes:

Carrier Tracking Info:
 COC No: 400-61559-23825.1
 Pages: 1 of 2
 Page #:

Analysis Requested:

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

Special Instructions/QC Requirements:

Received by: [Signature] Date: 1/19/17
Received by: [Signature] Date: 1/19/17
Received by: [Signature] Date: 1/19/17

Company: Southern Company
City: Birmingham
State, Zip: AL, 35291

Customer Seal No.: 57C, 51C, 30C IR6



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-132733-4

SDG Number: NAMU

Login Number: 132733

List Number: 1

Creator: Hughes, Nicholas T

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C, 0.0°C, 0.0°C IR-6; 3.0°C, 5.1°C, 5.7°C IR-6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

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.

TestAmerica Pensacola

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: 400-135509-1

TestAmerica Sample Delivery Group: NAMU

Client Project/Site: CCR -Plant Daniel

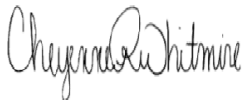
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:

4/19/2017 2:35:17 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

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

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

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

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Case Narrative

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Job ID: 400-135509-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-135509-1

Metals

Method(s) 6020: The ICSAB for batch 347398 recovered higher than the acceptance limits for element: Chromium. All reported samples associated with this ICSAB were ND, therefore, re-analysis of samples was not performed.

Method(s) 6020: The CRI for analytical batch 347398 contained Chromium above the acceptance limit. All reported samples associated with this CRI are ND, therefore, re-analysis of samples was not performed.

Method(s) 6020: The native sample and post digestion spike (PDS) associated with preparation batch 346980 and analytical batch 347398 were performed at the same dilution. Due to the additional level of analyte present in the spiked samples, the concentration of Molybdenum in the PDS was above the instrument calibration range. The data has been reported and qualified.

Method(s) 7470A: The method blank for prep batch 347049 contained Mercury above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-analysis of samples was not performed.

General Chemistry

Method(s) SM 4500 SO4 E: The method blank for analytical batch 347922 contained Sulfate above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) SM 4500 SO4 E: The method blank for analytical batch 347982 contained Sulfate above the reporting limit (RL). Associated sample(s) were not re-extracted and/or re-analyzed because results were greater than 10X the value found in the method blank.

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Client Sample ID: MW-11

Lab Sample ID: 400-135509-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.078		0.0025	0.00049	mg/L	5		6020	Total
Beryllium	0.00036	J	0.0025	0.00034	mg/L	5		6020	Recoverable Total
Calcium	1.8		0.25	0.13	mg/L	5		6020	Recoverable Total
Cobalt	0.0053		0.0025	0.00040	mg/L	5		6020	Recoverable Total
Mercury	0.00013	J B	0.00020	0.000070	mg/L	1		7470A	Recoverable Total/NA
Total Dissolved Solids	6.0		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	15		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	4.2	J B	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.46				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-12

Lab Sample ID: 400-135509-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.13		0.0025	0.00049	mg/L	5		6020	Total
Beryllium	0.00048	J	0.0025	0.00034	mg/L	5		6020	Recoverable Total
Boron	0.024	J	0.050	0.021	mg/L	5		6020	Recoverable Total
Cobalt	0.0029		0.0025	0.00040	mg/L	5		6020	Recoverable Total
Lithium	0.0033	J	0.0050	0.0032	mg/L	5		6020	Recoverable Total
Mercury	0.00011	J B	0.00020	0.000070	mg/L	1		7470A	Recoverable Total/NA
Total Dissolved Solids	22		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	14		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.26		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	11	B	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	3.88				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-13

Lab Sample ID: 400-135509-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.083		0.0025	0.00049	mg/L	5		6020	Total
Calcium	3.6		0.25	0.13	mg/L	5		6020	Recoverable Total
Cobalt	0.0010	J	0.0025	0.00040	mg/L	5		6020	Recoverable Total
Lithium	0.0038	J	0.0050	0.0032	mg/L	5		6020	Recoverable Total
Selenium	0.00026	J	0.0013	0.00024	mg/L	5		6020	Recoverable Total
Mercury	0.000096	J B	0.00020	0.000070	mg/L	1		7470A	Recoverable Total/NA
Total Dissolved Solids	54		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	14		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	7.6	B	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	5.07				SU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Client Sample ID: MW-14

Lab Sample ID: 400-135509-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Antimony	0.0014	J	0.0025	0.0010	mg/L	5		6020	Total
Arsenic	0.00082	J	0.0013	0.00046	mg/L	5		6020	Recoverable Total
Barium	0.089		0.0025	0.00049	mg/L	5		6020	Recoverable Total
Calcium	3.3		0.25	0.13	mg/L	5		6020	Recoverable Total
Cobalt	0.0016	J	0.0025	0.00040	mg/L	5		6020	Recoverable Total
Lead	0.00036	J	0.0013	0.00035	mg/L	5		6020	Recoverable Total
Molybdenum	0.0032	J	0.015	0.00085	mg/L	5		6020	Recoverable Total
Selenium	0.0027		0.0013	0.00024	mg/L	5		6020	Recoverable Total
Mercury	0.00011	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	30		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	11		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	3.9	J B	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.86				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-15

Lab Sample ID: 400-135509-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.054		0.0025	0.00049	mg/L	5		6020	Total
Calcium	1.3		0.25	0.13	mg/L	5		6020	Recoverable Total
Cobalt	0.0013	J	0.0025	0.00040	mg/L	5		6020	Recoverable Total
Mercury	0.000094	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	20		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	8.8		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	3.2	J B	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.47				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-16

Lab Sample ID: 400-135509-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.028		0.0025	0.00049	mg/L	5		6020	Total
Calcium	0.60		0.25	0.13	mg/L	5		6020	Recoverable Total
Cobalt	0.00085	J	0.0025	0.00040	mg/L	5		6020	Recoverable Total
Mercury	0.00010	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	8.0		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	7.3		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	3.3	J B	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.39				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-17

Lab Sample ID: 400-135509-7

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Client Sample ID: MW-17 (Continued)

Lab Sample ID: 400-135509-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.033		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.91		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00098	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.00010	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	16		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	7.9		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	3.7	J B	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.82				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-18

Lab Sample ID: 400-135509-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.053		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.76		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0012	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.000098	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	6.0		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	10		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	4.8	J B	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.45				SU	1		Field Sampling	Total/NA

Client Sample ID: DUP-02

Lab Sample ID: 400-135509-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.055		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.3		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0014	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.00019	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	22		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	9.1		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	2.9	J B	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: FB-02

Lab Sample ID: 400-135509-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.000093	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Sulfate	1.7	J B	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: EB-02

Lab Sample ID: 400-135509-11

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.00010	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Sulfate	1.7	J B	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
 SDG: NAMU

Client Sample ID: MW-19

Lab Sample ID: 400-135509-12

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00059	J	0.0013	0.00046	mg/L	5		6020	Total
Barium	0.029		0.0025	0.00049	mg/L	5		6020	Recoverable Total
Calcium	0.56		0.25	0.13	mg/L	5		6020	Recoverable Total
Cobalt	0.00051	J	0.0025	0.00040	mg/L	5		6020	Recoverable Total
Mercury	0.000097	J B	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	20		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	5.3		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	3.4	J B	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.96				SU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola



Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
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
Field Sampling	Field Sampling	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-135509-1	MW-11	Water	03/22/17 08:04	03/22/17 17:07
400-135509-2	MW-12	Water	03/21/17 10:23	03/22/17 17:07
400-135509-3	MW-13	Water	03/21/17 09:27	03/22/17 17:07
400-135509-4	MW-14	Water	03/22/17 10:21	03/22/17 17:07
400-135509-5	MW-15	Water	03/21/17 07:25	03/22/17 17:07
400-135509-6	MW-16	Water	03/21/17 08:08	03/22/17 17:07
400-135509-7	MW-17	Water	03/21/17 12:17	03/22/17 17:07
400-135509-8	MW-18	Water	03/21/17 13:10	03/22/17 17:07
400-135509-9	DUP-02	Water	03/21/17 06:25	03/22/17 17:07
400-135509-10	FB-02	Water	03/22/17 08:30	03/22/17 17:07
400-135509-11	EB-02	Water	03/22/17 08:15	03/22/17 17:07
400-135509-12	MW-19	Water	03/21/17 11:06	03/22/17 17:07

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Client Sample ID: MW-11
Date Collected: 03/22/17 08:04
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-1
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/24/17 08:38	03/27/17 14:46	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/24/17 08:38	03/27/17 14:46	5
Barium	0.078		0.0025	0.00049	mg/L		03/24/17 08:38	03/27/17 14:46	5
Beryllium	0.00036	J	0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 14:46	5
Boron	<0.021		0.050	0.021	mg/L		03/24/17 08:38	03/27/17 14:46	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 14:46	5
Calcium	1.8		0.25	0.13	mg/L		03/24/17 08:38	03/27/17 14:46	5
Chromium	<0.0011	[^]	0.0025	0.0011	mg/L		03/24/17 08:38	03/27/17 14:46	5
Cobalt	0.0053		0.0025	0.00040	mg/L		03/24/17 08:38	03/27/17 14:46	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/24/17 08:38	03/27/17 14:46	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/24/17 08:38	03/27/17 14:46	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/24/17 08:38	03/27/17 14:46	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/24/17 08:38	03/27/17 14:46	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/24/17 08:38	03/27/17 14:46	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00013	J B	0.00020	0.000070	mg/L		03/24/17 14:37	03/28/17 12:54	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	6.0		5.0	3.4	mg/L			03/28/17 16:21	1
Chloride	15		2.0	0.60	mg/L			03/31/17 12:34	1
Fluoride	<0.032		0.10	0.032	mg/L			04/03/17 14:13	1
Sulfate	4.2	J B	5.0	1.4	mg/L			03/31/17 10:12	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.46				SU			03/22/17 08:04	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Client Sample ID: MW-12
Date Collected: 03/21/17 10:23
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-2
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/24/17 08:38	03/27/17 14:50	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/24/17 08:38	03/27/17 14:50	5
Barium	0.13		0.0025	0.00049	mg/L		03/24/17 08:38	03/27/17 14:50	5
Beryllium	0.00048	J	0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 14:50	5
Boron	0.024	J	0.050	0.021	mg/L		03/24/17 08:38	03/27/17 14:50	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 14:50	5
Calcium	<0.13		0.25	0.13	mg/L		03/24/17 08:38	03/27/17 14:50	5
Chromium	<0.0011	^	0.0025	0.0011	mg/L		03/24/17 08:38	03/27/17 14:50	5
Cobalt	0.0029		0.0025	0.00040	mg/L		03/24/17 08:38	03/27/17 14:50	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/24/17 08:38	03/27/17 14:50	5
Lithium	0.0033	J	0.0050	0.0032	mg/L		03/24/17 08:38	03/27/17 14:50	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/24/17 08:38	03/27/17 14:50	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/24/17 08:38	03/27/17 14:50	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/24/17 08:38	03/27/17 14:50	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00011	J B	0.00020	0.000070	mg/L		03/24/17 14:37	03/28/17 12:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	22		5.0	3.4	mg/L			03/27/17 17:24	1
Chloride	14		2.0	0.60	mg/L			03/31/17 12:34	1
Fluoride	0.26		0.10	0.032	mg/L			04/03/17 14:16	1
Sulfate	11	B	5.0	1.4	mg/L			03/31/17 10:12	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	3.88				SU			03/21/17 10:23	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Client Sample ID: MW-13
Date Collected: 03/21/17 09:27
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-3
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/24/17 08:38	03/27/17 15:26	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/24/17 08:38	03/27/17 15:26	5
Barium	0.083		0.0025	0.00049	mg/L		03/24/17 08:38	03/27/17 15:26	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 15:26	5
Boron	<0.021		0.050	0.021	mg/L		03/24/17 08:38	03/27/17 15:26	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 15:26	5
Calcium	3.6		0.25	0.13	mg/L		03/24/17 08:38	03/27/17 15:26	5
Chromium	<0.0011	^	0.0025	0.0011	mg/L		03/24/17 08:38	03/27/17 15:26	5
Cobalt	0.0010	J	0.0025	0.00040	mg/L		03/24/17 08:38	03/27/17 15:26	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/24/17 08:38	03/27/17 15:26	5
Lithium	0.0038	J	0.0050	0.0032	mg/L		03/24/17 08:38	03/27/17 15:26	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/24/17 08:38	03/27/17 15:26	5
Selenium	0.00026	J	0.0013	0.00024	mg/L		03/24/17 08:38	03/27/17 15:26	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/24/17 08:38	03/27/17 15:26	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000096	J B	0.00020	0.000070	mg/L		03/24/17 14:37	03/28/17 12:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	54		5.0	3.4	mg/L			03/27/17 17:24	1
Chloride	14		2.0	0.60	mg/L			03/31/17 12:34	1
Fluoride	<0.032		0.10	0.032	mg/L			04/03/17 14:18	1
Sulfate	7.6	B	5.0	1.4	mg/L			03/31/17 10:12	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.07				SU			03/21/17 09:27	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Client Sample ID: MW-14
Date Collected: 03/22/17 10:21
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-4
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	0.0014	J	0.0025	0.0010	mg/L		03/24/17 08:38	03/27/17 15:22	5
Arsenic	0.00082	J	0.0013	0.00046	mg/L		03/24/17 08:38	03/27/17 15:22	5
Barium	0.089		0.0025	0.00049	mg/L		03/24/17 08:38	03/27/17 15:22	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 15:22	5
Boron	<0.021		0.050	0.021	mg/L		03/24/17 08:38	03/27/17 15:22	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 15:22	5
Calcium	3.3		0.25	0.13	mg/L		03/24/17 08:38	03/27/17 15:22	5
Chromium	<0.0011	^	0.0025	0.0011	mg/L		03/24/17 08:38	03/27/17 15:22	5
Cobalt	0.0016	J	0.0025	0.00040	mg/L		03/24/17 08:38	03/27/17 15:22	5
Lead	0.00036	J	0.0013	0.00035	mg/L		03/24/17 08:38	03/27/17 15:22	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/24/17 08:38	03/27/17 15:22	5
Molybdenum	0.0032	J	0.015	0.00085	mg/L		03/24/17 08:38	03/27/17 15:22	5
Selenium	0.0027		0.0013	0.00024	mg/L		03/24/17 08:38	03/27/17 15:22	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/24/17 08:38	03/27/17 15:22	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00011	J B	0.00020	0.000070	mg/L		03/24/17 14:37	03/28/17 12:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	30		5.0	3.4	mg/L			03/28/17 16:21	1
Chloride	11		2.0	0.60	mg/L			03/31/17 12:34	1
Fluoride	<0.032		0.10	0.032	mg/L			04/03/17 14:25	1
Sulfate	3.9	J B	5.0	1.4	mg/L			03/31/17 10:12	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.86				SU			03/22/17 10:21	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Client Sample ID: MW-15
Date Collected: 03/21/17 07:25
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-5
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/24/17 08:38	03/27/17 15:31	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/24/17 08:38	03/27/17 15:31	5
Barium	0.054		0.0025	0.00049	mg/L		03/24/17 08:38	03/27/17 15:31	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 15:31	5
Boron	<0.021		0.050	0.021	mg/L		03/24/17 08:38	03/27/17 15:31	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 15:31	5
Calcium	1.3		0.25	0.13	mg/L		03/24/17 08:38	03/27/17 15:31	5
Chromium	<0.0011	^	0.0025	0.0011	mg/L		03/24/17 08:38	03/27/17 15:31	5
Cobalt	0.0013	J	0.0025	0.00040	mg/L		03/24/17 08:38	03/27/17 15:31	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/24/17 08:38	03/27/17 15:31	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/24/17 08:38	03/27/17 15:31	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/24/17 08:38	03/27/17 15:31	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/24/17 08:38	03/27/17 15:31	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/24/17 08:38	03/27/17 15:31	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000094	J B	0.00020	0.000070	mg/L		03/24/17 14:37	03/28/17 13:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	20		5.0	3.4	mg/L			03/27/17 17:24	1
Chloride	8.8		2.0	0.60	mg/L			03/31/17 12:34	1
Fluoride	<0.032		0.10	0.032	mg/L			04/03/17 14:31	1
Sulfate	3.2	J B	5.0	1.4	mg/L			03/31/17 10:12	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.47				SU			03/21/17 07:25	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Client Sample ID: MW-16
Date Collected: 03/21/17 08:08
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-6
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/24/17 08:38	03/27/17 15:35	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/24/17 08:38	03/27/17 15:35	5
Barium	0.028		0.0025	0.00049	mg/L		03/24/17 08:38	03/27/17 15:35	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 15:35	5
Boron	<0.021		0.050	0.021	mg/L		03/24/17 08:38	03/27/17 15:35	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 15:35	5
Calcium	0.60		0.25	0.13	mg/L		03/24/17 08:38	03/27/17 15:35	5
Chromium	<0.0011	^	0.0025	0.0011	mg/L		03/24/17 08:38	03/27/17 15:35	5
Cobalt	0.00085	J	0.0025	0.00040	mg/L		03/24/17 08:38	03/27/17 15:35	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/24/17 08:38	03/27/17 15:35	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/24/17 08:38	03/27/17 15:35	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/24/17 08:38	03/27/17 15:35	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/24/17 08:38	03/27/17 15:35	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/24/17 08:38	03/27/17 15:35	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00010	J B	0.00020	0.000070	mg/L		03/24/17 14:37	03/28/17 13:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	8.0		5.0	3.4	mg/L			03/27/17 17:24	1
Chloride	7.3		2.0	0.60	mg/L			03/31/17 12:34	1
Fluoride	<0.032		0.10	0.032	mg/L			04/03/17 14:34	1
Sulfate	3.3	J B	5.0	1.4	mg/L			03/31/17 12:40	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.39				SU			03/21/17 08:08	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Client Sample ID: MW-17
Date Collected: 03/21/17 12:17
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-7
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/24/17 08:38	03/27/17 15:40	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/24/17 08:38	03/27/17 15:40	5
Barium	0.033		0.0025	0.00049	mg/L		03/24/17 08:38	03/27/17 15:40	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 15:40	5
Boron	<0.021		0.050	0.021	mg/L		03/24/17 08:38	03/27/17 15:40	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 15:40	5
Calcium	0.91		0.25	0.13	mg/L		03/24/17 08:38	03/27/17 15:40	5
Chromium	<0.0011	^	0.0025	0.0011	mg/L		03/24/17 08:38	03/27/17 15:40	5
Cobalt	0.00098	J	0.0025	0.00040	mg/L		03/24/17 08:38	03/27/17 15:40	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/24/17 08:38	03/27/17 15:40	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/24/17 08:38	03/27/17 15:40	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/24/17 08:38	03/27/17 15:40	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/24/17 08:38	03/27/17 15:40	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/24/17 08:38	03/27/17 15:40	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00010	J B	0.00020	0.000070	mg/L		03/24/17 14:37	03/28/17 13:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	16		5.0	3.4	mg/L			03/27/17 17:24	1
Chloride	7.9		2.0	0.60	mg/L			03/31/17 12:34	1
Fluoride	<0.032		0.10	0.032	mg/L			04/03/17 14:37	1
Sulfate	3.7	J B	5.0	1.4	mg/L			03/31/17 12:40	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.82				SU			03/21/17 12:17	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Client Sample ID: MW-18
Date Collected: 03/21/17 13:10
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-8
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/24/17 08:38	03/27/17 15:44	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/24/17 08:38	03/27/17 15:44	5
Barium	0.053		0.0025	0.00049	mg/L		03/24/17 08:38	03/27/17 15:44	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 15:44	5
Boron	<0.021		0.050	0.021	mg/L		03/24/17 08:38	03/27/17 15:44	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 15:44	5
Calcium	0.76		0.25	0.13	mg/L		03/24/17 08:38	03/27/17 15:44	5
Chromium	<0.0011	^	0.0025	0.0011	mg/L		03/24/17 08:38	03/27/17 15:44	5
Cobalt	0.0012	J	0.0025	0.00040	mg/L		03/24/17 08:38	03/27/17 15:44	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/24/17 08:38	03/27/17 15:44	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/24/17 08:38	03/27/17 15:44	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/24/17 08:38	03/27/17 15:44	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/24/17 08:38	03/27/17 15:44	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/24/17 08:38	03/27/17 15:44	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000098	J B	0.00020	0.000070	mg/L		03/24/17 14:37	03/28/17 13:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	6.0		5.0	3.4	mg/L			03/27/17 17:24	1
Chloride	10		2.0	0.60	mg/L			03/31/17 12:34	1
Fluoride	<0.032		0.10	0.032	mg/L			04/03/17 14:41	1
Sulfate	4.8	J B	5.0	1.4	mg/L			03/31/17 12:40	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.45				SU			03/21/17 13:10	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Client Sample ID: DUP-02

Date Collected: 03/21/17 06:25

Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-9

Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/24/17 08:38	03/27/17 15:49	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/24/17 08:38	03/27/17 15:49	5
Barium	0.055		0.0025	0.00049	mg/L		03/24/17 08:38	03/27/17 15:49	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 15:49	5
Boron	<0.021		0.050	0.021	mg/L		03/24/17 08:38	03/27/17 15:49	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 15:49	5
Calcium	1.3		0.25	0.13	mg/L		03/24/17 08:38	03/27/17 15:49	5
Chromium	<0.0011	^	0.0025	0.0011	mg/L		03/24/17 08:38	03/27/17 15:49	5
Cobalt	0.0014	J	0.0025	0.00040	mg/L		03/24/17 08:38	03/27/17 15:49	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/24/17 08:38	03/27/17 15:49	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/24/17 08:38	03/27/17 15:49	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/24/17 08:38	03/27/17 15:49	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/24/17 08:38	03/27/17 15:49	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/24/17 08:38	03/27/17 15:49	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00019	J B	0.00020	0.000070	mg/L		03/24/17 14:37	03/28/17 13:14	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	22		5.0	3.4	mg/L			03/27/17 17:24	1
Chloride	9.1		2.0	0.60	mg/L			03/31/17 12:34	1
Fluoride	<0.032		0.10	0.032	mg/L			04/03/17 14:44	1
Sulfate	2.9	J B	5.0	1.4	mg/L			03/31/17 12:40	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Client Sample ID: FB-02
Date Collected: 03/22/17 08:30
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-10
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/24/17 08:38	03/27/17 15:53	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/24/17 08:38	03/27/17 15:53	5
Barium	<0.00049		0.0025	0.00049	mg/L		03/24/17 08:38	03/27/17 15:53	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 15:53	5
Boron	<0.021		0.050	0.021	mg/L		03/24/17 08:38	03/27/17 15:53	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 15:53	5
Calcium	<0.13		0.25	0.13	mg/L		03/24/17 08:38	03/27/17 15:53	5
Chromium	<0.0011	^	0.0025	0.0011	mg/L		03/24/17 08:38	03/27/17 15:53	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		03/24/17 08:38	03/27/17 15:53	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/24/17 08:38	03/27/17 15:53	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/24/17 08:38	03/27/17 15:53	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/24/17 08:38	03/27/17 15:53	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/24/17 08:38	03/27/17 15:53	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/24/17 08:38	03/27/17 15:53	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000093	J B	0.00020	0.000070	mg/L		03/24/17 14:37	03/28/17 13:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			03/28/17 16:21	1
Chloride	<0.60		2.0	0.60	mg/L			03/31/17 12:34	1
Fluoride	<0.032		0.10	0.032	mg/L			04/03/17 14:47	1
Sulfate	1.7	J B	5.0	1.4	mg/L			03/31/17 12:40	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Client Sample ID: EB-02
Date Collected: 03/22/17 08:15
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-11
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/24/17 08:38	03/27/17 15:58	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/24/17 08:38	03/27/17 15:58	5
Barium	<0.00049		0.0025	0.00049	mg/L		03/24/17 08:38	03/27/17 15:58	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 15:58	5
Boron	<0.021		0.050	0.021	mg/L		03/24/17 08:38	03/27/17 15:58	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 15:58	5
Calcium	<0.13		0.25	0.13	mg/L		03/24/17 08:38	03/27/17 15:58	5
Chromium	<0.0011	^	0.0025	0.0011	mg/L		03/24/17 08:38	03/27/17 15:58	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		03/24/17 08:38	03/27/17 15:58	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/24/17 08:38	03/27/17 15:58	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/24/17 08:38	03/27/17 15:58	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/24/17 08:38	03/27/17 15:58	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/24/17 08:38	03/27/17 15:58	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/24/17 08:38	03/27/17 15:58	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00010	J B	0.00020	0.000070	mg/L		03/24/17 14:37	03/28/17 13:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			03/28/17 16:21	1
Chloride	<0.60		2.0	0.60	mg/L			03/31/17 12:42	1
Fluoride	<0.032		0.10	0.032	mg/L			04/03/17 14:50	1
Sulfate	1.7	J B	5.0	1.4	mg/L			03/31/17 12:40	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Client Sample ID: MW-19
Date Collected: 03/21/17 11:06
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-12
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/24/17 08:38	03/27/17 16:20	5
Arsenic	0.00059	J	0.0013	0.00046	mg/L		03/24/17 08:38	03/27/17 16:20	5
Barium	0.029		0.0025	0.00049	mg/L		03/24/17 08:38	03/27/17 16:20	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 16:20	5
Boron	<0.021		0.050	0.021	mg/L		03/24/17 08:38	03/27/17 16:20	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 16:20	5
Calcium	0.56		0.25	0.13	mg/L		03/24/17 08:38	03/27/17 16:20	5
Chromium	<0.0011	^	0.0025	0.0011	mg/L		03/24/17 08:38	03/27/17 16:20	5
Cobalt	0.00051	J	0.0025	0.00040	mg/L		03/24/17 08:38	03/27/17 16:20	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/24/17 08:38	03/27/17 16:20	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/24/17 08:38	03/27/17 16:20	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/24/17 08:38	03/27/17 16:20	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/24/17 08:38	03/27/17 16:20	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/24/17 08:38	03/27/17 16:20	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000097	J B	0.00020	0.000070	mg/L		03/24/17 14:37	03/28/17 13:18	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	20		5.0	3.4	mg/L			03/27/17 17:24	1
Chloride	5.3		2.0	0.60	mg/L			03/31/17 12:42	1
Fluoride	<0.032		0.10	0.032	mg/L			04/03/17 15:55	1
Sulfate	3.4	J B	5.0	1.4	mg/L			03/31/17 12:40	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.96				SU			03/21/17 11:06	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Qualifiers

Metals

Qualifier	Qualifier Description
^	ICV,CCV,ICB,CCB, ISA, ISB, CRI, CRA, DLCK or MRL standard: Instrument related QC is outside acceptance limits.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
B	Compound was found in the blank and sample.

General Chemistry

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Client Sample ID: MW-11
Date Collected: 03/22/17 08:04
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			346980	03/24/17 08:38	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	347398	03/27/17 14:46	DRE	TAL PEN
Total/NA	Prep	7470A			347049	03/24/17 14:37	JAP	TAL PEN
Total/NA	Analysis	7470A		1	347469	03/28/17 12:54	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	347445	03/28/17 16:21	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	347983	03/31/17 12:34	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348254	04/03/17 14:13	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	347922	03/31/17 10:12	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	350180	03/22/17 08:04	BWS	TAL PEN

Client Sample ID: MW-12
Date Collected: 03/21/17 10:23
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			346980	03/24/17 08:38	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	347398	03/27/17 14:50	DRE	TAL PEN
Total/NA	Prep	7470A			347049	03/24/17 14:37	JAP	TAL PEN
Total/NA	Analysis	7470A		1	347469	03/28/17 12:56	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	347255	03/27/17 17:24	VLS	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	347983	03/31/17 12:34	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348254	04/03/17 14:16	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	347922	03/31/17 10:12	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	350180	03/21/17 10:23	BWS	TAL PEN

Client Sample ID: MW-13
Date Collected: 03/21/17 09:27
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-3
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			346980	03/24/17 08:38	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	347398	03/27/17 15:26	DRE	TAL PEN
Total/NA	Prep	7470A			347049	03/24/17 14:37	JAP	TAL PEN
Total/NA	Analysis	7470A		1	347469	03/28/17 12:57	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	347255	03/27/17 17:24	VLS	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	347983	03/31/17 12:34	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348254	04/03/17 14:18	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	347922	03/31/17 10:12	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	350180	03/21/17 09:27	BWS	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Client Sample ID: MW-14

Date Collected: 03/22/17 10:21

Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			346980	03/24/17 08:38	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	347398	03/27/17 15:22	DRE	TAL PEN
Total/NA	Prep	7470A			347049	03/24/17 14:37	JAP	TAL PEN
Total/NA	Analysis	7470A		1	347469	03/28/17 12:58	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	347445	03/28/17 16:21	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	347983	03/31/17 12:34	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348254	04/03/17 14:25	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	347922	03/31/17 10:12	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	350180	03/22/17 10:21	BWS	TAL PEN

Client Sample ID: MW-15

Date Collected: 03/21/17 07:25

Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			346980	03/24/17 08:38	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	347398	03/27/17 15:31	DRE	TAL PEN
Total/NA	Prep	7470A			347049	03/24/17 14:37	JAP	TAL PEN
Total/NA	Analysis	7470A		1	347469	03/28/17 13:00	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	347255	03/27/17 17:24	VLS	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	347983	03/31/17 12:34	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348254	04/03/17 14:31	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	347922	03/31/17 10:12	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	350180	03/21/17 07:25	BWS	TAL PEN

Client Sample ID: MW-16

Date Collected: 03/21/17 08:08

Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			346980	03/24/17 08:38	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	347398	03/27/17 15:35	DRE	TAL PEN
Total/NA	Prep	7470A			347049	03/24/17 14:37	JAP	TAL PEN
Total/NA	Analysis	7470A		1	347469	03/28/17 13:01	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	347255	03/27/17 17:24	VLS	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	347983	03/31/17 12:34	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348254	04/03/17 14:34	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	347982	03/31/17 12:40	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	350180	03/21/17 08:08	BWS	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Client Sample ID: MW-17

Lab Sample ID: 400-135509-7

Date Collected: 03/21/17 12:17

Matrix: Water

Date Received: 03/22/17 17:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			346980	03/24/17 08:38	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	347398	03/27/17 15:40	DRE	TAL PEN
Total/NA	Prep	7470A			347049	03/24/17 14:37	JAP	TAL PEN
Total/NA	Analysis	7470A		1	347469	03/28/17 13:02	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	347255	03/27/17 17:24	VLS	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	347983	03/31/17 12:34	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348254	04/03/17 14:37	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	347982	03/31/17 12:40	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	350180	03/21/17 12:17	BWS	TAL PEN

Client Sample ID: MW-18

Lab Sample ID: 400-135509-8

Date Collected: 03/21/17 13:10

Matrix: Water

Date Received: 03/22/17 17:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			346980	03/24/17 08:38	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	347398	03/27/17 15:44	DRE	TAL PEN
Total/NA	Prep	7470A			347049	03/24/17 14:37	JAP	TAL PEN
Total/NA	Analysis	7470A		1	347469	03/28/17 13:04	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	347255	03/27/17 17:24	VLS	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	347983	03/31/17 12:34	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348254	04/03/17 14:41	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	347982	03/31/17 12:40	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	350180	03/21/17 13:10	BWS	TAL PEN

Client Sample ID: DUP-02

Lab Sample ID: 400-135509-9

Date Collected: 03/21/17 06:25

Matrix: Water

Date Received: 03/22/17 17:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			346980	03/24/17 08:38	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	347398	03/27/17 15:49	DRE	TAL PEN
Total/NA	Prep	7470A			347049	03/24/17 14:37	JAP	TAL PEN
Total/NA	Analysis	7470A		1	347469	03/28/17 13:14	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	347255	03/27/17 17:24	VLS	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	347983	03/31/17 12:34	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348254	04/03/17 14:44	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	347982	03/31/17 12:40	BJB	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Client Sample ID: FB-02
Date Collected: 03/22/17 08:30
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			346980	03/24/17 08:38	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	347398	03/27/17 15:53	DRE	TAL PEN
Total/NA	Prep	7470A			347049	03/24/17 14:37	JAP	TAL PEN
Total/NA	Analysis	7470A		1	347469	03/28/17 13:15	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	347445	03/28/17 16:21	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	347983	03/31/17 12:34	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348254	04/03/17 14:47	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	347982	03/31/17 12:40	BJB	TAL PEN

Client Sample ID: EB-02
Date Collected: 03/22/17 08:15
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-11
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			346980	03/24/17 08:38	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	347398	03/27/17 15:58	DRE	TAL PEN
Total/NA	Prep	7470A			347049	03/24/17 14:37	JAP	TAL PEN
Total/NA	Analysis	7470A		1	347469	03/28/17 13:17	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	347445	03/28/17 16:21	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	347983	03/31/17 12:42	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348254	04/03/17 14:50	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	347982	03/31/17 12:40	BJB	TAL PEN

Client Sample ID: MW-19
Date Collected: 03/21/17 11:06
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			346980	03/24/17 08:38	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	347398	03/27/17 16:20	DRE	TAL PEN
Total/NA	Prep	7470A			347049	03/24/17 14:37	JAP	TAL PEN
Total/NA	Analysis	7470A		1	347469	03/28/17 13:18	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	347255	03/27/17 17:24	VLS	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	347983	03/31/17 12:42	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	348269	04/03/17 15:55	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	347982	03/31/17 12:40	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	350180	03/21/17 11:06	BWS	TAL PEN

Laboratory References:

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

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Metals

Prep Batch: 346980

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135509-1	MW-11	Total Recoverable	Water	3005A	
400-135509-2	MW-12	Total Recoverable	Water	3005A	
400-135509-3	MW-13	Total Recoverable	Water	3005A	
400-135509-4	MW-14	Total Recoverable	Water	3005A	
400-135509-5	MW-15	Total Recoverable	Water	3005A	
400-135509-6	MW-16	Total Recoverable	Water	3005A	
400-135509-7	MW-17	Total Recoverable	Water	3005A	
400-135509-8	MW-18	Total Recoverable	Water	3005A	
400-135509-9	DUP-02	Total Recoverable	Water	3005A	
400-135509-10	FB-02	Total Recoverable	Water	3005A	
400-135509-11	EB-02	Total Recoverable	Water	3005A	
400-135509-12	MW-19	Total Recoverable	Water	3005A	
MB 400-346980/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-346980/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-135429-C-10-C MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-135429-C-10-D MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Prep Batch: 347049

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135509-1	MW-11	Total/NA	Water	7470A	
400-135509-2	MW-12	Total/NA	Water	7470A	
400-135509-3	MW-13	Total/NA	Water	7470A	
400-135509-4	MW-14	Total/NA	Water	7470A	
400-135509-5	MW-15	Total/NA	Water	7470A	
400-135509-6	MW-16	Total/NA	Water	7470A	
400-135509-7	MW-17	Total/NA	Water	7470A	
400-135509-8	MW-18	Total/NA	Water	7470A	
400-135509-9	DUP-02	Total/NA	Water	7470A	
400-135509-10	FB-02	Total/NA	Water	7470A	
400-135509-11	EB-02	Total/NA	Water	7470A	
400-135509-12	MW-19	Total/NA	Water	7470A	
MB 400-347049/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-347049/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-135448-H-12-B MS	Matrix Spike	Dissolved	Water	7470A	
400-135448-H-12-C MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	

Analysis Batch: 347398

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135509-1	MW-11	Total Recoverable	Water	6020	346980
400-135509-2	MW-12	Total Recoverable	Water	6020	346980
400-135509-3	MW-13	Total Recoverable	Water	6020	346980
400-135509-4	MW-14	Total Recoverable	Water	6020	346980
400-135509-5	MW-15	Total Recoverable	Water	6020	346980
400-135509-6	MW-16	Total Recoverable	Water	6020	346980
400-135509-7	MW-17	Total Recoverable	Water	6020	346980
400-135509-8	MW-18	Total Recoverable	Water	6020	346980
400-135509-9	DUP-02	Total Recoverable	Water	6020	346980
400-135509-10	FB-02	Total Recoverable	Water	6020	346980
400-135509-11	EB-02	Total Recoverable	Water	6020	346980
400-135509-12	MW-19	Total Recoverable	Water	6020	346980
MB 400-346980/1-A ^5	Method Blank	Total Recoverable	Water	6020	346980

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Metals (Continued)

Analysis Batch: 347398 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-346980/2-A	Lab Control Sample	Total Recoverable	Water	6020	346980
400-135429-C-10-C MS ^5	Matrix Spike	Total Recoverable	Water	6020	346980
400-135429-C-10-D MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	346980

Analysis Batch: 347469

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135509-1	MW-11	Total/NA	Water	7470A	347049
400-135509-2	MW-12	Total/NA	Water	7470A	347049
400-135509-3	MW-13	Total/NA	Water	7470A	347049
400-135509-4	MW-14	Total/NA	Water	7470A	347049
400-135509-5	MW-15	Total/NA	Water	7470A	347049
400-135509-6	MW-16	Total/NA	Water	7470A	347049
400-135509-7	MW-17	Total/NA	Water	7470A	347049
400-135509-8	MW-18	Total/NA	Water	7470A	347049
400-135509-9	DUP-02	Total/NA	Water	7470A	347049
400-135509-10	FB-02	Total/NA	Water	7470A	347049
400-135509-11	EB-02	Total/NA	Water	7470A	347049
400-135509-12	MW-19	Total/NA	Water	7470A	347049
MB 400-347049/14-A	Method Blank	Total/NA	Water	7470A	347049
LCS 400-347049/15-A	Lab Control Sample	Total/NA	Water	7470A	347049
400-135448-H-12-B MS	Matrix Spike	Dissolved	Water	7470A	347049
400-135448-H-12-C MSD	Matrix Spike Duplicate	Dissolved	Water	7470A	347049

General Chemistry

Analysis Batch: 347255

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135509-2	MW-12	Total/NA	Water	SM 2540C	
400-135509-3	MW-13	Total/NA	Water	SM 2540C	
400-135509-5	MW-15	Total/NA	Water	SM 2540C	
400-135509-6	MW-16	Total/NA	Water	SM 2540C	
400-135509-7	MW-17	Total/NA	Water	SM 2540C	
400-135509-8	MW-18	Total/NA	Water	SM 2540C	
400-135509-9	DUP-02	Total/NA	Water	SM 2540C	
400-135509-12	MW-19	Total/NA	Water	SM 2540C	
MB 400-347255/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-347255/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-135509-2 DU	MW-12	Total/NA	Water	SM 2540C	
400-135509-5 DU	MW-15	Total/NA	Water	SM 2540C	

Analysis Batch: 347445

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135509-1	MW-11	Total/NA	Water	SM 2540C	
400-135509-4	MW-14	Total/NA	Water	SM 2540C	
400-135509-10	FB-02	Total/NA	Water	SM 2540C	
400-135509-11	EB-02	Total/NA	Water	SM 2540C	
MB 400-347445/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-347445/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-135509-1 DU	MW-11	Total/NA	Water	SM 2540C	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

General Chemistry (Continued)

Analysis Batch: 347922

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135509-1	MW-11	Total/NA	Water	SM 4500 SO4 E	
400-135509-2	MW-12	Total/NA	Water	SM 4500 SO4 E	
400-135509-3	MW-13	Total/NA	Water	SM 4500 SO4 E	
400-135509-4	MW-14	Total/NA	Water	SM 4500 SO4 E	
400-135509-5	MW-15	Total/NA	Water	SM 4500 SO4 E	
MB 400-347922/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-347922/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-347922/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-135429-B-11 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-135429-B-11 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 347982

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135509-6	MW-16	Total/NA	Water	SM 4500 SO4 E	
400-135509-7	MW-17	Total/NA	Water	SM 4500 SO4 E	
400-135509-8	MW-18	Total/NA	Water	SM 4500 SO4 E	
400-135509-9	DUP-02	Total/NA	Water	SM 4500 SO4 E	
400-135509-10	FB-02	Total/NA	Water	SM 4500 SO4 E	
400-135509-11	EB-02	Total/NA	Water	SM 4500 SO4 E	
400-135509-12	MW-19	Total/NA	Water	SM 4500 SO4 E	
MB 400-347982/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-347982/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-347982/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-135509-12 MS	MW-19	Total/NA	Water	SM 4500 SO4 E	
400-135509-12 MSD	MW-19	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 347983

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135509-1	MW-11	Total/NA	Water	SM 4500 Cl- E	
400-135509-2	MW-12	Total/NA	Water	SM 4500 Cl- E	
400-135509-3	MW-13	Total/NA	Water	SM 4500 Cl- E	
400-135509-4	MW-14	Total/NA	Water	SM 4500 Cl- E	
400-135509-5	MW-15	Total/NA	Water	SM 4500 Cl- E	
400-135509-6	MW-16	Total/NA	Water	SM 4500 Cl- E	
400-135509-7	MW-17	Total/NA	Water	SM 4500 Cl- E	
400-135509-8	MW-18	Total/NA	Water	SM 4500 Cl- E	
400-135509-9	DUP-02	Total/NA	Water	SM 4500 Cl- E	
400-135509-10	FB-02	Total/NA	Water	SM 4500 Cl- E	
400-135509-11	EB-02	Total/NA	Water	SM 4500 Cl- E	
400-135509-12	MW-19	Total/NA	Water	SM 4500 Cl- E	
MB 400-347983/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-347983/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-347983/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-135509-12 MS	MW-19	Total/NA	Water	SM 4500 Cl- E	
400-135509-12 MSD	MW-19	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 348254

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135509-1	MW-11	Total/NA	Water	SM 4500 F C	
400-135509-2	MW-12	Total/NA	Water	SM 4500 F C	
400-135509-3	MW-13	Total/NA	Water	SM 4500 F C	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

General Chemistry (Continued)

Analysis Batch: 348254 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135509-4	MW-14	Total/NA	Water	SM 4500 F C	
400-135509-5	MW-15	Total/NA	Water	SM 4500 F C	
400-135509-6	MW-16	Total/NA	Water	SM 4500 F C	
400-135509-7	MW-17	Total/NA	Water	SM 4500 F C	
400-135509-8	MW-18	Total/NA	Water	SM 4500 F C	
400-135509-9	DUP-02	Total/NA	Water	SM 4500 F C	
400-135509-10	FB-02	Total/NA	Water	SM 4500 F C	
400-135509-11	EB-02	Total/NA	Water	SM 4500 F C	
MB 400-348254/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-348254/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-135509-4 DU	MW-14	Total/NA	Water	SM 4500 F C	

Analysis Batch: 348269

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135509-12	MW-19	Total/NA	Water	SM 4500 F C	
MB 400-348269/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-348269/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-135678-A-14 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-135678-A-14 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-135676-A-3 DU	Duplicate	Total/NA	Water	SM 4500 F C	

Field Service / Mobile Lab

Analysis Batch: 350180

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135509-1	MW-11	Total/NA	Water	Field Sampling	
400-135509-2	MW-12	Total/NA	Water	Field Sampling	
400-135509-3	MW-13	Total/NA	Water	Field Sampling	
400-135509-4	MW-14	Total/NA	Water	Field Sampling	
400-135509-5	MW-15	Total/NA	Water	Field Sampling	
400-135509-6	MW-16	Total/NA	Water	Field Sampling	
400-135509-7	MW-17	Total/NA	Water	Field Sampling	
400-135509-8	MW-18	Total/NA	Water	Field Sampling	
400-135509-12	MW-19	Total/NA	Water	Field Sampling	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-346980/1-A ^5
Matrix: Water
Analysis Batch: 347398

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 346980

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		03/24/17 08:38	03/27/17 13:12	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		03/24/17 08:38	03/27/17 13:12	5
Barium	<0.00049		0.0025	0.00049	mg/L		03/24/17 08:38	03/27/17 13:12	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 13:12	5
Boron	<0.021		0.050	0.021	mg/L		03/24/17 08:38	03/27/17 13:12	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		03/24/17 08:38	03/27/17 13:12	5
Calcium	<0.13		0.25	0.13	mg/L		03/24/17 08:38	03/27/17 13:12	5
Chromium	<0.0011	^	0.0025	0.0011	mg/L		03/24/17 08:38	03/27/17 13:12	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		03/24/17 08:38	03/27/17 13:12	5
Lead	<0.00035		0.0013	0.00035	mg/L		03/24/17 08:38	03/27/17 13:12	5
Lithium	<0.0032		0.0050	0.0032	mg/L		03/24/17 08:38	03/27/17 13:12	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		03/24/17 08:38	03/27/17 13:12	5
Selenium	<0.00024		0.0013	0.00024	mg/L		03/24/17 08:38	03/27/17 13:12	5
Thallium	<0.000085		0.00050	0.000085	mg/L		03/24/17 08:38	03/27/17 13:12	5

Lab Sample ID: LCS 400-346980/2-A
Matrix: Water
Analysis Batch: 347398

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 346980

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0530		mg/L		106	80 - 120
Arsenic	0.0500	0.0484		mg/L		97	80 - 120
Barium	0.0500	0.0492		mg/L		98	80 - 120
Beryllium	0.0500	0.0475		mg/L		95	80 - 120
Boron	0.100	0.0948		mg/L		95	80 - 120
Cadmium	0.0500	0.0499		mg/L		100	80 - 120
Calcium	5.00	4.52		mg/L		90	80 - 120
Chromium	0.0500	0.0481	^	mg/L		96	80 - 120
Cobalt	0.0500	0.0477		mg/L		95	80 - 120
Lead	0.0500	0.0478		mg/L		96	80 - 120
Lithium	0.0500	0.0491		mg/L		98	80 - 120
Molybdenum	0.100	0.0978		mg/L		98	80 - 120
Selenium	0.0500	0.0481		mg/L		96	80 - 120
Thallium	0.0100	0.00991		mg/L		99	80 - 120

Lab Sample ID: 400-135429-C-10-C MS ^5
Matrix: Water
Analysis Batch: 347398

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 346980

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0010		0.0500	0.0563		mg/L		113	75 - 125
Arsenic	<0.00046		0.0500	0.0514		mg/L		103	75 - 125
Barium	0.026		0.0500	0.0749		mg/L		98	75 - 125
Beryllium	<0.00034		0.0500	0.0469		mg/L		94	75 - 125
Boron	<0.021		0.100	0.117		mg/L		117	75 - 125
Cadmium	<0.00034		0.0500	0.0498		mg/L		100	75 - 125
Calcium	0.66		5.00	5.35		mg/L		94	75 - 125
Chromium	<0.0011	^	0.0500	0.0484	^	mg/L		97	75 - 125

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 400-135429-C-10-C MS ^5
Matrix: Water
Analysis Batch: 347398

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 346980

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	0.00064	J	0.0500	0.0519		mg/L		102	75 - 125
Lead	<0.00035		0.0500	0.0433		mg/L		87	75 - 125
Lithium	<0.0032		0.0500	0.0473		mg/L		95	75 - 125
Molybdenum	0.0051	J	0.100	0.106		mg/L		101	75 - 125
Selenium	0.0027		0.0500	0.0547		mg/L		104	75 - 125
Thallium	<0.000085		0.0100	0.00979		mg/L		98	75 - 125

Lab Sample ID: 400-135429-C-10-D MSD ^5
Matrix: Water
Analysis Batch: 347398

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 346980

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Antimony	<0.0010		0.0500	0.0529		mg/L		106	75 - 125	6	20
Arsenic	<0.00046		0.0500	0.0498		mg/L		100	75 - 125	3	20
Barium	0.026		0.0500	0.0746		mg/L		98	75 - 125	0	20
Beryllium	<0.00034		0.0500	0.0483		mg/L		97	75 - 125	3	20
Boron	<0.021		0.100	0.120		mg/L		120	75 - 125	3	20
Cadmium	<0.00034		0.0500	0.0499		mg/L		100	75 - 125	0	20
Calcium	0.66		5.00	5.23		mg/L		91	75 - 125	2	20
Chromium	<0.0011	^	0.0500	0.0483	^	mg/L		97	75 - 125	0	20
Cobalt	0.00064	J	0.0500	0.0527		mg/L		104	75 - 125	2	20
Lead	<0.00035		0.0500	0.0435		mg/L		87	75 - 125	0	20
Lithium	<0.0032		0.0500	0.0481		mg/L		96	75 - 125	2	20
Molybdenum	0.0051	J	0.100	0.0987		mg/L		94	75 - 125	8	20
Selenium	0.0027		0.0500	0.0502		mg/L		95	75 - 125	9	20
Thallium	<0.000085		0.0100	0.00993		mg/L		99	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-347049/14-A
Matrix: Water
Analysis Batch: 347469

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 347049

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000109	J	0.00020	0.000070	mg/L		03/24/17 13:04	03/28/17 12:35	1

Lab Sample ID: LCS 400-347049/15-A
Matrix: Water
Analysis Batch: 347469

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 347049

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00101	0.00111		mg/L		110	80 - 120

Lab Sample ID: 400-135448-H-12-B MS
Matrix: Water
Analysis Batch: 347469

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 347049

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00014	J B	0.00201	0.00215		mg/L		100	80 - 120

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Lab Sample ID: 400-135448-H-12-C MSD
Matrix: Water
Analysis Batch: 347469

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 347049

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	0.00014	J B	0.00201	0.00213		mg/L		99	80 - 120	1	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 400-347255/1
Matrix: Water
Analysis Batch: 347255

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			03/27/17 17:24	1

Lab Sample ID: LCS 400-347255/2
Matrix: Water
Analysis Batch: 347255

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	262		mg/L		89	78 - 122

Lab Sample ID: 400-135509-2 DU
Matrix: Water
Analysis Batch: 347255

Client Sample ID: MW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	22		<3.4		mg/L		NC	5

Lab Sample ID: 400-135509-5 DU
Matrix: Water
Analysis Batch: 347255

Client Sample ID: MW-15
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	20		20.0		mg/L		0	5

Lab Sample ID: MB 400-347445/1
Matrix: Water
Analysis Batch: 347445

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			03/28/17 16:21	1

Lab Sample ID: LCS 400-347445/2
Matrix: Water
Analysis Batch: 347445

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	282		mg/L		96	78 - 122

Lab Sample ID: 400-135509-1 DU
Matrix: Water
Analysis Batch: 347445

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	6.0		6.00		mg/L		0	5

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-347983/6
Matrix: Water
Analysis Batch: 347983

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	<0.60		2.0	0.60	mg/L			03/31/17 11:52	1

Lab Sample ID: LCS 400-347983/7
Matrix: Water
Analysis Batch: 347983

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	31.9		mg/L		106	90 - 110

Lab Sample ID: MRL 400-347983/3
Matrix: Water
Analysis Batch: 347983

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	1.98	J	mg/L		99	50 - 150

Lab Sample ID: 400-135509-12 MS
Matrix: Water
Analysis Batch: 347983

Client Sample ID: MW-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	5.3		10.0	16.4		mg/L		111	73 - 120

Lab Sample ID: 400-135509-12 MSD
Matrix: Water
Analysis Batch: 347983

Client Sample ID: MW-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	5.3		10.0	16.3		mg/L		110	73 - 120	1	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-348254/3
Matrix: Water
Analysis Batch: 348254

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			04/03/17 13:41	1

Lab Sample ID: LCS 400-348254/4
Matrix: Water
Analysis Batch: 348254

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

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: 400-135509-4 DU
Matrix: Water
Analysis Batch: 348254

Client Sample ID: MW-14
Prep Type: Total/NA

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

Lab Sample ID: MB 400-348269/3
Matrix: Water
Analysis Batch: 348269

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			04/03/17 15:28	1

Lab Sample ID: LCS 400-348269/4
Matrix: Water
Analysis Batch: 348269

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: 400-135678-A-14 MS
Matrix: Water
Analysis Batch: 348269

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	0.32		1.00	1.24		mg/L		92	75 - 125

Lab Sample ID: 400-135678-A-14 MSD
Matrix: Water
Analysis Batch: 348269

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Fluoride	0.32		1.00	1.26		mg/L		94	75 - 125	2	4

Lab Sample ID: 400-135676-A-3 DU
Matrix: Water
Analysis Batch: 348269

Client Sample ID: Duplicate
Prep Type: Total/NA

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

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-347922/6
Matrix: Water
Analysis Batch: 347922

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	2.54	J	5.0	1.4	mg/L			03/31/17 08:56	1

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
SDG: NAMU

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: LCS 400-347922/7
Matrix: Water
Analysis Batch: 347922

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	15.8		mg/L		105	90 - 110

Lab Sample ID: MRL 400-347922/3
Matrix: Water
Analysis Batch: 347922

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	6.41		mg/L		128	50 - 150

Lab Sample ID: 400-135429-B-11 MS
Matrix: Water
Analysis Batch: 347922

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	2.4	J B	10.0	10.5		mg/L		81	77 - 128

Lab Sample ID: 400-135429-B-11 MSD
Matrix: Water
Analysis Batch: 347922

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	2.4	J B	10.0	10.5		mg/L		81	77 - 128	0	5

Lab Sample ID: MB 400-347982/6
Matrix: Water
Analysis Batch: 347982

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	1.77	J	5.0	1.4	mg/L			03/31/17 11:46	1

Lab Sample ID: LCS 400-347982/7
Matrix: Water
Analysis Batch: 347982

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	15.8		mg/L		105	90 - 110

Lab Sample ID: MRL 400-347982/3
Matrix: Water
Analysis Batch: 347982

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	5.93		mg/L		119	50 - 150

Lab Sample ID: 400-135509-12 MS
Matrix: Water
Analysis Batch: 347982

Client Sample ID: MW-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	3.4	J B	10.0	12.1		mg/L		87	77 - 128

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
 SDG: NAMU


Lab Sample ID: 400-135509-12 MSD
Matrix: Water
Analysis Batch: 347982

Client Sample ID: MW-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	3.4	J B	10.0	12.1		mg/L		87	77 - 128	0	5

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Chain of Custody Record

Client Information		Lab Pkt: Whitmire, Cheyenne R		Camer Tracking No(s):		COC No: 400-55446-23825.2			
Client Contact: Mr. Cale Sellers		Phone: 850 380 3458		E-Mail: cheyenne.whitmire@testamericainc.com		Page: 1-a			
Company: Southern Company		Due Date Requested:		Analysis Requested		Job #: 400-135509			
Address: PO BOX 2641 GSC8		TAT Requested (days):		 400-135509 COC		Preservation Codes:			
City: Birmingham		PO #: Purchase Order not required				A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:		M - Hexane N - None O - AsHClO2 P - Na2O4S Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)	
State, Zip: AL, 35291		WO #:				Total Number of containers:			
Phone: 205-992-7762(Tel)		Project #: 40006621		Field Sampling Parameters		Special Instructions/Note:			
Email: CBSSELLER@SOUTHERNCO.COM		SSOW#:		9315_Ra226, 9320_Ra228, Ra226Ra228_GPPC 5M4500 Cl - Chloride, 5M4500_S04_F - Sulfate, 2540C - 6020 - Sp, As, Ba, B, Be, Ca, Cd, Cr, Co, Pb, Li, Mo, Se, Ti, 7470A - Mercury					
Project Name: CCR -Plant Daniel		Sample Date		Field Filtered Sample (Yes or No)		Total Dissolved Solids, 4500 F C - Fluoride			
Site: NAMU		Sample Time		Matrix		5M4500 Cl - Chloride, 5M4500_S04_F - Sulfate, 2540C -			
		Sample Type (C=Comp, G=grab)		(W=water, S=solid, O=wastoball, BT=Trisub, As=air)		6020 - Sp, As, Ba, B, Be, Ca, Cd, Cr, Co, Pb, Li, Mo, Se, Ti, 7470A -			
		Preservation Code				Total Dissolved Solids, 4500 F C - Fluoride			
Sample Identification		Sample Date		Sample Time		Total Dissolved Solids, 4500 F C - Fluoride			
MW-11		3/22/17		0804		5M4500 Cl - Chloride, 5M4500_S04_F - Sulfate, 2540C -			
MW-12		3/21/17		1023		6020 - Sp, As, Ba, B, Be, Ca, Cd, Cr, Co, Pb, Li, Mo, Se, Ti, 7470A -			
MW-13		3/21/17		0927		Mercury			
MW-14		3/22/17		1021					
MW-15		3/21/17		0725					
MW-16		3/21/17		0808					
MW-17		3/21/17		1217					
MW-18		3/21/17		1310					
DUP-02		3/21/17		0625					
FB-02		3/22/17		0830					
EB-02		3/22/17		0815					
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological									
Deliverable Requested: I, II, III, IV, Other (specify)									
Empty Kit Relinquished by:									
Relinquished by: [Signature]		Date: 3/22/17		Time: 1707		Company: PPH Eco			
Relinquished by:		Date/Time:		Date/Time:		Company:			
Relinquished by:		Date/Time:		Date/Time:		Company:			
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks:		0.0, 0.0, 0.0 C			
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months									
Special Instructions/QC Requirements:									
Method of Shipment:									
Received by: [Signature]		Date: 3-22-17		Time: 1707		Company:			
Received by:		Date/Time:		Date/Time:		Company:			
Received by:		Date/Time:		Date/Time:		Company:			

Chain of Custody Record

Client Information		Lab PM: Whitmire, Cheyenne R.		Carrier Tracking No(s):	
Client Contact: Mr. Cale Sellers		Phone: 850 380 3458		COC No: 400-55446-23825-2	
Company: Southern Company		E-Mail: cheyenne.whitmire@testamericainc.com		Page: 2-2	
Address: PO BOX 2641 GSC8		Due Date Requested:		Job #: 400-135509	
City: Birmingham		TAT Requested (days):		Preservation Codes:	
State, Zip: AL, 35291		PO #:		A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA W - ph 4-5 Z - other (specify)	
Phone: 205-992-7762(Tel)		Purchase Order not required		Other:	
Email: CBSSELLER@SOUTHERNCO.COM		WO #:		Total Number of containers	
Project Name: CCR -Plant Daniel		Project #: 40006621		Special Instructions/Note:	
Site: NAMU		SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=Tissue, AS=Air)	Field Filtered Sample (Yes or No)	Performance (MSD (Yes or No))	Field Sampling Parameters	Analysis Requested	Field Sampling Parameters	Analysis Requested
mw-19	3/21/17	1106	G	Water	X	D	9315, Ra226, 9320, Ra228, Ra226Ra228, GPC		Mercury	
				Water			Total Dissolved Solids, 4500 F, C - Fluoride			
				Water			6020 - Sb, As, Ba, B, Be, Ca, Cd, Cr, Co, Pb, Li, Mo, Se, Ti, 7470A -			
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						

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

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

Empty Kit/Relinquished by: _____ Date: _____

Relinquished by: _____ Date/Time: 3/22/17 1707 Company: Kati Sw.

Relinquished by: _____ Date/Time: _____ Company: _____

Relinquished by: _____ Date/Time: _____ Company: _____

Custody Seals Intact: Yes No

Custody Seal No.: _____

Special Instructions/QC Requirements: _____

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

Method of Shipment: _____

Received by: _____ Date/Time: 3-22-17 1707 Company: _____

Received by: _____ Date/Time: _____ Company: _____

Received by: _____ Date/Time: _____ Company: _____

Cooler Temperature(s) °C and Other Remarks: 0.0° 0.0° 0.0° 12-2



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-135509-1

SDG Number: NAMU

Login Number: 135509

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	0.0°C, 0.0°C, 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	

Accreditation/Certification Summary

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-1
 SDG: NAMU

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-17
Louisiana (DW)	NELAP Secondary AB	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17



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: 400-135509-2

TestAmerica Sample Delivery Group: NAMU

Client Project/Site: CCR -Plant Daniel

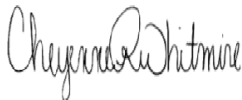
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:

4/21/2017 5:44:52 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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
SDG: NAMU

Job ID: 400-135509-2

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-135509-2

RAD

Method(s) 9315: Radium-226 Prep Batch 160-300500: The following samples have an RER (replicate error ratio) result outside of the acceptance criteria of 1 (1.69) for radium-226. Duplicate precision is demonstrated by acceptable relative percent difference (RPD), within the limit of 40% (31%). The data have been qualified and reported. MW-11 (400-135509-1), MW-12 (400-135509-2), MW-13 (400-135509-3), MW-14 (400-135509-4), MW-15 (400-135509-5), MW-16 (400-135509-6), MW-17 (400-135509-7), MW-18 (400-135509-8), DUP-02 (400-135509-9), FB-02 (400-135509-10), EB-02 (400-135509-11), MW-19 (400-135509-12), (LCS 160-300500/2-A), (MB 160-300500/1-A), (240-77176-E-1-A) and (240-77176-F-1-C DU)

Method(s) PrecSep_0: Radium 228 Prep Batch 160-300572. The following sample was reduced to 750 ml due to limited volume: MW-12 (400-135509-2).

Method(s) PrecSep-21: Radium 226 Prep Batch 160-300500. The following sample was reduced to 750 ml due to limited volume: MW-12 (400-135509-2).

Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
SDG: NAMU

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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
SDG: NAMU

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-135509-1	MW-11	Water	03/22/17 08:04	03/22/17 17:07
400-135509-2	MW-12	Water	03/21/17 10:23	03/22/17 17:07
400-135509-3	MW-13	Water	03/21/17 09:27	03/22/17 17:07
400-135509-4	MW-14	Water	03/22/17 10:21	03/22/17 17:07
400-135509-5	MW-15	Water	03/21/17 07:25	03/22/17 17:07
400-135509-6	MW-16	Water	03/21/17 08:08	03/22/17 17:07
400-135509-7	MW-17	Water	03/21/17 12:17	03/22/17 17:07
400-135509-8	MW-18	Water	03/21/17 13:10	03/22/17 17:07
400-135509-9	DUP-02	Water	03/21/17 06:25	03/22/17 17:07
400-135509-10	FB-02	Water	03/22/17 08:30	03/22/17 17:07
400-135509-11	EB-02	Water	03/22/17 08:15	03/22/17 17:07
400-135509-12	MW-19	Water	03/21/17 11:06	03/22/17 17:07

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
SDG: NAMU

Client Sample ID: MW-11
Date Collected: 03/22/17 08:04
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-1
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	0.446		0.135	0.141	1.00	0.122	pCi/L	03/29/17 09:00	04/20/17 06:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					03/29/17 09:00	04/20/17 06:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.701		0.274	0.281	1.00	0.383	pCi/L	03/29/17 10:06	04/12/17 10:56	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					03/29/17 10:06	04/12/17 10:56	1
Y Carrier	84.1		40 - 110					03/29/17 10:06	04/12/17 10:56	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	1.15		0.305	0.315	5.00	0.383	pCi/L		04/21/17 14:24	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
SDG: NAMU

Client Sample ID: MW-12
Date Collected: 03/21/17 10:23
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-2
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	0.653		0.197	0.205	1.00	0.181	pCi/L	03/29/17 09:00	04/20/17 06:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.6		40 - 110					03/29/17 09:00	04/20/17 06:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	2.04		0.441	0.479	1.00	0.495	pCi/L	03/29/17 10:06	04/12/17 10:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.6		40 - 110					03/29/17 10:06	04/12/17 10:57	1
Y Carrier	86.0		40 - 110					03/29/17 10:06	04/12/17 10:57	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	2.69		0.483	0.521	5.00	0.495	pCi/L		04/21/17 14:24	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
SDG: NAMU

Client Sample ID: MW-13
Date Collected: 03/21/17 09:27
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-3
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	0.353		0.123	0.127	1.00	0.112	pCi/L	03/29/17 09:00	04/20/17 06:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					03/29/17 09:00	04/20/17 06:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.631		0.243	0.250	1.00	0.331	pCi/L	03/29/17 10:06	04/12/17 10:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					03/29/17 10:06	04/12/17 10:57	1
Y Carrier	85.2		40 - 110					03/29/17 10:06	04/12/17 10:57	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	0.985		0.272	0.280	5.00	0.331	pCi/L		04/21/17 14:24	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
SDG: NAMU

Client Sample ID: MW-14
Date Collected: 03/22/17 10:21
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-4
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	0.777		0.175	0.189	1.00	0.113	pCi/L	03/29/17 09:00	04/20/17 06:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.0		40 - 110					03/29/17 09:00	04/20/17 06:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.658		0.271	0.278	1.00	0.380	pCi/L	03/29/17 10:06	04/12/17 10:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	85.0		40 - 110					03/29/17 10:06	04/12/17 10:57	1
Y Carrier	85.2		40 - 110					03/29/17 10:06	04/12/17 10:57	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	1.43		0.323	0.336	5.00	0.380	pCi/L		04/21/17 14:24	1

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
 SDG: NAMU

Client Sample ID: MW-15
Date Collected: 03/21/17 07:25
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-5
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	0.372		0.125	0.130	1.00	0.110	pCi/L	03/29/17 09:00	04/20/17 06:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					03/29/17 09:00	04/20/17 06:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.598		0.227	0.234	1.00	0.299	pCi/L	03/29/17 10:06	04/12/17 10:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.0		40 - 110					03/29/17 10:06	04/12/17 10:57	1
Y Carrier	85.2		40 - 110					03/29/17 10:06	04/12/17 10:57	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	0.970		0.260	0.268	5.00	0.299	pCi/L		04/21/17 14:24	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
SDG: NAMU

Client Sample ID: MW-16
Date Collected: 03/21/17 08:08
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-6
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	0.260		0.108	0.110	1.00	0.113	pCi/L	03/29/17 09:00	04/20/17 06:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		40 - 110					03/29/17 09:00	04/20/17 06:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.332		0.200	0.203	1.00	0.298	pCi/L	03/29/17 10:06	04/12/17 10:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.4		40 - 110					03/29/17 10:06	04/12/17 10:57	1
Y Carrier	84.9		40 - 110					03/29/17 10:06	04/12/17 10:57	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	0.592		0.227	0.230	5.00	0.298	pCi/L		04/21/17 14:24	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
SDG: NAMU

Client Sample ID: MW-17
Date Collected: 03/21/17 12:17
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-7
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	0.250		0.106	0.108	1.00	0.116	pCi/L	03/29/17 09:00	04/20/17 06:01	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					03/29/17 09:00	04/20/17 06:01	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.189	U	0.199	0.200	1.00	0.324	pCi/L	03/29/17 10:06	04/12/17 10:57	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	90.6		40 - 110					03/29/17 10:06	04/12/17 10:57	1
Y Carrier	89.3		40 - 110					03/29/17 10:06	04/12/17 10:57	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	0.439		0.225	0.227	5.00	0.324	pCi/L		04/21/17 14:24	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
SDG: NAMU

Client Sample ID: MW-18
Date Collected: 03/21/17 13:10
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-8
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	0.442		0.131	0.137	1.00	0.101	pCi/L	03/29/17 09:00	04/20/17 06:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.2		40 - 110					03/29/17 09:00	04/20/17 06:02	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.228	U	0.256	0.257	1.00	0.421	pCi/L	03/29/17 10:06	04/12/17 11:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	88.2		40 - 110					03/29/17 10:06	04/12/17 11:02	1
Y Carrier	88.6		40 - 110					03/29/17 10:06	04/12/17 11:02	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.670		0.288	0.291	5.00	0.421	pCi/L		04/21/17 14:24	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
SDG: NAMU

Client Sample ID: DUP-02
Date Collected: 03/21/17 06:25
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-9
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	0.280		0.107	0.110	1.00	0.0989	pCi/L	03/29/17 09:00	04/20/17 06:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.1		40 - 110					03/29/17 09:00	04/20/17 06:02	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.130	U	0.289	0.290	1.00	0.492	pCi/L	03/29/17 10:06	04/12/17 11:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.1		40 - 110					03/29/17 10:06	04/12/17 11:02	1
Y Carrier	89.0		40 - 110					03/29/17 10:06	04/12/17 11:02	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.410	U	0.309	0.310	5.00	0.492	pCi/L		04/21/17 14:24	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
SDG: NAMU

Client Sample ID: FB-02
Date Collected: 03/22/17 08:30
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-10
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	0.0301	U	0.0607	0.0608	1.00	0.110	pCi/L	03/29/17 09:00	04/20/17 06:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					03/29/17 09:00	04/20/17 06:02	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.0901	U	0.236	0.236	1.00	0.406	pCi/L	03/29/17 10:06	04/12/17 11:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	91.2		40 - 110					03/29/17 10:06	04/12/17 11:02	1
Y Carrier	84.9		40 - 110					03/29/17 10:06	04/12/17 11:02	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.120	U	0.243	0.243	5.00	0.406	pCi/L		04/21/17 14:24	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
SDG: NAMU

Client Sample ID: EB-02
Date Collected: 03/22/17 08:15
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-11
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	0.0454	U	0.0737	0.0738	1.00	0.128	pCi/L	03/29/17 09:00	04/20/17 06:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		40 - 110					03/29/17 09:00	04/20/17 06:02	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.378	U	0.280	0.282	1.00	0.441	pCi/L	03/29/17 10:06	04/12/17 11:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.5		40 - 110					03/29/17 10:06	04/12/17 11:02	1
Y Carrier	83.7		40 - 110					03/29/17 10:06	04/12/17 11:02	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.424	U	0.289	0.291	5.00	0.441	pCi/L		04/21/17 14:24	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
SDG: NAMU

Client Sample ID: MW-19
Date Collected: 03/21/17 11:06
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-12
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	0.199		0.100	0.102	1.00	0.118	pCi/L	03/29/17 09:00	04/20/17 06:02	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		40 - 110					03/29/17 09:00	04/20/17 06:02	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.252	U	0.250	0.251	1.00	0.405	pCi/L	03/29/17 10:06	04/12/17 11:03	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	89.7		40 - 110					03/29/17 10:06	04/12/17 11:03	1
Y Carrier	86.4		40 - 110					03/29/17 10:06	04/12/17 11:03	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.451		0.269	0.270	5.00	0.405	pCi/L		04/21/17 14:24	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
SDG: NAMU

Qualifiers

Rad

Qualifier	Qualifier Description
F	Duplicate RPD exceeds the control limit
U	Result is less than the sample detection limit.

Glossary

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

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
SDG: NAMU

Client Sample ID: MW-11

Date Collected: 03/22/17 08:04

Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			300500	03/29/17 09:00	LDE	TAL SL
Total/NA	Analysis	9315		1	304375	04/20/17 06:01	RTM	TAL SL
Total/NA	Prep	PrecSep_0			300572	03/29/17 10:06	LDE	TAL SL
Total/NA	Analysis	9320		1	303286	04/12/17 10:56	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	304767	04/21/17 14:24	RTM	TAL SL

Client Sample ID: MW-12

Date Collected: 03/21/17 10:23

Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			300500	03/29/17 09:00	LDE	TAL SL
Total/NA	Analysis	9315		1	304375	04/20/17 06:01	RTM	TAL SL
Total/NA	Prep	PrecSep_0			300572	03/29/17 10:06	LDE	TAL SL
Total/NA	Analysis	9320		1	303286	04/12/17 10:57	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	304767	04/21/17 14:24	RTM	TAL SL

Client Sample ID: MW-13

Date Collected: 03/21/17 09:27

Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			300500	03/29/17 09:00	LDE	TAL SL
Total/NA	Analysis	9315		1	304375	04/20/17 06:01	RTM	TAL SL
Total/NA	Prep	PrecSep_0			300572	03/29/17 10:06	LDE	TAL SL
Total/NA	Analysis	9320		1	303286	04/12/17 10:57	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	304767	04/21/17 14:24	RTM	TAL SL

Client Sample ID: MW-14

Date Collected: 03/22/17 10:21

Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			300500	03/29/17 09:00	LDE	TAL SL
Total/NA	Analysis	9315		1	304375	04/20/17 06:01	RTM	TAL SL
Total/NA	Prep	PrecSep_0			300572	03/29/17 10:06	LDE	TAL SL
Total/NA	Analysis	9320		1	303286	04/12/17 10:57	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	304767	04/21/17 14:24	RTM	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
SDG: NAMU

Client Sample ID: MW-15
Date Collected: 03/21/17 07:25
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-5
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			300500	03/29/17 09:00	LDE	TAL SL
Total/NA	Analysis	9315		1	304375	04/20/17 06:01	RTM	TAL SL
Total/NA	Prep	PrecSep_0			300572	03/29/17 10:06	LDE	TAL SL
Total/NA	Analysis	9320		1	303286	04/12/17 10:57	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	304767	04/21/17 14:24	RTM	TAL SL

Client Sample ID: MW-16
Date Collected: 03/21/17 08:08
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-6
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			300500	03/29/17 09:00	LDE	TAL SL
Total/NA	Analysis	9315		1	304375	04/20/17 06:01	RTM	TAL SL
Total/NA	Prep	PrecSep_0			300572	03/29/17 10:06	LDE	TAL SL
Total/NA	Analysis	9320		1	303286	04/12/17 10:57	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	304767	04/21/17 14:24	RTM	TAL SL

Client Sample ID: MW-17
Date Collected: 03/21/17 12:17
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-7
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			300500	03/29/17 09:00	LDE	TAL SL
Total/NA	Analysis	9315		1	304375	04/20/17 06:01	RTM	TAL SL
Total/NA	Prep	PrecSep_0			300572	03/29/17 10:06	LDE	TAL SL
Total/NA	Analysis	9320		1	303286	04/12/17 10:57	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	304767	04/21/17 14:24	RTM	TAL SL

Client Sample ID: MW-18
Date Collected: 03/21/17 13:10
Date Received: 03/22/17 17:07

Lab Sample ID: 400-135509-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			300500	03/29/17 09:00	LDE	TAL SL
Total/NA	Analysis	9315		1	304375	04/20/17 06:02	RTM	TAL SL
Total/NA	Prep	PrecSep_0			300572	03/29/17 10:06	LDE	TAL SL
Total/NA	Analysis	9320		1	303161	04/12/17 11:02	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	304767	04/21/17 14:24	RTM	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
SDG: NAMU

Client Sample ID: DUP-02

Lab Sample ID: 400-135509-9

Date Collected: 03/21/17 06:25

Matrix: Water

Date Received: 03/22/17 17:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			300500	03/29/17 09:00	LDE	TAL SL
Total/NA	Analysis	9315		1	304375	04/20/17 06:02	RTM	TAL SL
Total/NA	Prep	PrecSep_0			300572	03/29/17 10:06	LDE	TAL SL
Total/NA	Analysis	9320		1	303161	04/12/17 11:02	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	304767	04/21/17 14:24	RTM	TAL SL

Client Sample ID: FB-02

Lab Sample ID: 400-135509-10

Date Collected: 03/22/17 08:30

Matrix: Water

Date Received: 03/22/17 17:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			300500	03/29/17 09:00	LDE	TAL SL
Total/NA	Analysis	9315		1	304375	04/20/17 06:02	RTM	TAL SL
Total/NA	Prep	PrecSep_0			300572	03/29/17 10:06	LDE	TAL SL
Total/NA	Analysis	9320		1	303161	04/12/17 11:02	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	304767	04/21/17 14:24	RTM	TAL SL

Client Sample ID: EB-02

Lab Sample ID: 400-135509-11

Date Collected: 03/22/17 08:15

Matrix: Water

Date Received: 03/22/17 17:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			300500	03/29/17 09:00	LDE	TAL SL
Total/NA	Analysis	9315		1	304375	04/20/17 06:02	RTM	TAL SL
Total/NA	Prep	PrecSep_0			300572	03/29/17 10:06	LDE	TAL SL
Total/NA	Analysis	9320		1	303161	04/12/17 11:02	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	304767	04/21/17 14:24	RTM	TAL SL

Client Sample ID: MW-19

Lab Sample ID: 400-135509-12

Date Collected: 03/21/17 11:06

Matrix: Water

Date Received: 03/22/17 17:07

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			300500	03/29/17 09:00	LDE	TAL SL
Total/NA	Analysis	9315		1	304375	04/20/17 06:02	RTM	TAL SL
Total/NA	Prep	PrecSep_0			300572	03/29/17 10:06	LDE	TAL SL
Total/NA	Analysis	9320		1	303161	04/12/17 11:03	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	304767	04/21/17 14:24	RTM	TAL SL

Laboratory References:

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

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
SDG: NAMU

Rad

Prep Batch: 300500

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135509-1	MW-11	Total/NA	Water	PrecSep-21	
400-135509-2	MW-12	Total/NA	Water	PrecSep-21	
400-135509-3	MW-13	Total/NA	Water	PrecSep-21	
400-135509-4	MW-14	Total/NA	Water	PrecSep-21	
400-135509-5	MW-15	Total/NA	Water	PrecSep-21	
400-135509-6	MW-16	Total/NA	Water	PrecSep-21	
400-135509-7	MW-17	Total/NA	Water	PrecSep-21	
400-135509-8	MW-18	Total/NA	Water	PrecSep-21	
400-135509-9	DUP-02	Total/NA	Water	PrecSep-21	
400-135509-10	FB-02	Total/NA	Water	PrecSep-21	
400-135509-11	EB-02	Total/NA	Water	PrecSep-21	
400-135509-12	MW-19	Total/NA	Water	PrecSep-21	
MB 160-300500/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-300500/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
240-77176-F-1-C DU	Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 300572

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-135509-1	MW-11	Total/NA	Water	PrecSep_0	
400-135509-2	MW-12	Total/NA	Water	PrecSep_0	
400-135509-3	MW-13	Total/NA	Water	PrecSep_0	
400-135509-4	MW-14	Total/NA	Water	PrecSep_0	
400-135509-5	MW-15	Total/NA	Water	PrecSep_0	
400-135509-6	MW-16	Total/NA	Water	PrecSep_0	
400-135509-7	MW-17	Total/NA	Water	PrecSep_0	
400-135509-8	MW-18	Total/NA	Water	PrecSep_0	
400-135509-9	DUP-02	Total/NA	Water	PrecSep_0	
400-135509-10	FB-02	Total/NA	Water	PrecSep_0	
400-135509-11	EB-02	Total/NA	Water	PrecSep_0	
400-135509-12	MW-19	Total/NA	Water	PrecSep_0	
MB 160-300572/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-300572/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
240-77176-F-1-B DU	Duplicate	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
SDG: NAMU

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-300500/1-A
Matrix: Water
Analysis Batch: 304375

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 300500

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.005974	U	0.0535	0.0535	1.00	0.110	pCi/L	03/29/17 09:00	04/20/17 06:01	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.7		40 - 110					03/29/17 09:00	04/20/17 06:01	1

Lab Sample ID: LCS 160-300500/2-A
Matrix: Water
Analysis Batch: 304375

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300500

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	11.4	11.65		1.22	1.00	0.110	pCi/L	103	68 - 137
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	87.0		40 - 110						

Lab Sample ID: 240-77176-F-1-C DU
Matrix: Water
Analysis Batch: 304379

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 300500

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	94.0		68.52	F	6.37	1.00	0.124	pCi/L	1.69	1
Carrier	DU %Yield	DU Qualifier	Limits							
Ba Carrier	83.6		40 - 110							

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-300572/1-A
Matrix: Water
Analysis Batch: 303286

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 300572

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.4925		0.219	0.223	1.00	0.302	pCi/L	03/29/17 10:06	04/12/17 10:56	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.7		40 - 110					03/29/17 10:06	04/12/17 10:56	1
Y Carrier	89.0		40 - 110					03/29/17 10:06	04/12/17 10:56	1

QC Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
 SDG: NAMU

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

Lab Sample ID: LCS 160-300572/2-A
Matrix: Water
Analysis Batch: 303286

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 300572

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	13.6	15.95		1.70	1.00	0.410	pCi/L	117	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	87.0		40 - 110
Y Carrier	87.9		40 - 110

Lab Sample ID: 240-77176-F-1-B DU
Matrix: Water
Analysis Batch: 303161

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 300572

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-228	95.2		83.28		7.92	1.00	0.478	pCi/L	0.71	1

Carrier	DU %Yield	DU Qualifier	Limits
Ba Carrier	83.6		40 - 110
Y Carrier	84.1		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				Lab Pkt: Whitmire, Cheyenne R					
Southern Company				Camer Tracking No(s):					
Address: PO BOX 2641 GSC8				COC No: 400-55446-23825.2					
City: Birmingham				Page: 1-a					
State, Zip: AL, 35291				Job #: 400-135509					
Phone: 205-992-7762(Tel)				Preservation Codes:					
Email: CBSELLER@SOUTHERNCO.COM				A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchl H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:					
Project Name: CCR -Plant Daniel				M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - ph 4-5 Z - other (specify)					
Site: NAMU				Total Number of Containers:					
Sample Identification		Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastoball, BT=Basins, A=air)	Field Filled Sample (Yes or No)	Field Sampling Parameters	Analysis Requested	Special Instructions/Note:
MW-11		3/22/17	0804	G	Water	X	9315_Ra226, 9320_Ra228, Ra226Ra228_GPPC		
MW-12		3/21/17	1023	G	Water	X	5M4500 Cl - Chloride, 5M4500_S04_F - Sulfate, 2540C -		
MW-13		3/21/17	0927	G	Water	X	6020 - Sp, As, Ba, B, Be, Ca, Cd, Cr, Co, Pb, Li, Mo, Se, Ti, 7470A -		
MW-14		3/22/17	1021	G	Water	X	Mercury		
MW-15		3/21/17	0725	G	Water	X			
MW-16		3/21/17	0808	G	Water	X			
MW-17		3/21/17	1217	G	Water	X			
MW-18		3/21/17	1310	G	Water	X			
DUP-02		3/21/17	0625	G	Water	X			
FB-02		3/21/17	0830	G	Water	X			
EB-02		3/21/17	0815	G	Water	X			
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)									
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months									
Special Instructions/QC Requirements:									
Empty Kit Relinquished by:								Method of Shipment:	
Relinquished by: [Signature]								Date/Time: 3/22/17 1707	
Relinquished by:								Date/Time:	
Relinquished by:								Date/Time:	
Custody Seal No.:								Cooler Temperature(s) °C and Other Remarks: 0.0, 0.0, 0.0, C	



Chain of Custody Record

Client Information		Lab PM: Whitmire, Cheyenne R.		Carrier Tracking No(s):	
Client Contact: Mr. Cale Sellers		Phone: 850 380 3458		COC No: 400-55446-23825-2	
Company: Southern Company		E-Mail: cheyenne.whitmire@testamericainc.com		Page: 2-2	
Address: PO BOX 2641 GSC8		Due Date Requested:		Job #: 400-135509	
City: Birmingham		TAT Requested (days):		Preservation Codes:	
State, Zip: AL, 35291		PO #:		A - HCL M - Hexane B - NaOH N - None C - Zn Acetate O - AsNaO2 D - Nitric Acid P - Na2O4S Q - Na2SO3 E - NaHSO4 R - Na2S2O3 F - MeOH S - H2SO4 G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA U - Acetone T - TSP Dodecahydrate V - MCAA W - ph 4-5 Z - other (specify)	
Phone: 205-992-7762(Tel)		Purchase Order not required		Other:	
Email: CBSSELLER@SOUTHERNCO.COM		WO #:		Total Number of containers: X	
Project Name: CCR -Plant Daniel		Project #: 40006621		Special Instructions/Note:	
Site: NAMU		SSOW#:			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=Tissue, AS=Air)	Field Filtered Sample (Yes or No)		Field Sampling Parameters		Analysis Requested	Total Number of containers
					D	N	D	N		
mw-19	3/21/17	1106	G	Water	X	X	X	X		
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						
				Water						

<input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Possible Hazard Identification Deliverable Requested: I, II, III, IV, Other (specify)	
Empty Kit/Relinquished by:	Date:	Received by:	Method of Shipment:
Relinquished by: <i>[Signature]</i>	3/22/17 1707	<i>[Signature]</i>	
Relinquished by:	Date/Time:	Received by:	Date/Time:
Relinquished by:		Received by:	
Custody Seals Intact: A Yes A No	Custody Seal No.:	0.0° 0.0° 0.0° 0.0°	12-2



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-135509-2

SDG Number: NAMU

Login Number: 135509

List Number: 1

Creator: Siddoway, Benjamin

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C, 0.0°C, 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 <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
SDG: NAMU

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-17
Louisiana (DW)	NELAP Secondary AB	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska	State Program	10	MO00054	06-30-17
California	State Program	9	2886	03-31-18 *
Connecticut	State Program	1	PH-0241	03-31-17 *
Florida	NELAP	4	E87689	06-30-17
Illinois	NELAP	5	200023	11-30-17
Iowa	State Program	7	373	02-01-18
Kansas	NELAP	7	E-10236	10-31-17
Kentucky (DW)	State Program	4	90125	12-31-17
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-17
Louisiana (DW)	NELAP	6	LA170011	12-31-17
Maryland	State Program	3	310	09-30-17
Missouri	State Program	7	780	06-30-17
Nevada	State Program	9	MO000542017-1	07-31-17
New Jersey	NELAP	2	MO002	06-30-17 *
New York	NELAP	2	11616	03-31-17 *

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

TestAmerica Pensacola

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-135509-2
SDG: NAMU

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
North Dakota	State Program	8	R207	06-30-17
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-17
Pennsylvania	NELAP	3	68-00540	02-28-18
South Carolina	State Program	4	85002001	06-30-17
Texas	NELAP	6	T104704193-16-10	07-31-17
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		P330-17-0028	02-02-20
Utah	NELAP	8	MO000542016-8	07-31-17
Virginia	NELAP	3	460230	06-14-17
Washington	State Program	10	C592	08-30-17
West Virginia DEP	State Program	3	381	08-31-17 *

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

TestAmerica Pensacola

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: 400-138410-1

TestAmerica Sample Delivery Group: NAMU

Client Project/Site: CCR -Plant Daniel


For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:

6/26/2017 4:05:41 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

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

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

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Case Narrative

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Job ID: 400-138410-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-138410-1

Metals

Method(s) 6020: The continuing calibration blank (CCB) for analytical batch 357227 contained Selenium and Antimony above the reporting limit (RL). All reported samples associated with this CCB were ND for this analyte; therefore, re-analysis of samples was not performed.

Method(s) 6020: The continuing calibration blank (CCB) for analytical batch 357227 contained Antimony above the reporting limit (RL). All reported samples associated with this CCB were either ND for this analyte or contained this analyte at a concentration greater than 10X the value found in the CCB; therefore, re-analysis of samples was not performed.

General Chemistry

Method(s) SM 4500 F C: The sample duplicate precision for the following sample associated with analytical batch 356077 was outside control limits: (400-138427-A-1 DU). The associated Laboratory Control Sample (LCS) precision met acceptance criteria.

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Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Client Sample ID: MW-11

Lab Sample ID: 400-138410-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00080	J	0.0013	0.00046	mg/L	5		6020	Total
Barium	0.085		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.00043	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Calcium	2.0		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0048		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Molybdenum	0.0038	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	48		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	14		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	2.0	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.74				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-12

Lab Sample ID: 400-138410-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.16		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.00054	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Boron	0.031	J	0.050	0.021	mg/L	5		6020	Total Recoverable
Cobalt	0.0031		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lead	0.00036	J	0.0013	0.00035	mg/L	5		6020	Total Recoverable
Lithium	0.0032	J	0.0050	0.0032	mg/L	5		6020	Total Recoverable
Molybdenum	0.0010	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	6.0		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	16		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.27		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	11		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.07				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-13

Lab Sample ID: 400-138410-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.10		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	3.9		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0011	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0041	J	0.0050	0.0032	mg/L	5		6020	Total Recoverable
Molybdenum	0.0016	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	32		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	14		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Client Sample ID: MW-13 (Continued)

Lab Sample ID: 400-138410-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Sulfate	5.6		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	5.17				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-14

Lab Sample ID: 400-138410-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.094		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	3.6		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0016	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lead	0.00035	J	0.0013	0.00035	mg/L	5		6020	Total Recoverable
Molybdenum	0.0010	J	0.015	0.00085	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	46		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	10		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	5.02				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-15

Lab Sample ID: 400-138410-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.065		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.4		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0015	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Selenium - RA	0.00029	J	0.0013	0.00024	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	6.0		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	9.3		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.69				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-16

Lab Sample ID: 400-138410-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.036		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.65		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0010	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Chloride	7.4		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.61				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-17

Lab Sample ID: 400-138410-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.037		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.96		0.25	0.13	mg/L	5		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Client Sample ID: MW-17 (Continued)

Lab Sample ID: 400-138410-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Cobalt	0.0010	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	22		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	7.4		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	1.7	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.87				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-18

Lab Sample ID: 400-138410-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.060		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.80		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0013	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	30		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	10		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	3.0	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.55				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-19

Lab Sample ID: 400-138410-9

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00050	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.031		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.54		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00051	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Chloride	5.5		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	5.01				SU	1		Field Sampling	Total/NA

Client Sample ID: DUP-03

Lab Sample ID: 400-138410-10

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.061		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.80		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0013	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	28		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	9.9		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	3.0	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA

Client Sample ID: EB-02

Lab Sample ID: 400-138410-11

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Client Sample ID: FB-02

Lab Sample ID: 400-138410-12

No Detections.

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
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
Field Sampling	Field Sampling	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-138410-1	MW-11	Water	05/24/17 10:35	05/25/17 10:10
400-138410-2	MW-12	Water	05/23/17 14:46	05/25/17 10:10
400-138410-3	MW-13	Water	05/23/17 14:16	05/25/17 10:10
400-138410-4	MW-14	Water	05/24/17 12:22	05/25/17 10:10
400-138410-5	MW-15	Water	05/23/17 11:41	05/25/17 10:10
400-138410-6	MW-16	Water	05/23/17 12:23	05/25/17 10:10
400-138410-7	MW-17	Water	05/24/17 07:01	05/25/17 10:10
400-138410-8	MW-18	Water	05/24/17 08:47	05/25/17 10:10
400-138410-9	MW-19	Water	05/23/17 15:49	05/25/17 10:10
400-138410-10	DUP-03	Water	05/24/17 07:47	05/25/17 10:10
400-138410-11	EB-02	Water	05/24/17 12:30	05/25/17 10:10
400-138410-12	FB-02	Water	05/24/17 09:20	05/25/17 10:10

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Client Sample ID: MW-11
Date Collected: 05/24/17 10:35
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-1
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/17 15:12	06/15/17 13:18	5
Arsenic	0.00080	J	0.0013	0.00046	mg/L		06/05/17 15:12	06/15/17 13:18	5
Barium	0.085		0.0025	0.00049	mg/L		06/05/17 15:12	06/15/17 13:18	5
Beryllium	0.00043	J	0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 13:18	5
Boron	<0.021		0.050	0.021	mg/L		06/05/17 15:12	06/15/17 13:18	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 13:18	5
Calcium	2.0		0.25	0.13	mg/L		06/05/17 15:12	06/15/17 13:18	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/17 15:12	06/15/17 13:18	5
Cobalt	0.0048		0.0025	0.00040	mg/L		06/05/17 15:12	06/15/17 13:18	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/17 15:12	06/15/17 13:18	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/05/17 15:12	06/15/17 13:18	5
Molybdenum	0.0038	J	0.015	0.00085	mg/L		06/05/17 15:12	06/15/17 13:18	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/17 15:12	06/15/17 13:18	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/17 15:12	06/15/17 16:19	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/03/17 12:23	06/05/17 12:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	48		5.0	3.4	mg/L			05/27/17 14:35	1
Chloride	14		2.0	0.60	mg/L			05/30/17 11:11	1
Fluoride	<0.032		0.10	0.032	mg/L			06/06/17 16:52	1
Sulfate	2.0	J	5.0	1.4	mg/L			06/01/17 13:02	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.74				SU			05/24/17 10:35	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Client Sample ID: MW-12
Date Collected: 05/23/17 14:46
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-2
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/17 15:12	06/15/17 13:23	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/17 15:12	06/15/17 13:23	5
Barium	0.16		0.0025	0.00049	mg/L		06/05/17 15:12	06/15/17 13:23	5
Beryllium	0.00054	J	0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 13:23	5
Boron	0.031	J	0.050	0.021	mg/L		06/05/17 15:12	06/15/17 13:23	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 13:23	5
Calcium	<0.13		0.25	0.13	mg/L		06/05/17 15:12	06/15/17 13:23	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/17 15:12	06/15/17 13:23	5
Cobalt	0.0031		0.0025	0.00040	mg/L		06/05/17 15:12	06/15/17 13:23	5
Lead	0.00036	J	0.0013	0.00035	mg/L		06/05/17 15:12	06/15/17 13:23	5
Lithium	0.0032	J	0.0050	0.0032	mg/L		06/05/17 15:12	06/15/17 13:23	5
Molybdenum	0.0010	J	0.015	0.00085	mg/L		06/05/17 15:12	06/15/17 13:23	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/17 15:12	06/15/17 13:23	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/17 15:12	06/16/17 16:18	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/03/17 12:23	06/05/17 12:20	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	6.0		5.0	3.4	mg/L			05/27/17 13:54	1
Chloride	16		2.0	0.60	mg/L			05/30/17 12:45	1
Fluoride	0.27		0.10	0.032	mg/L			06/06/17 16:55	1
Sulfate	11		5.0	1.4	mg/L			05/31/17 10:40	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.07				SU			05/23/17 14:46	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Client Sample ID: MW-13
Date Collected: 05/23/17 14:16
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-3
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/17 15:12	06/15/17 13:45	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/17 15:12	06/15/17 13:45	5
Barium	0.10		0.0025	0.00049	mg/L		06/05/17 15:12	06/15/17 13:45	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 13:45	5
Boron	<0.021		0.050	0.021	mg/L		06/05/17 15:12	06/15/17 13:45	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 13:45	5
Calcium	3.9		0.25	0.13	mg/L		06/05/17 15:12	06/15/17 13:45	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/17 15:12	06/15/17 13:45	5
Cobalt	0.0011	J	0.0025	0.00040	mg/L		06/05/17 15:12	06/15/17 13:45	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/17 15:12	06/15/17 13:45	5
Lithium	0.0041	J	0.0050	0.0032	mg/L		06/05/17 15:12	06/15/17 13:45	5
Molybdenum	0.0016	J	0.015	0.00085	mg/L		06/05/17 15:12	06/15/17 13:45	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/17 15:12	06/15/17 13:45	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/17 15:12	06/16/17 16:22	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/03/17 12:23	06/05/17 12:22	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	32		5.0	3.4	mg/L			05/27/17 13:54	1
Chloride	14		2.0	0.60	mg/L			05/30/17 12:45	1
Fluoride	<0.032		0.10	0.032	mg/L			06/06/17 16:57	1
Sulfate	5.6		5.0	1.4	mg/L			05/31/17 11:14	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.17				SU			05/23/17 14:16	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Client Sample ID: MW-14
Date Collected: 05/24/17 12:22
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-4
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/17 15:12	06/15/17 13:50	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/17 15:12	06/15/17 13:50	5
Barium	0.094		0.0025	0.00049	mg/L		06/05/17 15:12	06/15/17 13:50	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 13:50	5
Boron	<0.021		0.050	0.021	mg/L		06/05/17 15:12	06/15/17 13:50	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 13:50	5
Calcium	3.6		0.25	0.13	mg/L		06/05/17 15:12	06/15/17 13:50	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/17 15:12	06/15/17 13:50	5
Cobalt	0.0016	J	0.0025	0.00040	mg/L		06/05/17 15:12	06/15/17 13:50	5
Lead	0.00035	J	0.0013	0.00035	mg/L		06/05/17 15:12	06/15/17 13:50	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/05/17 15:12	06/15/17 13:50	5
Molybdenum	0.0010	J	0.015	0.00085	mg/L		06/05/17 15:12	06/15/17 13:50	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/17 15:12	06/15/17 13:50	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/17 15:12	06/15/17 13:50	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/03/17 12:23	06/05/17 12:24	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	46		5.0	3.4	mg/L			05/27/17 14:35	1
Chloride	10		2.0	0.60	mg/L			05/30/17 11:11	1
Fluoride	<0.032		0.10	0.032	mg/L			06/06/17 17:00	1
Sulfate	<1.4		5.0	1.4	mg/L			05/31/17 08:28	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.02				SU			05/24/17 12:22	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Client Sample ID: MW-15
Date Collected: 05/23/17 11:41
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-5
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/17 15:12	06/15/17 14:16	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/17 15:12	06/15/17 14:16	5
Barium	0.065		0.0025	0.00049	mg/L		06/05/17 15:12	06/15/17 14:16	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 14:16	5
Boron	<0.021		0.050	0.021	mg/L		06/05/17 15:12	06/15/17 14:16	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 14:16	5
Calcium	1.4		0.25	0.13	mg/L		06/05/17 15:12	06/15/17 14:16	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/17 15:12	06/15/17 14:16	5
Cobalt	0.0015	J	0.0025	0.00040	mg/L		06/05/17 15:12	06/15/17 14:16	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/17 15:12	06/15/17 14:16	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/05/17 15:12	06/15/17 14:16	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/05/17 15:12	06/15/17 14:16	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/17 15:12	06/15/17 14:16	5

Method: 6020 - Metals (ICP/MS) - Total Recoverable - RA

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Selenium	0.00029	J	0.0013	0.00024	mg/L		06/05/17 15:12	06/16/17 16:26	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/03/17 12:23	06/05/17 12:25	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	6.0		5.0	3.4	mg/L			05/27/17 13:54	1
Chloride	9.3		2.0	0.60	mg/L			05/30/17 12:18	1
Fluoride	<0.032		0.10	0.032	mg/L			06/06/17 14:06	1
Sulfate	<1.4		5.0	1.4	mg/L			05/31/17 11:14	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.69				SU			05/23/17 11:41	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Client Sample ID: MW-16
Date Collected: 05/23/17 12:23
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-6
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/17 15:12	06/15/17 14:21	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/17 15:12	06/15/17 14:21	5
Barium	0.036		0.0025	0.00049	mg/L		06/05/17 15:12	06/15/17 14:21	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 14:21	5
Boron	<0.021		0.050	0.021	mg/L		06/05/17 15:12	06/15/17 14:21	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 14:21	5
Calcium	0.65		0.25	0.13	mg/L		06/05/17 15:12	06/15/17 14:21	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/17 15:12	06/15/17 14:21	5
Cobalt	0.0010	J	0.0025	0.00040	mg/L		06/05/17 15:12	06/15/17 14:21	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/17 15:12	06/15/17 14:21	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/05/17 15:12	06/15/17 14:21	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/05/17 15:12	06/15/17 14:21	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/17 15:12	06/15/17 14:21	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/17 15:12	06/15/17 14:21	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/03/17 12:23	06/05/17 12:27	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			05/27/17 13:54	1
Chloride	7.4		2.0	0.60	mg/L			05/30/17 12:45	1
Fluoride	<0.032		0.10	0.032	mg/L			06/06/17 14:12	1
Sulfate	<1.4		5.0	1.4	mg/L			05/31/17 11:14	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.61				SU			05/23/17 12:23	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Client Sample ID: MW-17
Date Collected: 05/24/17 07:01
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-7
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/17 15:12	06/15/17 14:29	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/17 15:12	06/15/17 14:29	5
Barium	0.037		0.0025	0.00049	mg/L		06/05/17 15:12	06/15/17 14:29	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 14:29	5
Boron	<0.021		0.050	0.021	mg/L		06/05/17 15:12	06/15/17 14:29	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 14:29	5
Calcium	0.96		0.25	0.13	mg/L		06/05/17 15:12	06/15/17 14:29	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/17 15:12	06/15/17 14:29	5
Cobalt	0.0010	J	0.0025	0.00040	mg/L		06/05/17 15:12	06/15/17 14:29	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/17 15:12	06/15/17 14:29	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/05/17 15:12	06/15/17 14:29	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/05/17 15:12	06/15/17 14:29	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/17 15:12	06/15/17 14:29	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/17 15:12	06/15/17 14:29	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/03/17 12:23	06/05/17 12:29	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	22		5.0	3.4	mg/L			05/27/17 14:35	1
Chloride	7.4		2.0	0.60	mg/L			05/30/17 12:45	1
Fluoride	<0.032		0.10	0.032	mg/L			06/06/17 14:15	1
Sulfate	1.7	J	5.0	1.4	mg/L			06/01/17 13:02	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.87				SU			05/24/17 07:01	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Client Sample ID: MW-18
Date Collected: 05/24/17 08:47
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-8
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/17 15:12	06/15/17 14:33	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/17 15:12	06/15/17 14:33	5
Barium	0.060		0.0025	0.00049	mg/L		06/05/17 15:12	06/15/17 14:33	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 14:33	5
Boron	<0.021		0.050	0.021	mg/L		06/05/17 15:12	06/15/17 14:33	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 14:33	5
Calcium	0.80		0.25	0.13	mg/L		06/05/17 15:12	06/15/17 14:33	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/17 15:12	06/15/17 14:33	5
Cobalt	0.0013	J	0.0025	0.00040	mg/L		06/05/17 15:12	06/15/17 14:33	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/17 15:12	06/15/17 14:33	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/05/17 15:12	06/15/17 14:33	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/05/17 15:12	06/15/17 14:33	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/17 15:12	06/15/17 14:33	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/17 15:12	06/15/17 14:33	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/03/17 12:23	06/05/17 12:31	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	30		5.0	3.4	mg/L			05/27/17 14:35	1
Chloride	10		2.0	0.60	mg/L			05/30/17 12:45	1
Fluoride	<0.032		0.10	0.032	mg/L			06/06/17 14:18	1
Sulfate	3.0	J	5.0	1.4	mg/L			06/01/17 13:02	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.55				SU			05/24/17 08:47	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Client Sample ID: MW-19
Date Collected: 05/23/17 15:49
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-9
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/17 15:12	06/15/17 14:38	5
Arsenic	0.00050	J	0.0013	0.00046	mg/L		06/05/17 15:12	06/15/17 14:38	5
Barium	0.031		0.0025	0.00049	mg/L		06/05/17 15:12	06/15/17 14:38	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 14:38	5
Boron	<0.021		0.050	0.021	mg/L		06/05/17 15:12	06/15/17 14:38	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 14:38	5
Calcium	0.54		0.25	0.13	mg/L		06/05/17 15:12	06/15/17 14:38	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/17 15:12	06/15/17 14:38	5
Cobalt	0.00051	J	0.0025	0.00040	mg/L		06/05/17 15:12	06/15/17 14:38	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/17 15:12	06/15/17 14:38	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/05/17 15:12	06/15/17 14:38	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/05/17 15:12	06/15/17 14:38	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/17 15:12	06/15/17 14:38	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/17 15:12	06/15/17 14:38	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/03/17 12:23	06/05/17 12:32	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			05/27/17 13:54	1
Chloride	5.5		2.0	0.60	mg/L			05/30/17 12:45	1
Fluoride	<0.032		0.10	0.032	mg/L			06/06/17 14:20	1
Sulfate	<1.4		5.0	1.4	mg/L			05/31/17 11:14	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.01				SU			05/23/17 15:49	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Client Sample ID: DUP-03

Date Collected: 05/24/17 07:47

Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-10

Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/17 15:12	06/15/17 14:42	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/17 15:12	06/15/17 14:42	5
Barium	0.061		0.0025	0.00049	mg/L		06/05/17 15:12	06/15/17 14:42	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 14:42	5
Boron	<0.021		0.050	0.021	mg/L		06/05/17 15:12	06/15/17 14:42	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 14:42	5
Calcium	0.80		0.25	0.13	mg/L		06/05/17 15:12	06/15/17 14:42	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/17 15:12	06/15/17 14:42	5
Cobalt	0.0013 J		0.0025	0.00040	mg/L		06/05/17 15:12	06/15/17 14:42	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/17 15:12	06/15/17 14:42	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/05/17 15:12	06/15/17 14:42	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/05/17 15:12	06/15/17 14:42	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/17 15:12	06/15/17 14:42	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/17 15:12	06/15/17 14:42	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/03/17 12:23	06/05/17 12:34	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	28		5.0	3.4	mg/L			05/27/17 14:35	1
Chloride	9.9		2.0	0.60	mg/L			05/30/17 12:46	1
Fluoride	<0.032		0.10	0.032	mg/L			06/06/17 14:24	1
Sulfate	3.0 J		5.0	1.4	mg/L			06/01/17 13:02	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Client Sample ID: EB-02
Date Collected: 05/24/17 12:30
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-11
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/17 15:12	06/15/17 14:47	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/17 15:12	06/15/17 14:47	5
Barium	<0.00049		0.0025	0.00049	mg/L		06/05/17 15:12	06/15/17 14:47	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 14:47	5
Boron	<0.021		0.050	0.021	mg/L		06/05/17 15:12	06/15/17 14:47	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 14:47	5
Calcium	<0.13		0.25	0.13	mg/L		06/05/17 15:12	06/15/17 14:47	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/17 15:12	06/15/17 14:47	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/05/17 15:12	06/15/17 14:47	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/17 15:12	06/15/17 14:47	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/05/17 15:12	06/15/17 14:47	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/05/17 15:12	06/15/17 14:47	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/17 15:12	06/15/17 14:47	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/17 15:12	06/15/17 14:47	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/03/17 12:23	06/05/17 12:47	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			05/27/17 14:35	1
Chloride	<0.60		2.0	0.60	mg/L			05/30/17 12:45	1
Fluoride	<0.032		0.10	0.032	mg/L			06/06/17 14:27	1
Sulfate	<1.4		5.0	1.4	mg/L			06/01/17 13:02	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Client Sample ID: FB-02
Date Collected: 05/24/17 09:20
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-12
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/17 15:12	06/15/17 14:52	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/17 15:12	06/15/17 14:52	5
Barium	<0.00049		0.0025	0.00049	mg/L		06/05/17 15:12	06/15/17 14:52	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 14:52	5
Boron	<0.021		0.050	0.021	mg/L		06/05/17 15:12	06/15/17 14:52	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 14:52	5
Calcium	<0.13		0.25	0.13	mg/L		06/05/17 15:12	06/15/17 14:52	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/17 15:12	06/15/17 14:52	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/05/17 15:12	06/15/17 14:52	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/17 15:12	06/15/17 14:52	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/05/17 15:12	06/15/17 14:52	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/05/17 15:12	06/15/17 14:52	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/17 15:12	06/15/17 14:52	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/17 15:12	06/15/17 14:52	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/03/17 12:23	06/05/17 12:49	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			05/27/17 14:35	1
Chloride	<0.60		2.0	0.60	mg/L			05/30/17 10:47	1
Fluoride	<0.032		0.10	0.032	mg/L			06/06/17 14:30	1
Sulfate	<1.4		5.0	1.4	mg/L			06/01/17 13:02	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Qualifiers

Metals

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.

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.
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.

Glossary

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

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Client Sample ID: MW-11

Date Collected: 05/24/17 10:35

Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			355936	06/05/17 15:12	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	357227	06/15/17 13:18	DRE	TAL PEN
Total Recoverable	Prep	3005A	RA		355936	06/05/17 15:12	DRE	TAL PEN
Total Recoverable	Analysis	6020	RA	5	357227	06/15/17 16:19	DRE	TAL PEN
Total/NA	Prep	7470A			355528	06/03/17 12:23	DN1	TAL PEN
Total/NA	Analysis	7470A		1	355918	06/05/17 12:01	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	355171	05/27/17 14:35	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	355367	05/30/17 11:11	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356099	06/06/17 16:52	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355598	06/01/17 13:02	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	358332	05/24/17 10:35	BWS	TAL PEN

Client Sample ID: MW-12

Date Collected: 05/23/17 14:46

Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			355936	06/05/17 15:12	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	357227	06/15/17 13:23	DRE	TAL PEN
Total Recoverable	Prep	3005A	RA		355936	06/05/17 15:12	DRE	TAL PEN
Total Recoverable	Analysis	6020	RA	5	357532	06/16/17 16:18	DRE	TAL PEN
Total/NA	Prep	7470A			355528	06/03/17 12:23	DN1	TAL PEN
Total/NA	Analysis	7470A		1	355918	06/05/17 12:20	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	355170	05/27/17 13:54	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	355366	05/30/17 12:45	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356099	06/06/17 16:55	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355476	05/31/17 10:40	VLS	TAL PEN
Total/NA	Analysis	Field Sampling		1	358332	05/23/17 14:46	BWS	TAL PEN

Client Sample ID: MW-13

Date Collected: 05/23/17 14:16

Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			355936	06/05/17 15:12	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	357227	06/15/17 13:45	DRE	TAL PEN
Total Recoverable	Prep	3005A	RA		355936	06/05/17 15:12	DRE	TAL PEN
Total Recoverable	Analysis	6020	RA	5	357532	06/16/17 16:22	DRE	TAL PEN
Total/NA	Prep	7470A			355528	06/03/17 12:23	DN1	TAL PEN
Total/NA	Analysis	7470A		1	355918	06/05/17 12:22	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	355170	05/27/17 13:54	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	355366	05/30/17 12:45	RRC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Client Sample ID: MW-13

Lab Sample ID: 400-138410-3

Date Collected: 05/23/17 14:16

Matrix: Water

Date Received: 05/25/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 4500 F C		1	356099	06/06/17 16:57	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355476	05/31/17 11:14	VLS	TAL PEN
Total/NA	Analysis	Field Sampling		1	358332	05/23/17 14:16	BWS	TAL PEN

Client Sample ID: MW-14

Lab Sample ID: 400-138410-4

Date Collected: 05/24/17 12:22

Matrix: Water

Date Received: 05/25/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			355936	06/05/17 15:12	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	357227	06/15/17 13:50	DRE	TAL PEN
Total/NA	Prep	7470A			355528	06/03/17 12:23	DN1	TAL PEN
Total/NA	Analysis	7470A		1	355918	06/05/17 12:24	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	355171	05/27/17 14:35	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	355367	05/30/17 11:11	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356099	06/06/17 17:00	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355483	05/31/17 08:28	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	358332	05/24/17 12:22	BWS	TAL PEN

Client Sample ID: MW-15

Lab Sample ID: 400-138410-5

Date Collected: 05/23/17 11:41

Matrix: Water

Date Received: 05/25/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			355936	06/05/17 15:12	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	357227	06/15/17 14:16	DRE	TAL PEN
Total Recoverable	Prep	3005A	RA		355936	06/05/17 15:12	DRE	TAL PEN
Total Recoverable	Analysis	6020	RA	5	357532	06/16/17 16:26	DRE	TAL PEN
Total/NA	Prep	7470A			355528	06/03/17 12:23	DN1	TAL PEN
Total/NA	Analysis	7470A		1	355918	06/05/17 12:25	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	355170	05/27/17 13:54	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	355366	05/30/17 12:18	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356077	06/06/17 14:06	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355476	05/31/17 11:14	VLS	TAL PEN
Total/NA	Analysis	Field Sampling		1	358332	05/23/17 11:41	BWS	TAL PEN

Client Sample ID: MW-16

Lab Sample ID: 400-138410-6

Date Collected: 05/23/17 12:23

Matrix: Water

Date Received: 05/25/17 10:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			355936	06/05/17 15:12	DRE	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Client Sample ID: MW-16

Date Collected: 05/23/17 12:23

Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Analysis	6020		5	357227	06/15/17 14:21	DRE	TAL PEN
Total/NA	Prep	7470A			355528	06/03/17 12:23	DN1	TAL PEN
Total/NA	Analysis	7470A		1	355918	06/05/17 12:27	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	355170	05/27/17 13:54	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	355366	05/30/17 12:45	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356077	06/06/17 14:12	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355476	05/31/17 11:14	VLS	TAL PEN
Total/NA	Analysis	Field Sampling		1	358332	05/23/17 12:23	BWS	TAL PEN

Client Sample ID: MW-17

Date Collected: 05/24/17 07:01

Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			355936	06/05/17 15:12	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	357227	06/15/17 14:29	DRE	TAL PEN
Total/NA	Prep	7470A			355528	06/03/17 12:23	DN1	TAL PEN
Total/NA	Analysis	7470A		1	355918	06/05/17 12:29	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	355171	05/27/17 14:35	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	355366	05/30/17 12:45	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356077	06/06/17 14:15	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355598	06/01/17 13:02	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	358332	05/24/17 07:01	BWS	TAL PEN

Client Sample ID: MW-18

Date Collected: 05/24/17 08:47

Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			355936	06/05/17 15:12	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	357227	06/15/17 14:33	DRE	TAL PEN
Total/NA	Prep	7470A			355528	06/03/17 12:23	DN1	TAL PEN
Total/NA	Analysis	7470A		1	355918	06/05/17 12:31	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	355171	05/27/17 14:35	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	355366	05/30/17 12:45	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356077	06/06/17 14:18	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355598	06/01/17 13:02	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	358332	05/24/17 08:47	BWS	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Client Sample ID: MW-19

Date Collected: 05/23/17 15:49

Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-9

Matrix: Water

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total Recoverable	Prep	3005A			355936	06/05/17 15:12	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	357227	06/15/17 14:38	DRE	TAL PEN
Total/NA	Prep	7470A			355528	06/03/17 12:23	DN1	TAL PEN
Total/NA	Analysis	7470A		1	355918	06/05/17 12:32	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	355170	05/27/17 13:54	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	355366	05/30/17 12:45	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356077	06/06/17 14:20	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355476	05/31/17 11:14	VLS	TAL PEN
Total/NA	Analysis	Field Sampling		1	358332	05/23/17 15:49	BWS	TAL PEN

Client Sample ID: DUP-03

Date Collected: 05/24/17 07:47

Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-10

Matrix: Water

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total Recoverable	Prep	3005A			355936	06/05/17 15:12	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	357227	06/15/17 14:42	DRE	TAL PEN
Total/NA	Prep	7470A			355528	06/03/17 12:23	DN1	TAL PEN
Total/NA	Analysis	7470A		1	355918	06/05/17 12:34	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	355171	05/27/17 14:35	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	355366	05/30/17 12:46	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356077	06/06/17 14:24	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355598	06/01/17 13:02	RRC	TAL PEN

Client Sample ID: EB-02

Date Collected: 05/24/17 12:30

Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-11

Matrix: Water

<u>Prep Type</u>	<u>Batch Type</u>	<u>Batch Method</u>	<u>Run</u>	<u>Dilution Factor</u>	<u>Batch Number</u>	<u>Prepared or Analyzed</u>	<u>Analyst</u>	<u>Lab</u>
Total Recoverable	Prep	3005A			355936	06/05/17 15:12	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	357227	06/15/17 14:47	DRE	TAL PEN
Total/NA	Prep	7470A			355528	06/03/17 12:23	DN1	TAL PEN
Total/NA	Analysis	7470A		1	355918	06/05/17 12:47	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	355171	05/27/17 14:35	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	355366	05/30/17 12:45	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356077	06/06/17 14:27	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355598	06/01/17 13:02	RRC	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Client Sample ID: FB-02
Date Collected: 05/24/17 09:20
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-12
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			355936	06/05/17 15:12	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	357227	06/15/17 14:52	DRE	TAL PEN
Total/NA	Prep	7470A			355528	06/03/17 12:23	DN1	TAL PEN
Total/NA	Analysis	7470A		1	355918	06/05/17 12:49	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	355171	05/27/17 14:35	TET	TAL PEN
Total/NA	Analysis	SM 4500 Cl- E		1	355367	05/30/17 10:47	RRC	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	356077	06/06/17 14:30	CAC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	355598	06/01/17 13:02	RRC	TAL PEN

Laboratory References:

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

QC Association Summary

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
 SDG: NAMU

Metals

Prep Batch: 355528

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138410-1	MW-11	Total/NA	Water	7470A	
400-138410-2	MW-12	Total/NA	Water	7470A	
400-138410-3	MW-13	Total/NA	Water	7470A	
400-138410-4	MW-14	Total/NA	Water	7470A	
400-138410-5	MW-15	Total/NA	Water	7470A	
400-138410-6	MW-16	Total/NA	Water	7470A	
400-138410-7	MW-17	Total/NA	Water	7470A	
400-138410-8	MW-18	Total/NA	Water	7470A	
400-138410-9	MW-19	Total/NA	Water	7470A	
400-138410-10	DUP-03	Total/NA	Water	7470A	
400-138410-11	EB-02	Total/NA	Water	7470A	
400-138410-12	FB-02	Total/NA	Water	7470A	
MB 400-355528/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-355528/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-138410-1 MS	MW-11	Total/NA	Water	7470A	
400-138410-1 MSD	MW-11	Total/NA	Water	7470A	

Analysis Batch: 355918

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138410-1	MW-11	Total/NA	Water	7470A	355528
400-138410-2	MW-12	Total/NA	Water	7470A	355528
400-138410-3	MW-13	Total/NA	Water	7470A	355528
400-138410-4	MW-14	Total/NA	Water	7470A	355528
400-138410-5	MW-15	Total/NA	Water	7470A	355528
400-138410-6	MW-16	Total/NA	Water	7470A	355528
400-138410-7	MW-17	Total/NA	Water	7470A	355528
400-138410-8	MW-18	Total/NA	Water	7470A	355528
400-138410-9	MW-19	Total/NA	Water	7470A	355528
400-138410-10	DUP-03	Total/NA	Water	7470A	355528
400-138410-11	EB-02	Total/NA	Water	7470A	355528
400-138410-12	FB-02	Total/NA	Water	7470A	355528
MB 400-355528/14-A	Method Blank	Total/NA	Water	7470A	355528
LCS 400-355528/15-A	Lab Control Sample	Total/NA	Water	7470A	355528
400-138410-1 MS	MW-11	Total/NA	Water	7470A	355528
400-138410-1 MSD	MW-11	Total/NA	Water	7470A	355528

Prep Batch: 355936

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138410-1 - RA	MW-11	Total Recoverable	Water	3005A	
400-138410-1	MW-11	Total Recoverable	Water	3005A	
400-138410-2	MW-12	Total Recoverable	Water	3005A	
400-138410-2 - RA	MW-12	Total Recoverable	Water	3005A	
400-138410-3 - RA	MW-13	Total Recoverable	Water	3005A	
400-138410-3	MW-13	Total Recoverable	Water	3005A	
400-138410-4	MW-14	Total Recoverable	Water	3005A	
400-138410-5 - RA	MW-15	Total Recoverable	Water	3005A	
400-138410-5	MW-15	Total Recoverable	Water	3005A	
400-138410-6	MW-16	Total Recoverable	Water	3005A	
400-138410-7	MW-17	Total Recoverable	Water	3005A	
400-138410-8	MW-18	Total Recoverable	Water	3005A	
400-138410-9	MW-19	Total Recoverable	Water	3005A	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Metals (Continued)

Prep Batch: 355936 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138410-10	DUP-03	Total Recoverable	Water	3005A	
400-138410-11	EB-02	Total Recoverable	Water	3005A	
400-138410-12	FB-02	Total Recoverable	Water	3005A	
MB 400-355936/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-355936/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-138410-2 MS	MW-12	Total Recoverable	Water	3005A	
400-138410-2 MSD	MW-12	Total Recoverable	Water	3005A	

Analysis Batch: 357227

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138410-1	MW-11	Total Recoverable	Water	6020	355936
400-138410-1 - RA	MW-11	Total Recoverable	Water	6020	355936
400-138410-2	MW-12	Total Recoverable	Water	6020	355936
400-138410-3	MW-13	Total Recoverable	Water	6020	355936
400-138410-4	MW-14	Total Recoverable	Water	6020	355936
400-138410-5	MW-15	Total Recoverable	Water	6020	355936
400-138410-6	MW-16	Total Recoverable	Water	6020	355936
400-138410-7	MW-17	Total Recoverable	Water	6020	355936
400-138410-8	MW-18	Total Recoverable	Water	6020	355936
400-138410-9	MW-19	Total Recoverable	Water	6020	355936
400-138410-10	DUP-03	Total Recoverable	Water	6020	355936
400-138410-11	EB-02	Total Recoverable	Water	6020	355936
400-138410-12	FB-02	Total Recoverable	Water	6020	355936
MB 400-355936/1-A ^5	Method Blank	Total Recoverable	Water	6020	355936
LCS 400-355936/2-A	Lab Control Sample	Total Recoverable	Water	6020	355936
400-138410-2 MS	MW-12	Total Recoverable	Water	6020	355936
400-138410-2 MSD	MW-12	Total Recoverable	Water	6020	355936

Analysis Batch: 357532

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138410-2 - RA	MW-12	Total Recoverable	Water	6020	355936
400-138410-3 - RA	MW-13	Total Recoverable	Water	6020	355936
400-138410-5 - RA	MW-15	Total Recoverable	Water	6020	355936

General Chemistry

Analysis Batch: 355170

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138410-2	MW-12	Total/NA	Water	SM 2540C	
400-138410-3	MW-13	Total/NA	Water	SM 2540C	
400-138410-5	MW-15	Total/NA	Water	SM 2540C	
400-138410-6	MW-16	Total/NA	Water	SM 2540C	
400-138410-9	MW-19	Total/NA	Water	SM 2540C	
MB 400-355170/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-355170/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-138410-2 DU	MW-12	Total/NA	Water	SM 2540C	

Analysis Batch: 355171

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138410-1	MW-11	Total/NA	Water	SM 2540C	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

General Chemistry (Continued)

Analysis Batch: 355171 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138410-4	MW-14	Total/NA	Water	SM 2540C	
400-138410-7	MW-17	Total/NA	Water	SM 2540C	
400-138410-8	MW-18	Total/NA	Water	SM 2540C	
400-138410-10	DUP-03	Total/NA	Water	SM 2540C	
400-138410-11	EB-02	Total/NA	Water	SM 2540C	
400-138410-12	FB-02	Total/NA	Water	SM 2540C	
MB 400-355171/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-355171/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-138410-1 DU	MW-11	Total/NA	Water	SM 2540C	

Analysis Batch: 355366

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138410-2	MW-12	Total/NA	Water	SM 4500 Cl- E	
400-138410-3	MW-13	Total/NA	Water	SM 4500 Cl- E	
400-138410-5	MW-15	Total/NA	Water	SM 4500 Cl- E	
400-138410-6	MW-16	Total/NA	Water	SM 4500 Cl- E	
400-138410-7	MW-17	Total/NA	Water	SM 4500 Cl- E	
400-138410-8	MW-18	Total/NA	Water	SM 4500 Cl- E	
400-138410-9	MW-19	Total/NA	Water	SM 4500 Cl- E	
400-138410-10	DUP-03	Total/NA	Water	SM 4500 Cl- E	
400-138410-11	EB-02	Total/NA	Water	SM 4500 Cl- E	
MB 400-355366/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-355366/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-355366/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-138410-5 MS	MW-15	Total/NA	Water	SM 4500 Cl- E	
400-138410-5 MSD	MW-15	Total/NA	Water	SM 4500 Cl- E	
400-138410-7 MS	MW-17	Total/NA	Water	SM 4500 Cl- E	
400-138410-7 MSD	MW-17	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 355367

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138410-1	MW-11	Total/NA	Water	SM 4500 Cl- E	
400-138410-4	MW-14	Total/NA	Water	SM 4500 Cl- E	
400-138410-12	FB-02	Total/NA	Water	SM 4500 Cl- E	
MB 400-355367/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-355367/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-355367/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-138410-1 MS	MW-11	Total/NA	Water	SM 4500 Cl- E	
400-138410-1 MSD	MW-11	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 355476

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138410-2	MW-12	Total/NA	Water	SM 4500 SO4 E	
400-138410-3	MW-13	Total/NA	Water	SM 4500 SO4 E	
400-138410-5	MW-15	Total/NA	Water	SM 4500 SO4 E	
400-138410-6	MW-16	Total/NA	Water	SM 4500 SO4 E	
400-138410-9	MW-19	Total/NA	Water	SM 4500 SO4 E	
MB 400-355476/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-355476/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-355476/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-138410-2 MS	MW-12	Total/NA	Water	SM 4500 SO4 E	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

General Chemistry (Continued)

Analysis Batch: 355476 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138410-2 MSD	MW-12	Total/NA	Water	SM 4500 SO4 E	
400-138410-9 MS	MW-19	Total/NA	Water	SM 4500 SO4 E	
400-138410-9 MSD	MW-19	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 355483

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138410-4	MW-14	Total/NA	Water	SM 4500 SO4 E	
MB 400-355483/15	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-355483/16	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-355483/12	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-138310-A-8 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-138310-A-8 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 355598

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138410-1	MW-11	Total/NA	Water	SM 4500 SO4 E	
400-138410-7	MW-17	Total/NA	Water	SM 4500 SO4 E	
400-138410-8	MW-18	Total/NA	Water	SM 4500 SO4 E	
400-138410-10	DUP-03	Total/NA	Water	SM 4500 SO4 E	
400-138410-11	EB-02	Total/NA	Water	SM 4500 SO4 E	
400-138410-12	FB-02	Total/NA	Water	SM 4500 SO4 E	
MB 400-355598/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-355598/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-355598/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-138410-1 MS	MW-11	Total/NA	Water	SM 4500 SO4 E	
400-138410-1 MSD	MW-11	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 356077

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138410-5	MW-15	Total/NA	Water	SM 4500 F C	
400-138410-6	MW-16	Total/NA	Water	SM 4500 F C	
400-138410-7	MW-17	Total/NA	Water	SM 4500 F C	
400-138410-8	MW-18	Total/NA	Water	SM 4500 F C	
400-138410-9	MW-19	Total/NA	Water	SM 4500 F C	
400-138410-10	DUP-03	Total/NA	Water	SM 4500 F C	
400-138410-11	EB-02	Total/NA	Water	SM 4500 F C	
400-138410-12	FB-02	Total/NA	Water	SM 4500 F C	
MB 400-356077/5	Method Blank	Total/NA	Water	SM 4500 F C	
MB 400-356077/7	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-356077/6	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-138410-5 MS	MW-15	Total/NA	Water	SM 4500 F C	
400-138410-5 MSD	MW-15	Total/NA	Water	SM 4500 F C	
400-138427-A-1 DU	Duplicate	Total/NA	Water	SM 4500 F C	

Analysis Batch: 356099

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138410-1	MW-11	Total/NA	Water	SM 4500 F C	
400-138410-2	MW-12	Total/NA	Water	SM 4500 F C	
400-138410-3	MW-13	Total/NA	Water	SM 4500 F C	
400-138410-4	MW-14	Total/NA	Water	SM 4500 F C	
MB 400-356099/3	Method Blank	Total/NA	Water	SM 4500 F C	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

General Chemistry (Continued)

Analysis Batch: 356099 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
LCS 400-356099/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-138681-A-2 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-138681-A-2 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-138407-A-6 DU	Duplicate	Total/NA	Water	SM 4500 F C	

Field Service / Mobile Lab

Analysis Batch: 358332

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138410-1	MW-11	Total/NA	Water	Field Sampling	
400-138410-2	MW-12	Total/NA	Water	Field Sampling	
400-138410-3	MW-13	Total/NA	Water	Field Sampling	
400-138410-4	MW-14	Total/NA	Water	Field Sampling	
400-138410-5	MW-15	Total/NA	Water	Field Sampling	
400-138410-6	MW-16	Total/NA	Water	Field Sampling	
400-138410-7	MW-17	Total/NA	Water	Field Sampling	
400-138410-8	MW-18	Total/NA	Water	Field Sampling	
400-138410-9	MW-19	Total/NA	Water	Field Sampling	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-355936/1-A ^5
Matrix: Water
Analysis Batch: 357227

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 355936

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		06/05/17 15:12	06/15/17 13:09	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		06/05/17 15:12	06/15/17 13:09	5
Barium	<0.00049		0.0025	0.00049	mg/L		06/05/17 15:12	06/15/17 13:09	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 13:09	5
Boron	<0.021		0.050	0.021	mg/L		06/05/17 15:12	06/15/17 13:09	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		06/05/17 15:12	06/15/17 13:09	5
Calcium	<0.13		0.25	0.13	mg/L		06/05/17 15:12	06/15/17 13:09	5
Chromium	<0.0011		0.0025	0.0011	mg/L		06/05/17 15:12	06/15/17 13:09	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		06/05/17 15:12	06/15/17 13:09	5
Lead	<0.00035		0.0013	0.00035	mg/L		06/05/17 15:12	06/15/17 13:09	5
Lithium	<0.0032		0.0050	0.0032	mg/L		06/05/17 15:12	06/15/17 13:09	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		06/05/17 15:12	06/15/17 13:09	5
Selenium	<0.00024		0.0013	0.00024	mg/L		06/05/17 15:12	06/15/17 13:09	5
Thallium	<0.000085		0.00050	0.000085	mg/L		06/05/17 15:12	06/15/17 13:09	5

Lab Sample ID: LCS 400-355936/2-A
Matrix: Water
Analysis Batch: 357227

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 355936

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0579		mg/L		116	80 - 120
Arsenic	0.0500	0.0522		mg/L		104	80 - 120
Barium	0.0500	0.0543		mg/L		109	80 - 120
Beryllium	0.0500	0.0523		mg/L		105	80 - 120
Boron	0.100	0.101		mg/L		101	80 - 120
Cadmium	0.0500	0.0513		mg/L		103	80 - 120
Calcium	5.00	5.10		mg/L		102	80 - 120
Chromium	0.0500	0.0525		mg/L		105	80 - 120
Cobalt	0.0500	0.0521		mg/L		104	80 - 120
Lead	0.0500	0.0513		mg/L		103	80 - 120
Lithium	0.0500	0.0525		mg/L		105	80 - 120
Molybdenum	0.100	0.101		mg/L		101	80 - 120
Selenium	0.0500	0.0519		mg/L		104	80 - 120
Thallium	0.0100	0.0102		mg/L		102	80 - 120

Lab Sample ID: 400-138410-2 MS
Matrix: Water
Analysis Batch: 357227

Client Sample ID: MW-12
Prep Type: Total Recoverable
Prep Batch: 355936

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0010		0.0500	0.0596		mg/L		119	75 - 125
Arsenic	<0.00046		0.0500	0.0539		mg/L		108	75 - 125
Barium	0.16		0.0500	0.217		mg/L		109	75 - 125
Beryllium	0.00054	J	0.0500	0.0527		mg/L		104	75 - 125
Boron	0.031	J	0.100	0.136		mg/L		105	75 - 125
Cadmium	<0.00034		0.0500	0.0494		mg/L		99	75 - 125
Calcium	<0.13		5.00	5.24		mg/L		105	75 - 125
Chromium	<0.0011		0.0500	0.0537		mg/L		107	75 - 125

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 400-138410-2 MS
Matrix: Water
Analysis Batch: 357227

Client Sample ID: MW-12
Prep Type: Total Recoverable
Prep Batch: 355936

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	0.0031		0.0500	0.0564		mg/L		107	75 - 125
Lead	0.00036	J	0.0500	0.0554		mg/L		110	75 - 125
Lithium	0.0032	J	0.0500	0.0525		mg/L		105	75 - 125
Molybdenum	0.0010	J	0.100	0.105		mg/L		104	75 - 125
Selenium	0.00056	J ^	0.0500	0.0539		mg/L		107	75 - 125
Thallium	<0.000085		0.0100	0.0105		mg/L		105	75 - 125

Lab Sample ID: 400-138410-2 MSD
Matrix: Water
Analysis Batch: 357227

Client Sample ID: MW-12
Prep Type: Total Recoverable
Prep Batch: 355936

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Antimony	<0.0010		0.0500	0.0593		mg/L		119	75 - 125	0	20
Arsenic	<0.00046		0.0500	0.0540		mg/L		108	75 - 125	0	20
Barium	0.16		0.0500	0.220		mg/L		115	75 - 125	1	20
Beryllium	0.00054	J	0.0500	0.0521		mg/L		103	75 - 125	1	20
Boron	0.031	J	0.100	0.132		mg/L		101	75 - 125	3	20
Cadmium	<0.00034		0.0500	0.0518		mg/L		104	75 - 125	5	20
Calcium	<0.13		5.00	5.39		mg/L		108	75 - 125	3	20
Chromium	<0.0011		0.0500	0.0541		mg/L		108	75 - 125	1	20
Cobalt	0.0031		0.0500	0.0568		mg/L		107	75 - 125	1	20
Lead	0.00036	J	0.0500	0.0541		mg/L		108	75 - 125	2	20
Lithium	0.0032	J	0.0500	0.0521		mg/L		104	75 - 125	1	20
Molybdenum	0.0010	J	0.100	0.103		mg/L		102	75 - 125	2	20
Selenium	0.00056	J ^	0.0500	0.0526		mg/L		104	75 - 125	3	20
Thallium	<0.000085		0.0100	0.0103		mg/L		103	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-355528/14-A
Matrix: Water
Analysis Batch: 355918

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 355528

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/03/17 12:23	06/05/17 11:58	1

Lab Sample ID: LCS 400-355528/15-A
Matrix: Water
Analysis Batch: 355918

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 355528

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00101	0.000957		mg/L		95	80 - 120

Lab Sample ID: 400-138410-1 MS
Matrix: Water
Analysis Batch: 355918

Client Sample ID: MW-11
Prep Type: Total/NA
Prep Batch: 355528

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.000070		0.00201	0.00194		mg/L		96	80 - 120

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Lab Sample ID: 400-138410-1 MSD
Matrix: Water
Analysis Batch: 355918

Client Sample ID: MW-11
Prep Type: Total/NA
Prep Batch: 355528

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.000070		0.00201	0.00190		mg/L		94	80 - 120	2	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 400-355170/1
Matrix: Water
Analysis Batch: 355170

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			05/27/17 13:54	1

Lab Sample ID: LCS 400-355170/2
Matrix: Water
Analysis Batch: 355170

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	248		mg/L		85	78 - 122

Lab Sample ID: 400-138410-2 DU
Matrix: Water
Analysis Batch: 355170

Client Sample ID: MW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	6.0		6.00		mg/L		0	5

Lab Sample ID: MB 400-355171/1
Matrix: Water
Analysis Batch: 355171

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			05/27/17 14:35	1

Lab Sample ID: LCS 400-355171/2
Matrix: Water
Analysis Batch: 355171

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	276		mg/L		94	78 - 122

Lab Sample ID: 400-138410-1 DU
Matrix: Water
Analysis Batch: 355171

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	48		48.0		mg/L		0	5

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-355366/6
Matrix: Water
Analysis Batch: 355366

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	-		05/30/17 11:52	1

Lab Sample ID: LCS 400-355366/7
Matrix: Water
Analysis Batch: 355366

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	31.7		mg/L	-	106	90 - 110

Lab Sample ID: MRL 400-355366/3
Matrix: Water
Analysis Batch: 355366

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	2.16		mg/L	-	108	50 - 150

Lab Sample ID: 400-138410-5 MS
Matrix: Water
Analysis Batch: 355366

Client Sample ID: MW-15
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	20.1		mg/L	-	108	73 - 120

Lab Sample ID: 400-138410-5 MSD
Matrix: Water
Analysis Batch: 355366

Client Sample ID: MW-15
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	9.3		10.0	20.1		mg/L	-	109	73 - 120	0	8

Lab Sample ID: 400-138410-7 MS
Matrix: Water
Analysis Batch: 355366

Client Sample ID: MW-17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	7.4		10.0	18.7		mg/L	-	113	73 - 120

Lab Sample ID: 400-138410-7 MSD
Matrix: Water
Analysis Batch: 355366

Client Sample ID: MW-17
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	7.4		10.0	18.7		mg/L	-	113	73 - 120	0	8

Lab Sample ID: MB 400-355367/6
Matrix: Water
Analysis Batch: 355367

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	-		05/30/17 10:13	1

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Lab Sample ID: LCS 400-355367/7
Matrix: Water
Analysis Batch: 355367

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	31.3		mg/L		104	90 - 110

Lab Sample ID: MRL 400-355367/3
Matrix: Water
Analysis Batch: 355367

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	2.16		mg/L		108	50 - 150

Lab Sample ID: 400-138410-1 MS
Matrix: Water
Analysis Batch: 355367

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	14		10.0	24.3		mg/L		104	73 - 120

Lab Sample ID: 400-138410-1 MSD
Matrix: Water
Analysis Batch: 355367

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	14		10.0	24.2		mg/L		104	73 - 120	0	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-356077/5
Matrix: Water
Analysis Batch: 356077

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			06/06/17 13:54	1

Lab Sample ID: MB 400-356077/7
Matrix: Water
Analysis Batch: 356077

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			06/06/17 14:00	1

Lab Sample ID: LCS 400-356077/6
Matrix: Water
Analysis Batch: 356077

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	3.72		mg/L		93	90 - 110

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: 400-138410-5 MS
Matrix: Water
Analysis Batch: 356077

Client Sample ID: MW-15
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	0.900		mg/L		90	75 - 125

Lab Sample ID: 400-138410-5 MSD
Matrix: Water
Analysis Batch: 356077

Client Sample ID: MW-15
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	0.930		mg/L		93	75 - 125	3	4

Lab Sample ID: 400-138427-A-1 DU
Matrix: Water
Analysis Batch: 356077

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	0.0400	J F5	mg/L		22	4

Lab Sample ID: MB 400-356099/3
Matrix: Water
Analysis Batch: 356099

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			06/06/17 15:59	1

Lab Sample ID: LCS 400-356099/4
Matrix: Water
Analysis Batch: 356099

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	4.00	3.87		mg/L		97	90 - 110

Lab Sample ID: 400-138681-A-2 MS
Matrix: Water
Analysis Batch: 356099

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	0.900		mg/L		86	75 - 125

Lab Sample ID: 400-138681-A-2 MSD
Matrix: Water
Analysis Batch: 356099

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	0.900		mg/L		86	75 - 125	0	4

Lab Sample ID: 400-138407-A-6 DU
Matrix: Water
Analysis Batch: 356099

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

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-355476/6
Matrix: Water
Analysis Batch: 355476

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.4		5.0	1.4	mg/L			05/31/17 09:13	1

Lab Sample ID: LCS 400-355476/7
Matrix: Water
Analysis Batch: 355476

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	14.9		mg/L		99	90 - 110

Lab Sample ID: MRL 400-355476/3
Matrix: Water
Analysis Batch: 355476

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	4.33	J	mg/L		87	50 - 150

Lab Sample ID: 400-138410-2 MS
Matrix: Water
Analysis Batch: 355476

Client Sample ID: MW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	11		10.0	23.2		mg/L		120	77 - 128

Lab Sample ID: 400-138410-2 MSD
Matrix: Water
Analysis Batch: 355476

Client Sample ID: MW-12
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Sulfate	11		10.0	22.7		mg/L		115	77 - 128	2	5

Lab Sample ID: 400-138410-9 MS
Matrix: Water
Analysis Batch: 355476

Client Sample ID: MW-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	<1.4		10.0	12.7		mg/L		127	77 - 128

Lab Sample ID: 400-138410-9 MSD
Matrix: Water
Analysis Batch: 355476

Client Sample ID: MW-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Sulfate	<1.4		10.0	12.2		mg/L		122	77 - 128	4	5

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
SDG: NAMU

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: MB 400-355483/15
Matrix: Water
Analysis Batch: 355483

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.4		5.0	1.4	mg/L			05/31/17 07:52	1

Lab Sample ID: LCS 400-355483/16
Matrix: Water
Analysis Batch: 355483

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	14.9		mg/L		99	90 - 110

Lab Sample ID: MRL 400-355483/12
Matrix: Water
Analysis Batch: 355483

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	4.55	J	mg/L		91	50 - 150

Lab Sample ID: 400-138310-A-8 MS
Matrix: Water
Analysis Batch: 355483

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	<1.4		10.0	10.8		mg/L		108	77 - 128

Lab Sample ID: 400-138310-A-8 MSD
Matrix: Water
Analysis Batch: 355483

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Sulfate	<1.4		10.0	10.7		mg/L		107	77 - 128	1	5

Lab Sample ID: MB 400-355598/6
Matrix: Water
Analysis Batch: 355598

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.4		5.0	1.4	mg/L			06/01/17 12:35	1

Lab Sample ID: LCS 400-355598/7
Matrix: Water
Analysis Batch: 355598

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	14.8		mg/L		98	90 - 110

Lab Sample ID: MRL 400-355598/3
Matrix: Water
Analysis Batch: 355598

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	4.52	J	mg/L		90	50 - 150

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
 SDG: NAMU

Lab Sample ID: 400-138410-1 MS
Matrix: Water
Analysis Batch: 355598

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	2.0	J	10.0	13.4		mg/L		114	77 - 128

Lab Sample ID: 400-138410-1 MSD
Matrix: Water
Analysis Batch: 355598

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	2.0	J	10.0	13.3		mg/L		113	77 - 128	1	5

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Chain of Custody Record

Client Information Client Contact: Mr. Cale Sellers Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: 205-992-7762(Tel) Email: CSSELLER@SOUTHERNCO.COM Project Name: CCR -Plant Daniel Site: Mississippi NAMU		Lab PM: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com Carrier Tracking No(s): Lab # 400-138410																																																													
Due Date Requested: TAT Requested (days): PO #: SCS10347656 WO #:		Analysis Requested 9315 Ra226, 9320 Ra228 SM4500 Cl E, SM4500 SO4 E 6020, 7470A 2540C - Total Dissolved Solids 4500 F, C - Fluoride																																																													
Preservation Codes: A - HCl B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:		Preservation Codes: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecalhydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)																																																													
Special Instructions/Note: Total Number of Containers:																																																															
Sample Identification <table border="1"> <thead> <tr> <th>Sample ID</th> <th>Sample Date</th> <th>Sample Time</th> <th>Sample Type (C=Comp, G=grab)</th> <th>Matrix (W=water, S=solid, O=wastewater, BT=leachate, AA=air)</th> </tr> </thead> <tbody> <tr><td>MW-11</td><td>5/21/17</td><td>1035</td><td>G</td><td>Water</td></tr> <tr><td>MW-12</td><td>5/23/17</td><td>1446</td><td></td><td>Water</td></tr> <tr><td>MW-13</td><td>5/23/17</td><td>1416</td><td></td><td>Water</td></tr> <tr><td>MW-14</td><td>5/24/17</td><td>1222</td><td></td><td>Water</td></tr> <tr><td>MW-15</td><td>5/23/17</td><td>1141</td><td></td><td>Water</td></tr> <tr><td>MW-16</td><td>5/23/17</td><td>1223</td><td></td><td>Water</td></tr> <tr><td>MW-17</td><td>5/24/17</td><td>0701</td><td></td><td>Water</td></tr> <tr><td>MW-18</td><td>5/24/17</td><td>0847</td><td></td><td>Water</td></tr> <tr><td>MW-19</td><td>5/23/17</td><td>1549</td><td></td><td>Water</td></tr> <tr><td>DUP -03</td><td>5/24/17</td><td>0747</td><td></td><td>W</td></tr> <tr><td>EB-02</td><td>5/24/17</td><td>1230</td><td>G</td><td>W</td></tr> </tbody> </table>				Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=leachate, AA=air)	MW-11	5/21/17	1035	G	Water	MW-12	5/23/17	1446		Water	MW-13	5/23/17	1416		Water	MW-14	5/24/17	1222		Water	MW-15	5/23/17	1141		Water	MW-16	5/23/17	1223		Water	MW-17	5/24/17	0701		Water	MW-18	5/24/17	0847		Water	MW-19	5/23/17	1549		Water	DUP -03	5/24/17	0747		W	EB-02	5/24/17	1230	G	W
Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=leachate, AA=air)																																																											
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EB-02	5/24/17	1230	G	W																																																											
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological																																																															
Deliverable Requested: I, II, III, IV, Other (specify)																																																															
Empty Kit Relinquished by:																																																															
Relinquished by: <i>[Signature]</i> Relinquished by: <i>[Signature]</i> Relinquished by:		Date: 5-25-17 1010 Date: 5-25-17 1010 Date:																																																													
Custody Seals Intact: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks: 0.0, 0.4, 0.6, 0.0, 0.6, 1.2																																																													



Chain of Custody Record

Client Information Client Contact: Mr. Cale Sellers Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: 205-992-7762(Tel) Email: CBSELLER@SOUTHERNCO.COM Project Name: CCR -Plant Daniel Site: NAMU		Lab PM: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com		Carrier Tracking No(s): COC No: 400-55446-23825.2 Page: 2-2 Job #: 400-138410	
Due Date Requested: TAT Requested (days): PO #: Purchase Order not required WO #: Project #: 40006621 SSO#: 512417			Analysis Requested		
Sample Identification FB-02			Field Filtered Sample (Yes or No)		
Sample Date 5/24/17			Field Sampling Parameters Perform MS/MSD (Yes or No)		
Sample Time 0920			Mercury 6020 - Sb,As,Ba,Bi,Be,Ca,Cd,Cr,Cu,Pb,Li,Mn,Se,Tl,7470A 6020 - Total Dissolved Solids, 4500 F C - Fluoride 6020 - M4500 Cl E - Chloride, M4500 SO4 E - Sulfate, 2540C		
Sample Type (C=Comp, G=grab) G			Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=air) Water		
Preservation Code G			Special Instructions (Note): Total Number of containers		
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)					
Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months					
Special Instructions/QC Requirements:					
Empty Kit Relinquished by:		Date:		Method of Shipment:	
Relinquished by: <i>ph</i>		Date/Time: 5-25-17 1010		Company:	
Relinquished by:		Date/Time:		Company:	
Relinquished by:		Date/Time:		Company:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No			Custody Seal No.:		



0.05, 0.4, 0.6, 0.8, 1.2, 1.8

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-138410-1

SDG Number: NAMU

Login Number: 138410

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	0.0°C, 0.4°C, 0.6°C, 0.0°C, 0.6°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-1
 SDG: NAMU

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-18
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-18
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	06-30-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-18
Washington	State Program	10	C915	05-15-18
West Virginia DEP	State Program	3	136	06-30-17



TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-138410-2

TestAmerica Sample Delivery Group: NAMU

Client Project/Site: CCR -Plant Daniel

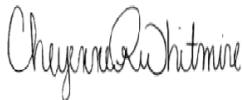
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:

6/29/2017 10:28:03 AM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

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

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

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

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Case Narrative

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
SDG: NAMU

Job ID: 400-138410-2

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-138410-2

RAD

Method(s) PrecSep_0: Radium 228 Prep Batch 160-311851. Insufficient sample volume was available to perform a sample duplicate (DU). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision. MW-11 (400-138410-1), MW-12 (400-138410-2), MW-13 (400-138410-3), MW-14 (400-138410-4), MW-15 (400-138410-5), MW-16 (400-138410-6), MW-17 (400-138410-7), MW-18 (400-138410-8), MW-19 (400-138410-9), DUP-03 (400-138410-10), EB-02 (400-138410-11) and FB-02 (400-138410-12)

Method(s) PrecSep-21: Radium 226 Prep Batch 160-311849. Insufficient sample volume was available to perform a sample duplicate (DU). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision. MW-11 (400-138410-1), MW-12 (400-138410-2), MW-13 (400-138410-3), MW-14 (400-138410-4), MW-15 (400-138410-5), MW-16 (400-138410-6), MW-17 (400-138410-7), MW-18 (400-138410-8), MW-19 (400-138410-9), DUP-03 (400-138410-10), EB-02 (400-138410-11) and FB-02 (400-138410-12)



Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
SDG: NAMU

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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
SDG: NAMU

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-138410-1	MW-11	Water	05/24/17 10:35	05/25/17 10:10
400-138410-2	MW-12	Water	05/23/17 14:46	05/25/17 10:10
400-138410-3	MW-13	Water	05/23/17 14:16	05/25/17 10:10
400-138410-4	MW-14	Water	05/24/17 12:22	05/25/17 10:10
400-138410-5	MW-15	Water	05/23/17 11:41	05/25/17 10:10
400-138410-6	MW-16	Water	05/23/17 12:23	05/25/17 10:10
400-138410-7	MW-17	Water	05/24/17 07:01	05/25/17 10:10
400-138410-8	MW-18	Water	05/24/17 08:47	05/25/17 10:10
400-138410-9	MW-19	Water	05/23/17 15:49	05/25/17 10:10
400-138410-10	DUP-03	Water	05/24/17 07:47	05/25/17 10:10
400-138410-11	EB-02	Water	05/24/17 12:30	05/25/17 10:10
400-138410-12	FB-02	Water	05/24/17 09:20	05/25/17 10:10

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
SDG: NAMU

Client Sample ID: MW-11
Date Collected: 05/24/17 10:35
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-1
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	0.171		0.0785	0.0799	1.00	0.0900	pCi/L	06/05/17 07:49	06/28/17 06:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					06/05/17 07:49	06/28/17 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	0.270	U	0.233	0.234	1.00	0.373	pCi/L	06/05/17 08:18	06/16/17 14:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					06/05/17 08:18	06/16/17 14:23	1
Y Carrier	88.6		40 - 110					06/05/17 08:18	06/16/17 14:23	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	0.440		0.245	0.247	5.00	0.373	pCi/L		06/28/17 13:00	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
SDG: NAMU

Client Sample ID: MW-12
Date Collected: 05/23/17 14:46
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-2
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	0.558		0.122	0.132	1.00	0.0656	pCi/L	06/05/17 07:49	06/28/17 06:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					06/05/17 07:49	06/28/17 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	1.09		0.297	0.313	1.00	0.383	pCi/L	06/05/17 08:18	06/16/17 14:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.7		40 - 110					06/05/17 08:18	06/16/17 14:23	1
Y Carrier	90.5		40 - 110					06/05/17 08:18	06/16/17 14:23	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.64		0.321	0.340	5.00	0.383	pCi/L		06/28/17 13:00	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
SDG: NAMU

Client Sample ID: MW-13
Date Collected: 05/23/17 14:16
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-3
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	0.208		0.0745	0.0768	1.00	0.0588	pCi/L	06/05/17 07:49	06/28/17 06:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	106		40 - 110					06/05/17 07:49	06/28/17 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	0.257	U	0.187	0.189	1.00	0.292	pCi/L	06/05/17 08:18	06/16/17 14:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	106		40 - 110					06/05/17 08:18	06/16/17 14:23	1
Y Carrier	95.3		40 - 110					06/05/17 08:18	06/16/17 14:23	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	0.465		0.202	0.204	5.00	0.292	pCi/L		06/28/17 13:00	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
SDG: NAMU

Client Sample ID: MW-14
Date Collected: 05/24/17 12:22
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-4
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	0.418		0.105	0.111	1.00	0.0567	pCi/L	06/05/17 07:49	06/28/17 06:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					06/05/17 07:49	06/28/17 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	0.412		0.218	0.221	1.00	0.322	pCi/L	06/05/17 08:18	06/16/17 14:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					06/05/17 08:18	06/16/17 14:23	1
Y Carrier	91.2		40 - 110					06/05/17 08:18	06/16/17 14:23	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	0.830		0.241	0.247	5.00	0.322	pCi/L		06/28/17 13:00	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
SDG: NAMU

Client Sample ID: MW-15
Date Collected: 05/23/17 11:41
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-5
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	0.318		0.0917	0.0961	1.00	0.0553	pCi/L	06/05/17 07:49	06/28/17 06:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					06/05/17 07:49	06/28/17 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	0.132	U	0.168	0.169	1.00	0.279	pCi/L	06/05/17 08:18	06/16/17 14:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					06/05/17 08:18	06/16/17 14:23	1
Y Carrier	95.7		40 - 110					06/05/17 08:18	06/16/17 14:23	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	0.451		0.191	0.194	5.00	0.279	pCi/L		06/28/17 13:00	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
SDG: NAMU

Client Sample ID: MW-16
Date Collected: 05/23/17 12:23
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-6
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	0.153		0.0654	0.0668	1.00	0.0597	pCi/L	06/05/17 07:49	06/28/17 06:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	106		40 - 110					06/05/17 07:49	06/28/17 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	0.0511	U	0.182	0.182	1.00	0.318	pCi/L	06/05/17 08:18	06/16/17 14:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	106		40 - 110					06/05/17 08:18	06/16/17 14:23	1
Y Carrier	93.8		40 - 110					06/05/17 08:18	06/16/17 14:23	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	0.204	U	0.194	0.194	5.00	0.318	pCi/L		06/28/17 13:00	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
SDG: NAMU

Client Sample ID: MW-17
Date Collected: 05/24/17 07:01
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-7
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	0.238		0.0865	0.0891	1.00	0.0630	pCi/L	06/05/17 07:49	06/28/17 06:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					06/05/17 07:49	06/28/17 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	0.252	U	0.214	0.215	1.00	0.342	pCi/L	06/05/17 08:18	06/16/17 14:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	104		40 - 110					06/05/17 08:18	06/16/17 14:23	1
Y Carrier	93.1		40 - 110					06/05/17 08:18	06/16/17 14:23	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	0.490		0.231	0.233	5.00	0.342	pCi/L		06/28/17 13:00	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
SDG: NAMU

Client Sample ID: MW-18
Date Collected: 05/24/17 08:47
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-8
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	0.404		0.111	0.117	1.00	0.0615	pCi/L	06/05/17 07:49	06/28/17 06:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					06/05/17 07:49	06/28/17 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	0.284	U	0.197	0.199	1.00	0.305	pCi/L	06/05/17 08:18	06/16/17 14:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	103		40 - 110					06/05/17 08:18	06/16/17 14:23	1
Y Carrier	90.5		40 - 110					06/05/17 08:18	06/16/17 14:23	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	0.688		0.227	0.231	5.00	0.305	pCi/L		06/28/17 13:00	1

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
 SDG: NAMU

Client Sample ID: MW-19
Date Collected: 05/23/17 15:49
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-9
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	0.142		0.0663	0.0675	1.00	0.0537	pCi/L	06/05/17 07:49	06/28/17 06:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					06/05/17 07:49	06/28/17 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	0.389		0.204	0.207	1.00	0.301	pCi/L	06/05/17 08:18	06/16/17 14:23	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	102		40 - 110					06/05/17 08:18	06/16/17 14:23	1
Y Carrier	95.3		40 - 110					06/05/17 08:18	06/16/17 14:23	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	0.531		0.214	0.218	5.00	0.301	pCi/L		06/28/17 13:00	1

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
 SDG: NAMU

Client Sample ID: DUP-03

Lab Sample ID: 400-138410-10

Date Collected: 05/24/17 07:47

Matrix: Water

Date Received: 05/25/17 10:10

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.401		0.102	0.108	1.00	0.0502	pCi/L	06/05/17 07:49	06/28/17 06:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	107		40 - 110					06/05/17 07:49	06/28/17 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	0.275		0.178	0.179	1.00	0.268	pCi/L	06/05/17 08:18	06/16/17 14:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	107		40 - 110					06/05/17 08:18	06/16/17 14:24	1
Y Carrier	91.6		40 - 110					06/05/17 08:18	06/16/17 14:24	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	0.676		0.205	0.210	5.00	0.268	pCi/L		06/28/17 13:00	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
SDG: NAMU

Client Sample ID: EB-02
Date Collected: 05/24/17 12:30
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-11
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	0.0571	U	0.0506	0.0509	1.00	0.0731	pCi/L	06/05/17 07:49	06/28/17 06:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.4		40 - 110					06/05/17 07:49	06/28/17 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	0.0963	U	0.182	0.182	1.00	0.310	pCi/L	06/05/17 08:18	06/16/17 14:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	99.4		40 - 110					06/05/17 08:18	06/16/17 14:24	1
Y Carrier	93.5		40 - 110					06/05/17 08:18	06/16/17 14:24	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	0.153	U	0.189	0.189	5.00	0.310	pCi/L		06/28/17 13:00	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
SDG: NAMU

Client Sample ID: FB-02
Date Collected: 05/24/17 09:20
Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-12
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	0.0377	U	0.0419	0.0421	1.00	0.0654	pCi/L	06/05/17 07:49	06/28/17 06:41	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					06/05/17 07:49	06/28/17 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	0.142	U	0.205	0.206	1.00	0.344	pCi/L	06/05/17 08:18	06/16/17 14:24	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	100		40 - 110					06/05/17 08:18	06/16/17 14:24	1
Y Carrier	95.3		40 - 110					06/05/17 08:18	06/16/17 14:24	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	0.180	U	0.210	0.210	5.00	0.344	pCi/L		06/28/17 13:00	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
SDG: NAMU

Qualifiers

Rad

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

Glossary

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

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
SDG: NAMU

Client Sample ID: MW-11

Date Collected: 05/24/17 10:35

Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			311849	06/05/17 07:49	LDE	TAL SL
Total/NA	Analysis	9315		1	315638	06/28/17 06:40	RTM	TAL SL
Total/NA	Prep	PrecSep_0			311851	06/05/17 08:18	LDE	TAL SL
Total/NA	Analysis	9320		1	313774	06/16/17 14:23	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	315684	06/28/17 13:00	RTM	TAL SL

Client Sample ID: MW-12

Date Collected: 05/23/17 14:46

Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			311849	06/05/17 07:49	LDE	TAL SL
Total/NA	Analysis	9315		1	315638	06/28/17 06:40	RTM	TAL SL
Total/NA	Prep	PrecSep_0			311851	06/05/17 08:18	LDE	TAL SL
Total/NA	Analysis	9320		1	313774	06/16/17 14:23	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	315684	06/28/17 13:00	RTM	TAL SL

Client Sample ID: MW-13

Date Collected: 05/23/17 14:16

Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			311849	06/05/17 07:49	LDE	TAL SL
Total/NA	Analysis	9315		1	315638	06/28/17 06:40	RTM	TAL SL
Total/NA	Prep	PrecSep_0			311851	06/05/17 08:18	LDE	TAL SL
Total/NA	Analysis	9320		1	313774	06/16/17 14:23	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	315684	06/28/17 13:00	RTM	TAL SL

Client Sample ID: MW-14

Date Collected: 05/24/17 12:22

Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			311849	06/05/17 07:49	LDE	TAL SL
Total/NA	Analysis	9315		1	315638	06/28/17 06:40	RTM	TAL SL
Total/NA	Prep	PrecSep_0			311851	06/05/17 08:18	LDE	TAL SL
Total/NA	Analysis	9320		1	313774	06/16/17 14:23	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	315684	06/28/17 13:00	RTM	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
SDG: NAMU

Client Sample ID: MW-15

Date Collected: 05/23/17 11:41

Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			311849	06/05/17 07:49	LDE	TAL SL
Total/NA	Analysis	9315		1	315638	06/28/17 06:40	RTM	TAL SL
Total/NA	Prep	PrecSep_0			311851	06/05/17 08:18	LDE	TAL SL
Total/NA	Analysis	9320		1	313774	06/16/17 14:23	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	315684	06/28/17 13:00	RTM	TAL SL

Client Sample ID: MW-16

Date Collected: 05/23/17 12:23

Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			311849	06/05/17 07:49	LDE	TAL SL
Total/NA	Analysis	9315		1	315638	06/28/17 06:40	RTM	TAL SL
Total/NA	Prep	PrecSep_0			311851	06/05/17 08:18	LDE	TAL SL
Total/NA	Analysis	9320		1	313774	06/16/17 14:23	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	315684	06/28/17 13:00	RTM	TAL SL

Client Sample ID: MW-17

Date Collected: 05/24/17 07:01

Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			311849	06/05/17 07:49	LDE	TAL SL
Total/NA	Analysis	9315		1	315638	06/28/17 06:40	RTM	TAL SL
Total/NA	Prep	PrecSep_0			311851	06/05/17 08:18	LDE	TAL SL
Total/NA	Analysis	9320		1	313774	06/16/17 14:23	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	315684	06/28/17 13:00	RTM	TAL SL

Client Sample ID: MW-18

Date Collected: 05/24/17 08:47

Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-8

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			311849	06/05/17 07:49	LDE	TAL SL
Total/NA	Analysis	9315		1	315638	06/28/17 06:41	RTM	TAL SL
Total/NA	Prep	PrecSep_0			311851	06/05/17 08:18	LDE	TAL SL
Total/NA	Analysis	9320		1	313774	06/16/17 14:23	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	315684	06/28/17 13:00	RTM	TAL SL

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
SDG: NAMU

Client Sample ID: MW-19

Date Collected: 05/23/17 15:49

Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			311849	06/05/17 07:49	LDE	TAL SL
Total/NA	Analysis	9315		1	315638	06/28/17 06:41	RTM	TAL SL
Total/NA	Prep	PrecSep_0			311851	06/05/17 08:18	LDE	TAL SL
Total/NA	Analysis	9320		1	313774	06/16/17 14:23	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	315684	06/28/17 13:00	RTM	TAL SL

Client Sample ID: DUP-03

Date Collected: 05/24/17 07:47

Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-10

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			311849	06/05/17 07:49	LDE	TAL SL
Total/NA	Analysis	9315		1	315638	06/28/17 06:41	RTM	TAL SL
Total/NA	Prep	PrecSep_0			311851	06/05/17 08:18	LDE	TAL SL
Total/NA	Analysis	9320		1	313774	06/16/17 14:24	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	315684	06/28/17 13:00	RTM	TAL SL

Client Sample ID: EB-02

Date Collected: 05/24/17 12:30

Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-11

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			311849	06/05/17 07:49	LDE	TAL SL
Total/NA	Analysis	9315		1	315638	06/28/17 06:41	RTM	TAL SL
Total/NA	Prep	PrecSep_0			311851	06/05/17 08:18	LDE	TAL SL
Total/NA	Analysis	9320		1	313774	06/16/17 14:24	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	315684	06/28/17 13:00	RTM	TAL SL

Client Sample ID: FB-02

Date Collected: 05/24/17 09:20

Date Received: 05/25/17 10:10

Lab Sample ID: 400-138410-12

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			311849	06/05/17 07:49	LDE	TAL SL
Total/NA	Analysis	9315		1	315638	06/28/17 06:41	RTM	TAL SL
Total/NA	Prep	PrecSep_0			311851	06/05/17 08:18	LDE	TAL SL
Total/NA	Analysis	9320		1	313774	06/16/17 14:24	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	315684	06/28/17 13:00	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: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
 SDG: NAMU

Rad

Prep Batch: 311849

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138410-1	MW-11	Total/NA	Water	PrecSep-21	
400-138410-2	MW-12	Total/NA	Water	PrecSep-21	
400-138410-3	MW-13	Total/NA	Water	PrecSep-21	
400-138410-4	MW-14	Total/NA	Water	PrecSep-21	
400-138410-5	MW-15	Total/NA	Water	PrecSep-21	
400-138410-6	MW-16	Total/NA	Water	PrecSep-21	
400-138410-7	MW-17	Total/NA	Water	PrecSep-21	
400-138410-8	MW-18	Total/NA	Water	PrecSep-21	
400-138410-9	MW-19	Total/NA	Water	PrecSep-21	
400-138410-10	DUP-03	Total/NA	Water	PrecSep-21	
400-138410-11	EB-02	Total/NA	Water	PrecSep-21	
400-138410-12	FB-02	Total/NA	Water	PrecSep-21	
MB 160-311849/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-311849/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-311849/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 311851

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-138410-1	MW-11	Total/NA	Water	PrecSep_0	
400-138410-2	MW-12	Total/NA	Water	PrecSep_0	
400-138410-3	MW-13	Total/NA	Water	PrecSep_0	
400-138410-4	MW-14	Total/NA	Water	PrecSep_0	
400-138410-5	MW-15	Total/NA	Water	PrecSep_0	
400-138410-6	MW-16	Total/NA	Water	PrecSep_0	
400-138410-7	MW-17	Total/NA	Water	PrecSep_0	
400-138410-8	MW-18	Total/NA	Water	PrecSep_0	
400-138410-9	MW-19	Total/NA	Water	PrecSep_0	
400-138410-10	DUP-03	Total/NA	Water	PrecSep_0	
400-138410-11	EB-02	Total/NA	Water	PrecSep_0	
400-138410-12	FB-02	Total/NA	Water	PrecSep_0	
MB 160-311851/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-311851/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-311851/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
SDG: NAMU

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-311849/1-A
Matrix: Water
Analysis Batch: 315638

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311849

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	-0.04038	U	0.0376	0.0378	1.00	0.101	pCi/L	06/05/17 07:49	06/28/17 06:39	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					06/05/17 07:49	06/28/17 06:39	1

Lab Sample ID: LCS 160-311849/2-A
Matrix: Water
Analysis Batch: 315638

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311849

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	11.4	10.96		1.12	1.00	0.0651	pCi/L	96	68 - 137
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	97.3		40 - 110						

Lab Sample ID: LCSD 160-311849/3-A
Matrix: Water
Analysis Batch: 315638

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311849

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	11.4	9.937		1.03	1.00	0.0744	pCi/L	87	68 - 137	0.47	1
Carrier	LCSD %Yield	LCSD Qualifier	Limits								
Ba Carrier	97.9		40 - 110								

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-311851/1-A
Matrix: Water
Analysis Batch: 313774

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 311851

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.1367	U	0.219	0.219	1.00	0.369	pCi/L	06/05/17 08:18	06/16/17 14:22	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	94.1		40 - 110					06/05/17 08:18	06/16/17 14:22	1
Y Carrier	89.3		40 - 110					06/05/17 08:18	06/16/17 14:22	1

QC Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
 SDG: NAMU

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

Lab Sample ID: LCS 160-311851/2-A
Matrix: Water
Analysis Batch: 313774

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 311851

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	13.3	12.72		1.37	1.00	0.325	pCi/L	96	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	97.3		40 - 110
Y Carrier	97.6		40 - 110

Lab Sample ID: LCSD 160-311851/3-A
Matrix: Water
Analysis Batch: 313774

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 311851

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	13.3	13.45		1.44	1.00	0.356	pCi/L	101	56 - 140	0.26	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	97.9		40 - 110
Y Carrier	91.6		40 - 110

Chain of Custody Record

Client Information Client Contact: Mr. Cale Sellers Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: 205-992-7762(Tel) Email: CBSELLER@SOUTHERNCO.COM Project Name: CCR -Plant Daniel Site: Mississippi NAMU		Lab PM: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com Carrier Tracking No(s): Lab # 400-138410		
Due Date Requested: TAT Requested (days): PO #: SCS10347656 WO #: Project #: 40006621 SSON#:		Analysis Requested 9315_Ra226, 9320_Ra228 SM4500 Cl.E, SM4500_S04.F 6020_7470A 2540C - Total Dissolved Solids 4500_F_C - Fluoride		
Preservation Codes: A - HCl B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2O4S Q - Na2SO3 R - Na2S2O3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)		Special Instructions/Note: Total Number of Containers:		
Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wastewater, BT=Trace, AA=Air)
MW-11	5/21/17	1035	G	Water
MW-12	5/23/17	1446		Water
MW-13	5/23/17	1416		Water
MW-14	5/24/17	1222		Water
MW-15	5/23/17	1141		Water
MW-16	5/23/17	1223		Water
MW-17	5/24/17	0701		Water
MW-18	5/24/17	0847		Water
MW-19	5/23/17	1549		Water
DUP -03	5/24/17	0747		W
EB-02	5/24/17	1230	G	W
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological				
Deliverable Requested: I, II, III, IV, Other (specify)				
Empty Kit Relinquished by:				
Relinquished by: <i>[Signature]</i> Relinquished by:		Date: 5-25-17 1010 Date/Time:		
Relinquished by:		Date/Time:		
Relinquished by:		Date/Time:		
Custody Seals Intact: Δ Yes Δ No		Custody Seal No.:		
Cooler Temperature(s) °C and Other Remarks: 0.0, 0.4, 0.6, 0.0, 0.6, 1.2				



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

Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information Client Contact: Mr. Cale Sellers Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: 205-992-7762(Tel) Email: CBSELLER@SOUTHERNCO.COM Project Name: CCR -Plant Daniel Site: NAMU		Lab PM: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com Carrier Tracking No(s): COC No: 400-55446-23825.2 Page: 2-2 Job #: 400-138410	
Due Date Requested: TAT Requested (days): PO #: Purchase Order not required WO #:		Analysis Requested	
Sample Identification FB-02 Sample Date: 5/24/17 Sample Time: 0920 Sample Type (C=Comp, G=grab): G Matrix (W=water, S=solid, O=waste/oil, BT=Tissue, A=air): Water		Field Filtered Sample (Yes or No): Perform MS/MSD (Yes or No): Field Sampling Parameters: Mercury 6020 - Sb, As, Ba, B, Be, Ca, Cd, Cr, Co, Pb, Li, Mo, Se, Ti, 7470A - M4500 Cl, E - Chloride, M4500 SO4 E - Sulfate, 2540C - 9315 Ra226, 9320 Ra228, Ra226Ra228 GPC	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/Note:	
Empty Kit Relinquished by: Relinquished by: [Signature] Date: 5-25-17 Company: [Signature]		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Custody Seals Intact: Δ Yes Δ No Custody Seal No.:		Method of Shipment: Received by: [Signature] Date/Time: 5-25-17 1010 Company:	



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-138410-2

SDG Number: NAMU

Login Number: 138410

List Number: 1

Creator: Siddoway, Benjamin

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C, 0.4°C, 0.6°C, 0.0°C, 0.6°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
SDG: NAMU

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-18
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-18
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	06-30-17
New Jersey	NELAP	2	FL006	06-30-18
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-18
Washington	State Program	10	C915	05-15-18
West Virginia DEP	State Program	3	136	06-30-18

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska	State Program	10	MO00054	06-30-17 *
California	State Program	9	2886	03-31-18 *
Connecticut	State Program	1	PH-0241	03-31-19
Florida	NELAP	4	E87689	06-30-18
Illinois	NELAP	5	200023	11-30-17
Iowa	State Program	7	373	02-01-18
Kansas	NELAP	7	E-10236	10-31-17
Kentucky (DW)	State Program	4	90125	12-31-17
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-18
Louisiana (DW)	NELAP	6	LA170011	12-31-17
Maryland	State Program	3	310	09-30-17 *
Missouri	State Program	7	780	06-30-17 *
Nevada	State Program	9	MO000542017-1	07-31-17 *
New Jersey	NELAP	2	MO002	06-30-17 *
New York	NELAP	2	11616	03-31-18

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

TestAmerica Pensacola

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-138410-2
SDG: NAMU

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
North Dakota	State Program	8	R207	06-30-17 *
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-17 *
Pennsylvania	NELAP	3	68-00540	02-21-18
South Carolina	State Program	4	85002001	06-30-17 *
Texas	NELAP	6	T104704193-16-10	07-31-17 *
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		P330-17-0028	02-02-20
Utah	NELAP	8	MO000542016-8	07-31-17 *
Virginia	NELAP	3	460230	06-14-18
Washington	State Program	10	C592	08-30-17 *
West Virginia DEP	State Program	3	381	08-31-17 *

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

TestAmerica Pensacola

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: 400-132733-3

TestAmerica Sample Delivery Group: NAMU

Client Project/Site: CCR -Plant Daniel

For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:

3/28/2017 2:46:09 PM

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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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Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-11

Lab Sample ID: 400-132733-14

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.081		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.00034	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Calcium	1.8		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0047		0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.000078	J	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	32		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	13		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.77				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-12

Lab Sample ID: 400-132733-15

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.14		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.00040	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Boron	0.024	J	0.050	0.021	mg/L	5		6020	Total Recoverable
Cobalt	0.0024	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0033	J	0.0050	0.0032	mg/L	5		6020	Total Recoverable
Chloride	15		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Fluoride	0.28		0.10	0.032	mg/L	1		SM 4500 F C	Total/NA
Sulfate	9.4		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.35				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-13

Lab Sample ID: 400-132733-16

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.11		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Beryllium	0.00034	J	0.0025	0.00034	mg/L	5		6020	Total Recoverable
Calcium	0.55		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0013	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0058		0.0050	0.0032	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	60		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	13		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	5.5		5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.7				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-14

Lab Sample ID: 400-132733-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.11		0.0025	0.00049	mg/L	5		6020	Total Recoverable

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-14 (Continued)

Lab Sample ID: 400-132733-17

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	3.8		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0012	J	0.0025	0.0011	mg/L	5		6020	Total Recoverable
Cobalt	0.0016	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lead	0.00049	J	0.0013	0.00035	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	48		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	11		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	5.11				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-15

Lab Sample ID: 400-132733-18

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.063		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.3		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0012	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.000079	J	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	26		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	8.3		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.65				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-16

Lab Sample ID: 400-132733-19

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.032		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.58		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00072	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	18		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	6.3		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.68				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-17

Lab Sample ID: 400-132733-20

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.038		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.0		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00090	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	32		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	7.4		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	1.5	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	5.02				SU	1		Field Sampling	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-18

Lab Sample ID: 400-132733-21

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.062		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.81		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0011	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	30		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	9.2		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	3.8	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.63				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-19

Lab Sample ID: 400-132733-22

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00075	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.033		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.64		0.25	0.13	mg/L	5		6020	Total Recoverable
Chromium	0.0011	J	0.0025	0.0011	mg/L	5		6020	Total Recoverable
Cobalt	0.00043	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	20		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	5.3		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	5.27				SU	1		Field Sampling	Total/NA

Client Sample ID: DUP-03

Lab Sample ID: 400-132733-23

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00063	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.035		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.66		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00052	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Mercury	0.000076	J	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	24		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	5.1		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: EB-03

Lab Sample ID: 400-132733-24

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.00013	J	0.00020	0.000070	mg/L	1		7470A	Total/NA

Client Sample ID: FB-03

Lab Sample ID: 400-132733-25

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Mercury	0.00015	J	0.00020	0.000070	mg/L	1		7470A	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
 SDG: NAMU

Client Sample ID: DUP-04

Lab Sample ID: 400-132733-26

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.065		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	1.3		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.0013	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Lithium	0.0033	J	0.0050	0.0032	mg/L	5		6020	Total Recoverable
Selenium	0.00036	J	0.0013	0.00024	mg/L	5		6020	Total Recoverable
Mercury	0.00013	J	0.00020	0.000070	mg/L	1		7470A	Total/NA
Total Dissolved Solids	18		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	8.5		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola



Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
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
Field Sampling	Field Sampling	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-132733-14	MW-11	Water	01/19/17 12:54	01/19/17 15:05
400-132733-15	MW-12	Water	01/19/17 09:50	01/19/17 15:05
400-132733-16	MW-13	Water	01/19/17 10:55	01/19/17 15:05
400-132733-17	MW-14	Water	01/18/17 14:15	01/19/17 15:05
400-132733-18	MW-15	Water	01/19/17 09:03	01/19/17 15:05
400-132733-19	MW-16	Water	01/18/17 09:35	01/19/17 15:05
400-132733-20	MW-17	Water	01/18/17 11:21	01/19/17 15:05
400-132733-21	MW-18	Water	01/18/17 12:08	01/19/17 15:05
400-132733-22	MW-19	Water	01/18/17 10:10	01/19/17 15:05
400-132733-23	DUP-03	Water	01/18/17 09:10	01/19/17 15:05
400-132733-24	EB-03	Water	01/19/17 13:05	01/19/17 15:05
400-132733-25	FB-03	Water	01/19/17 10:15	01/19/17 15:05
400-132733-26	DUP-04	Water	01/19/17 08:03	01/19/17 15:05

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-11
Date Collected: 01/19/17 12:54
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-14
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 17:09	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 17:09	5
Barium	0.081		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 17:09	5
Beryllium	0.00034	J	0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 17:09	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 17:09	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 17:09	5
Calcium	1.8		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 17:09	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 17:09	5
Cobalt	0.0047		0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 17:09	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 17:09	5
Lithium	<0.0032		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 17:09	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 17:09	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 17:09	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 17:09	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000078	J	0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 14:55	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	32		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	13		2.0	0.60	mg/L			01/24/17 15:15	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 16:12	1
Sulfate	<1.4		5.0	1.4	mg/L			01/25/17 09:44	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.77				SU			01/19/17 12:54	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-12
Date Collected: 01/19/17 09:50
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-15
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 17:54	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 17:54	5
Barium	0.14		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 17:54	5
Beryllium	0.00040	J	0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 17:54	5
Boron	0.024	J	0.050	0.021	mg/L		01/23/17 09:20	01/24/17 17:54	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 17:54	5
Calcium	<0.13		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 17:54	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 17:54	5
Cobalt	0.0024	J	0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 17:54	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 17:54	5
Lithium	0.0033	J	0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 17:54	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 17:54	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 17:54	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 17:54	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 14:56	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	15		2.0	0.60	mg/L			01/24/17 15:15	1
Fluoride	0.28		0.10	0.032	mg/L			01/31/17 16:15	1
Sulfate	9.4		5.0	1.4	mg/L			01/25/17 09:44	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.35				SU			01/19/17 09:50	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-13
Date Collected: 01/19/17 10:55
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-16
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 17:59	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 17:59	5
Barium	0.11		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 17:59	5
Beryllium	0.00034	J	0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 17:59	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 17:59	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 17:59	5
Calcium	0.55		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 17:59	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 17:59	5
Cobalt	0.0013	J	0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 17:59	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 17:59	5
Lithium	0.0058		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 17:59	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 17:59	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 17:59	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 17:59	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 14:57	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	60		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	13		2.0	0.60	mg/L			01/24/17 15:45	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 16:30	1
Sulfate	5.5		5.0	1.4	mg/L			01/25/17 09:44	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.7				SU			01/19/17 10:55	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-14
Date Collected: 01/18/17 14:15
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-17
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 18:03	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 18:03	5
Barium	0.11		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 18:03	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:03	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 18:03	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:03	5
Calcium	3.8		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 18:03	5
Chromium	0.0012	J	0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 18:03	5
Cobalt	0.0016	J	0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 18:03	5
Lead	0.00049	J	0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 18:03	5
Lithium	<0.0032		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 18:03	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 18:03	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 18:03	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 18:03	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 14:59	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	48		5.0	3.4	mg/L			01/21/17 14:05	1
Chloride	11		2.0	0.60	mg/L			01/24/17 15:45	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 17:03	1
Sulfate	<1.4		5.0	1.4	mg/L			01/25/17 09:44	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.11				SU			01/18/17 14:15	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-15
Date Collected: 01/19/17 09:03
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-18
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 18:08	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 18:08	5
Barium	0.063		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 18:08	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:08	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 18:08	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:08	5
Calcium	1.3		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 18:08	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 18:08	5
Cobalt	0.0012	J	0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 18:08	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 18:08	5
Lithium	<0.0032		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 18:08	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 18:08	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 18:08	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 18:08	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000079	J	0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 15:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	26		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	8.3		2.0	0.60	mg/L			01/24/17 15:45	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 17:09	1
Sulfate	<1.4		5.0	1.4	mg/L			01/25/17 09:44	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.65				SU			01/19/17 09:03	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-16
Date Collected: 01/18/17 09:35
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-19
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 18:12	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 18:12	5
Barium	0.032		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 18:12	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:12	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 18:12	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:12	5
Calcium	0.58		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 18:12	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 18:12	5
Cobalt	0.00072 J		0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 18:12	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 18:12	5
Lithium	<0.0032		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 18:12	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 18:12	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 18:12	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 18:12	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 15:01	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	18		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	6.3		2.0	0.60	mg/L			01/24/17 15:45	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 17:12	1
Sulfate	<1.4		5.0	1.4	mg/L			01/25/17 09:44	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.68				SU			01/18/17 09:35	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-17
Date Collected: 01/18/17 11:21
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-20
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 18:17	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 18:17	5
Barium	0.038		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 18:17	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:17	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 18:17	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:17	5
Calcium	1.0		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 18:17	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 18:17	5
Cobalt	0.00090	J	0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 18:17	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 18:17	5
Lithium	<0.0032		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 18:17	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 18:17	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 18:17	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 18:17	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 15:02	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	32		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	7.4		2.0	0.60	mg/L			01/24/17 15:45	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 17:14	1
Sulfate	1.5	J	5.0	1.4	mg/L			01/25/17 09:47	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.02				SU			01/18/17 11:21	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-18
Date Collected: 01/18/17 12:08
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-21
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 18:21	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 18:21	5
Barium	0.062		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 18:21	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:21	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 18:21	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:21	5
Calcium	0.81		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 18:21	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 18:21	5
Cobalt	0.0011	J	0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 18:21	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 18:21	5
Lithium	<0.0032		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 18:21	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 18:21	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 18:21	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 18:21	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 15:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	30		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	9.2		2.0	0.60	mg/L			01/25/17 09:10	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 17:18	1
Sulfate	3.8	J	5.0	1.4	mg/L			01/25/17 09:47	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.63				SU			01/18/17 12:08	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-19
Date Collected: 01/18/17 10:10
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-22
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 18:26	5
Arsenic	0.00075	J	0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 18:26	5
Barium	0.033		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 18:26	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:26	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 18:26	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:26	5
Calcium	0.64		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 18:26	5
Chromium	0.0011	J	0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 18:26	5
Cobalt	0.00043	J	0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 18:26	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 18:26	5
Lithium	<0.0032		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 18:26	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 18:26	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 18:26	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 18:26	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 15:05	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	20		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	5.3		2.0	0.60	mg/L			01/25/17 09:10	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 17:20	1
Sulfate	<1.4		5.0	1.4	mg/L			01/25/17 09:47	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.27				SU			01/18/17 10:10	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: DUP-03

Date Collected: 01/18/17 09:10

Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-23

Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 18:53	5
Arsenic	0.00063	J	0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 18:53	5
Barium	0.035		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 18:53	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:53	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 18:53	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:53	5
Calcium	0.66		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 18:53	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 18:53	5
Cobalt	0.00052	J	0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 18:53	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 18:53	5
Lithium	<0.0032		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 18:53	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 18:53	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 18:53	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 18:53	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.000076	J	0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 15:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	24		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	5.1		2.0	0.60	mg/L			01/25/17 09:10	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 17:22	1
Sulfate	<1.4		5.0	1.4	mg/L			01/25/17 09:47	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: EB-03
Date Collected: 01/19/17 13:05
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-24
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 18:57	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 18:57	5
Barium	<0.00049		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 18:57	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:57	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 18:57	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 18:57	5
Calcium	<0.13		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 18:57	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 18:57	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 18:57	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 18:57	5
Lithium	<0.0032		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 18:57	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 18:57	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 18:57	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 18:57	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00013	J	0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 15:16	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	<0.60		2.0	0.60	mg/L			01/25/17 10:12	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 17:25	1
Sulfate	<1.4		5.0	1.4	mg/L			01/25/17 10:19	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: FB-03
Date Collected: 01/19/17 10:15
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-25
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 19:02	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 19:02	5
Barium	<0.00049		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 19:02	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 19:02	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 19:02	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 19:02	5
Calcium	<0.13		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 19:02	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 19:02	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 19:02	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 19:02	5
Lithium	<0.0032		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 19:02	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 19:02	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 19:02	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 19:02	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00015	J	0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 15:17	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	<0.60		2.0	0.60	mg/L			01/25/17 10:12	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 17:33	1
Sulfate	<1.4		5.0	1.4	mg/L			01/25/17 10:19	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: DUP-04

Date Collected: 01/19/17 08:03

Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-26

Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 19:06	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 19:06	5
Barium	0.065		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 19:06	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 19:06	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 19:06	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 19:06	5
Calcium	1.3		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 19:06	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 19:06	5
Cobalt	0.0013	J	0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 19:06	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 19:06	5
Lithium	0.0033	J	0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 19:06	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 19:06	5
Selenium	0.00036	J	0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 19:06	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 19:06	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	0.00013	J	0.00020	0.000070	mg/L		01/24/17 12:14	01/26/17 15:19	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	18		5.0	3.4	mg/L			01/21/17 14:48	1
Chloride	8.5		2.0	0.60	mg/L			01/25/17 10:12	1
Fluoride	<0.032		0.10	0.032	mg/L			01/31/17 17:36	1
Sulfate	<1.4		5.0	1.4	mg/L			01/25/17 10:19	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Qualifiers

Metals

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.

General Chemistry

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

Glossary

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

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-11

Date Collected: 01/19/17 12:54

Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-14

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 17:09	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 14:55	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339649	01/24/17 15:15	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 16:12	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 09:44	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	343304	01/19/17 12:54	BWS	TAL PEN

Client Sample ID: MW-12

Date Collected: 01/19/17 09:50

Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-15

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 17:54	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 14:56	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339649	01/24/17 15:15	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 16:15	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 09:44	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	343304	01/19/17 09:50	BWS	TAL PEN

Client Sample ID: MW-13

Date Collected: 01/19/17 10:55

Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-16

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 17:59	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 14:57	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339649	01/24/17 15:45	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 16:30	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 09:44	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	343304	01/19/17 10:55	BWS	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-14

Lab Sample ID: 400-132733-17

Date Collected: 01/18/17 14:15

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 18:03	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 14:59	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339296	01/21/17 14:05	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339649	01/24/17 15:45	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 17:03	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 09:44	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	343304	01/18/17 14:15	BWS	TAL PEN

Client Sample ID: MW-15

Lab Sample ID: 400-132733-18

Date Collected: 01/19/17 09:03

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 18:08	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 15:00	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339649	01/24/17 15:45	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 17:09	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 09:44	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	343304	01/19/17 09:03	BWS	TAL PEN

Client Sample ID: MW-16

Lab Sample ID: 400-132733-19

Date Collected: 01/18/17 09:35

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 18:12	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 15:01	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339649	01/24/17 15:45	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 17:12	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 09:44	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	343304	01/18/17 09:35	BWS	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: MW-17

Lab Sample ID: 400-132733-20

Date Collected: 01/18/17 11:21

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 18:17	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 15:02	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339649	01/24/17 15:45	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 17:14	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 09:47	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	343304	01/18/17 11:21	BWS	TAL PEN

Client Sample ID: MW-18

Lab Sample ID: 400-132733-21

Date Collected: 01/18/17 12:08

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 18:21	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 15:04	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339727	01/25/17 09:10	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 17:18	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 09:47	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	343304	01/18/17 12:08	BWS	TAL PEN

Client Sample ID: MW-19

Lab Sample ID: 400-132733-22

Date Collected: 01/18/17 10:10

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 18:26	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 15:05	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339727	01/25/17 09:10	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 17:20	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 09:47	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	343304	01/18/17 10:10	BWS	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: DUP-03

Lab Sample ID: 400-132733-23

Date Collected: 01/18/17 09:10

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 18:53	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 15:15	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339727	01/25/17 09:10	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 17:22	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 09:47	BJB	TAL PEN

Client Sample ID: EB-03

Lab Sample ID: 400-132733-24

Date Collected: 01/19/17 13:05

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 18:57	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 15:16	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339727	01/25/17 10:12	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 17:25	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 10:19	BJB	TAL PEN

Client Sample ID: FB-03

Lab Sample ID: 400-132733-25

Date Collected: 01/19/17 10:15

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 19:02	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 15:17	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339727	01/25/17 10:12	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 17:33	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 10:19	BJB	TAL PEN

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Client Sample ID: DUP-04

Lab Sample ID: 400-132733-26

Date Collected: 01/19/17 08:03

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			339359	01/23/17 09:20	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	339677	01/24/17 19:06	RJB	TAL PEN
Total/NA	Prep	7470A			339546	01/24/17 12:14	JAP	TAL PEN
Total/NA	Analysis	7470A		1	339947	01/26/17 15:19	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	339298	01/21/17 14:48	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	339727	01/25/17 10:12	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	340526	01/31/17 17:36	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	339729	01/25/17 10:19	BJB	TAL PEN

Laboratory References:

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

QC Association Summary

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
 SDG: NAMU

Metals

Prep Batch: 339359

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-14	MW-11	Total Recoverable	Water	3005A	
400-132733-15	MW-12	Total Recoverable	Water	3005A	
400-132733-16	MW-13	Total Recoverable	Water	3005A	
400-132733-17	MW-14	Total Recoverable	Water	3005A	
400-132733-18	MW-15	Total Recoverable	Water	3005A	
400-132733-19	MW-16	Total Recoverable	Water	3005A	
400-132733-20	MW-17	Total Recoverable	Water	3005A	
400-132733-21	MW-18	Total Recoverable	Water	3005A	
400-132733-22	MW-19	Total Recoverable	Water	3005A	
400-132733-23	DUP-03	Total Recoverable	Water	3005A	
400-132733-24	EB-03	Total Recoverable	Water	3005A	
400-132733-25	FB-03	Total Recoverable	Water	3005A	
400-132733-26	DUP-04	Total Recoverable	Water	3005A	
MB 400-339359/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-339359/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-132733-14 MS	MW-11	Total Recoverable	Water	3005A	
400-132733-14 MSD	MW-11	Total Recoverable	Water	3005A	

Prep Batch: 339546

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-14	MW-11	Total/NA	Water	7470A	
400-132733-15	MW-12	Total/NA	Water	7470A	
400-132733-16	MW-13	Total/NA	Water	7470A	
400-132733-17	MW-14	Total/NA	Water	7470A	
400-132733-18	MW-15	Total/NA	Water	7470A	
400-132733-19	MW-16	Total/NA	Water	7470A	
400-132733-20	MW-17	Total/NA	Water	7470A	
400-132733-21	MW-18	Total/NA	Water	7470A	
400-132733-22	MW-19	Total/NA	Water	7470A	
400-132733-23	DUP-03	Total/NA	Water	7470A	
400-132733-24	EB-03	Total/NA	Water	7470A	
400-132733-25	FB-03	Total/NA	Water	7470A	
400-132733-26	DUP-04	Total/NA	Water	7470A	
MB 400-339546/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-339546/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-132957-A-5-B MS	Matrix Spike	Total/NA	Water	7470A	
400-132957-A-5-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 339677

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-14	MW-11	Total Recoverable	Water	6020	339359
400-132733-15	MW-12	Total Recoverable	Water	6020	339359
400-132733-16	MW-13	Total Recoverable	Water	6020	339359
400-132733-17	MW-14	Total Recoverable	Water	6020	339359
400-132733-18	MW-15	Total Recoverable	Water	6020	339359
400-132733-19	MW-16	Total Recoverable	Water	6020	339359
400-132733-20	MW-17	Total Recoverable	Water	6020	339359
400-132733-21	MW-18	Total Recoverable	Water	6020	339359
400-132733-22	MW-19	Total Recoverable	Water	6020	339359
400-132733-23	DUP-03	Total Recoverable	Water	6020	339359
400-132733-24	EB-03	Total Recoverable	Water	6020	339359

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Metals (Continued)

Analysis Batch: 339677 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-25	FB-03	Total Recoverable	Water	6020	339359
400-132733-26	DUP-04	Total Recoverable	Water	6020	339359
MB 400-339359/1-A ^5	Method Blank	Total Recoverable	Water	6020	339359
LCS 400-339359/2-A	Lab Control Sample	Total Recoverable	Water	6020	339359
400-132733-14 MS	MW-11	Total Recoverable	Water	6020	339359
400-132733-14 MSD	MW-11	Total Recoverable	Water	6020	339359

Analysis Batch: 339947

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-14	MW-11	Total/NA	Water	7470A	339546
400-132733-15	MW-12	Total/NA	Water	7470A	339546
400-132733-16	MW-13	Total/NA	Water	7470A	339546
400-132733-17	MW-14	Total/NA	Water	7470A	339546
400-132733-18	MW-15	Total/NA	Water	7470A	339546
400-132733-19	MW-16	Total/NA	Water	7470A	339546
400-132733-20	MW-17	Total/NA	Water	7470A	339546
400-132733-21	MW-18	Total/NA	Water	7470A	339546
400-132733-22	MW-19	Total/NA	Water	7470A	339546
400-132733-23	DUP-03	Total/NA	Water	7470A	339546
400-132733-24	EB-03	Total/NA	Water	7470A	339546
400-132733-25	FB-03	Total/NA	Water	7470A	339546
400-132733-26	DUP-04	Total/NA	Water	7470A	339546
MB 400-339546/14-A	Method Blank	Total/NA	Water	7470A	339546
LCS 400-339546/15-A	Lab Control Sample	Total/NA	Water	7470A	339546
400-132957-A-5-B MS	Matrix Spike	Total/NA	Water	7470A	339546
400-132957-A-5-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	339546

Analysis Batch: 339962

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132957-A-5-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	339546

General Chemistry

Analysis Batch: 339296

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-17	MW-14	Total/NA	Water	SM 2540C	
MB 400-339296/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-339296/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-132810-A-1 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 339298

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-14	MW-11	Total/NA	Water	SM 2540C	
400-132733-15	MW-12	Total/NA	Water	SM 2540C	
400-132733-16	MW-13	Total/NA	Water	SM 2540C	
400-132733-18	MW-15	Total/NA	Water	SM 2540C	
400-132733-19	MW-16	Total/NA	Water	SM 2540C	
400-132733-20	MW-17	Total/NA	Water	SM 2540C	
400-132733-21	MW-18	Total/NA	Water	SM 2540C	
400-132733-22	MW-19	Total/NA	Water	SM 2540C	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

General Chemistry (Continued)

Analysis Batch: 339298 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-23	DUP-03	Total/NA	Water	SM 2540C	
400-132733-24	EB-03	Total/NA	Water	SM 2540C	
400-132733-25	FB-03	Total/NA	Water	SM 2540C	
400-132733-26	DUP-04	Total/NA	Water	SM 2540C	
MB 400-339298/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-339298/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-132733-14 DU	MW-11	Total/NA	Water	SM 2540C	

Analysis Batch: 339649

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-14	MW-11	Total/NA	Water	SM 4500 Cl- E	
400-132733-15	MW-12	Total/NA	Water	SM 4500 Cl- E	
400-132733-16	MW-13	Total/NA	Water	SM 4500 Cl- E	
400-132733-17	MW-14	Total/NA	Water	SM 4500 Cl- E	
400-132733-18	MW-15	Total/NA	Water	SM 4500 Cl- E	
400-132733-19	MW-16	Total/NA	Water	SM 4500 Cl- E	
400-132733-20	MW-17	Total/NA	Water	SM 4500 Cl- E	
MB 400-339649/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-339649/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-339649/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-132913-B-3 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-132913-B-3 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 339727

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-21	MW-18	Total/NA	Water	SM 4500 Cl- E	
400-132733-22	MW-19	Total/NA	Water	SM 4500 Cl- E	
400-132733-23	DUP-03	Total/NA	Water	SM 4500 Cl- E	
400-132733-24	EB-03	Total/NA	Water	SM 4500 Cl- E	
400-132733-25	FB-03	Total/NA	Water	SM 4500 Cl- E	
400-132733-26	DUP-04	Total/NA	Water	SM 4500 Cl- E	
MB 400-339727/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-339727/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-339727/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-132733-21 MS	MW-18	Total/NA	Water	SM 4500 Cl- E	
400-132733-21 MSD	MW-18	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 339729

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-14	MW-11	Total/NA	Water	SM 4500 SO4 E	
400-132733-15	MW-12	Total/NA	Water	SM 4500 SO4 E	
400-132733-16	MW-13	Total/NA	Water	SM 4500 SO4 E	
400-132733-17	MW-14	Total/NA	Water	SM 4500 SO4 E	
400-132733-18	MW-15	Total/NA	Water	SM 4500 SO4 E	
400-132733-19	MW-16	Total/NA	Water	SM 4500 SO4 E	
400-132733-20	MW-17	Total/NA	Water	SM 4500 SO4 E	
400-132733-21	MW-18	Total/NA	Water	SM 4500 SO4 E	
400-132733-22	MW-19	Total/NA	Water	SM 4500 SO4 E	
400-132733-23	DUP-03	Total/NA	Water	SM 4500 SO4 E	
400-132733-24	EB-03	Total/NA	Water	SM 4500 SO4 E	
400-132733-25	FB-03	Total/NA	Water	SM 4500 SO4 E	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

General Chemistry (Continued)

Analysis Batch: 339729 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-26	DUP-04	Total/NA	Water	SM 4500 SO4 E	
MB 400-339729/8	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-339729/9	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-339729/5	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-132733-21 MS	MW-18	Total/NA	Water	SM 4500 SO4 E	
400-132733-21 MSD	MW-18	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 340526

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-14	MW-11	Total/NA	Water	SM 4500 F C	
400-132733-15	MW-12	Total/NA	Water	SM 4500 F C	
400-132733-16	MW-13	Total/NA	Water	SM 4500 F C	
400-132733-17	MW-14	Total/NA	Water	SM 4500 F C	
400-132733-18	MW-15	Total/NA	Water	SM 4500 F C	
400-132733-19	MW-16	Total/NA	Water	SM 4500 F C	
400-132733-20	MW-17	Total/NA	Water	SM 4500 F C	
400-132733-21	MW-18	Total/NA	Water	SM 4500 F C	
400-132733-22	MW-19	Total/NA	Water	SM 4500 F C	
400-132733-23	DUP-03	Total/NA	Water	SM 4500 F C	
400-132733-24	EB-03	Total/NA	Water	SM 4500 F C	
400-132733-25	FB-03	Total/NA	Water	SM 4500 F C	
400-132733-26	DUP-04	Total/NA	Water	SM 4500 F C	
MB 400-340526/2	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-340526/3	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-132810-A-5 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-132810-A-5 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-132733-17 DU	MW-14	Total/NA	Water	SM 4500 F C	

Field Service / Mobile Lab

Analysis Batch: 343304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-14	MW-11	Total/NA	Water	Field Sampling	
400-132733-15	MW-12	Total/NA	Water	Field Sampling	
400-132733-16	MW-13	Total/NA	Water	Field Sampling	
400-132733-17	MW-14	Total/NA	Water	Field Sampling	
400-132733-18	MW-15	Total/NA	Water	Field Sampling	
400-132733-19	MW-16	Total/NA	Water	Field Sampling	
400-132733-20	MW-17	Total/NA	Water	Field Sampling	
400-132733-21	MW-18	Total/NA	Water	Field Sampling	
400-132733-22	MW-19	Total/NA	Water	Field Sampling	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-339359/1-A ^5
Matrix: Water
Analysis Batch: 339677

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 339359

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		01/23/17 09:20	01/24/17 16:56	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		01/23/17 09:20	01/24/17 16:56	5
Barium	<0.00049		0.0025	0.00049	mg/L		01/23/17 09:20	01/24/17 16:56	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 16:56	5
Boron	<0.021		0.050	0.021	mg/L		01/23/17 09:20	01/24/17 16:56	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		01/23/17 09:20	01/24/17 16:56	5
Calcium	<0.13		0.25	0.13	mg/L		01/23/17 09:20	01/24/17 16:56	5
Chromium	<0.0011		0.0025	0.0011	mg/L		01/23/17 09:20	01/24/17 16:56	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		01/23/17 09:20	01/24/17 16:56	5
Lead	<0.00035		0.0013	0.00035	mg/L		01/23/17 09:20	01/24/17 16:56	5
Lithium	<0.0032		0.0050	0.0032	mg/L		01/23/17 09:20	01/24/17 16:56	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		01/23/17 09:20	01/24/17 16:56	5
Selenium	<0.00024		0.0013	0.00024	mg/L		01/23/17 09:20	01/24/17 16:56	5
Thallium	<0.000085		0.00050	0.000085	mg/L		01/23/17 09:20	01/24/17 16:56	5

Lab Sample ID: LCS 400-339359/2-A
Matrix: Water
Analysis Batch: 339677

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 339359

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0533		mg/L		107	80 - 120
Arsenic	0.0500	0.0508		mg/L		102	80 - 120
Barium	0.0500	0.0529		mg/L		106	80 - 120
Beryllium	0.0500	0.0546		mg/L		109	80 - 120
Boron	0.100	0.0986		mg/L		99	80 - 120
Cadmium	0.0500	0.0523		mg/L		105	80 - 120
Calcium	5.00	4.82		mg/L		96	80 - 120
Chromium	0.0500	0.0492		mg/L		98	80 - 120
Cobalt	0.0500	0.0480		mg/L		96	80 - 120
Lead	0.0500	0.0519		mg/L		104	80 - 120
Lithium	0.0500	0.0524		mg/L		105	80 - 120
Molybdenum	0.100	0.103		mg/L		103	80 - 120
Selenium	0.0500	0.0497		mg/L		99	80 - 120
Thallium	0.0100	0.0107		mg/L		107	80 - 120

Lab Sample ID: 400-132733-14 MS
Matrix: Water
Analysis Batch: 339677

Client Sample ID: MW-11
Prep Type: Total Recoverable
Prep Batch: 339359

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0010		0.0500	0.0523		mg/L		105	75 - 125
Arsenic	<0.00046		0.0500	0.0509		mg/L		102	75 - 125
Barium	0.081		0.0500	0.134		mg/L		105	75 - 125
Beryllium	0.00034	J	0.0500	0.0577		mg/L		115	75 - 125
Boron	<0.021		0.100	0.111		mg/L		111	75 - 125
Cadmium	<0.00034		0.0500	0.0514		mg/L		103	75 - 125
Calcium	1.8		5.00	6.79		mg/L		100	75 - 125
Chromium	<0.0011		0.0500	0.0496		mg/L		99	75 - 125

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 400-132733-14 MS
Matrix: Water
Analysis Batch: 339677

Client Sample ID: MW-11
Prep Type: Total Recoverable
Prep Batch: 339359

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Cobalt	0.0047		0.0500	0.0537		mg/L		98	75 - 125
Lead	<0.00035		0.0500	0.0533		mg/L		107	75 - 125
Lithium	<0.0032		0.0500	0.0565		mg/L		113	75 - 125
Molybdenum	<0.00085		0.100	0.102		mg/L		102	75 - 125
Selenium	<0.00024		0.0500	0.0497		mg/L		99	75 - 125
Thallium	<0.000085		0.0100	0.0108		mg/L		108	75 - 125

Lab Sample ID: 400-132733-14 MSD
Matrix: Water
Analysis Batch: 339677

Client Sample ID: MW-11
Prep Type: Total Recoverable
Prep Batch: 339359

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Antimony	<0.0010		0.0500	0.0536		mg/L		107	75 - 125	2	20
Arsenic	<0.00046		0.0500	0.0520		mg/L		104	75 - 125	2	20
Barium	0.081		0.0500	0.136		mg/L		109	75 - 125	1	20
Beryllium	0.00034	J	0.0500	0.0580		mg/L		115	75 - 125	1	20
Boron	<0.021		0.100	0.110		mg/L		110	75 - 125	1	20
Cadmium	<0.00034		0.0500	0.0551		mg/L		110	75 - 125	7	20
Calcium	1.8		5.00	6.83		mg/L		101	75 - 125	1	20
Chromium	<0.0011		0.0500	0.0505		mg/L		101	75 - 125	2	20
Cobalt	0.0047		0.0500	0.0543		mg/L		99	75 - 125	1	20
Lead	<0.00035		0.0500	0.0526		mg/L		105	75 - 125	1	20
Lithium	<0.0032		0.0500	0.0588		mg/L		118	75 - 125	4	20
Molybdenum	<0.00085		0.100	0.104		mg/L		104	75 - 125	2	20
Selenium	<0.00024		0.0500	0.0506		mg/L		101	75 - 125	2	20
Thallium	<0.000085		0.0100	0.0108		mg/L		108	75 - 125	1	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-339546/14-A
Matrix: Water
Analysis Batch: 339947

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 339546

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		01/24/17 10:12	01/26/17 13:46	1

Lab Sample ID: LCS 400-339546/15-A
Matrix: Water
Analysis Batch: 339947

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 339546

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	0.00101	0.00114		mg/L		113	80 - 120

Lab Sample ID: 400-132957-A-5-B MS
Matrix: Water
Analysis Batch: 339947

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 339546

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Mercury	<0.000070		0.00201	0.00203		mg/L		101	80 - 120

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Lab Sample ID: 400-132957-A-5-C MSD
Matrix: Water
Analysis Batch: 339947

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 339546

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.000070		0.00201	0.00219		mg/L		109	80 - 120	8	20

Lab Sample ID: 400-132957-A-5-C MSD
Matrix: Water
Analysis Batch: 339962

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 339546

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.000070		0.00201	0.00210		mg/L		104	80 - 120	4	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 400-339296/1
Matrix: Water
Analysis Batch: 339296

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			01/21/17 14:05	1

Lab Sample ID: LCS 400-339296/2
Matrix: Water
Analysis Batch: 339296

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	254		mg/L		87	78 - 122

Lab Sample ID: 400-132810-A-1 DU
Matrix: Water
Analysis Batch: 339296

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	<3.4		<3.4		mg/L		NC	5

Lab Sample ID: MB 400-339298/1
Matrix: Water
Analysis Batch: 339298

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			01/21/17 14:48	1

Lab Sample ID: LCS 400-339298/2
Matrix: Water
Analysis Batch: 339298

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	234		mg/L		80	78 - 122

Lab Sample ID: 400-132733-14 DU
Matrix: Water
Analysis Batch: 339298

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	32		32.0		mg/L		0	5

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-339649/6
Matrix: Water
Analysis Batch: 339649

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			01/24/17 14:29	1

Lab Sample ID: LCS 400-339649/7
Matrix: Water
Analysis Batch: 339649

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 400-339649/3
Matrix: Water
Analysis Batch: 339649

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	2.09		mg/L		105	50 - 150

Lab Sample ID: 400-132913-B-3 MS
Matrix: Water
Analysis Batch: 339649

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	22		10.0	29.6		mg/L		80	73 - 120

Lab Sample ID: 400-132913-B-3 MSD
Matrix: Water
Analysis Batch: 339649

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Chloride	22		10.0	31.4		mg/L		98	73 - 120	6	8

Lab Sample ID: MB 400-339727/6
Matrix: Water
Analysis Batch: 339727

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			01/25/17 08:22	1

Lab Sample ID: LCS 400-339727/7
Matrix: Water
Analysis Batch: 339727

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	31.8		mg/L		106	90 - 110

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: MRL 400-339727/3
Matrix: Water
Analysis Batch: 339727

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	2.03		mg/L		101	50 - 150

Lab Sample ID: 400-132733-21 MS
Matrix: Water
Analysis Batch: 339727

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	9.2		10.0	20.0		mg/L		108	73 - 120

Lab Sample ID: 400-132733-21 MSD
Matrix: Water
Analysis Batch: 339727

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	9.2		10.0	20.0		mg/L		108	73 - 120	0	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-340526/2
Matrix: Water
Analysis Batch: 340526

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			01/31/17 15:43	1

Lab Sample ID: LCS 400-340526/3
Matrix: Water
Analysis Batch: 340526

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: 400-132810-A-5 MS
Matrix: Water
Analysis Batch: 340526

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: 400-132810-A-5 MSD
Matrix: Water
Analysis Batch: 340526

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

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: 400-132733-17 DU
Matrix: Water
Analysis Batch: 340526

Client Sample ID: MW-14
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 400-339729/8
Matrix: Water
Analysis Batch: 339729

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			01/25/17 08:28	1

Lab Sample ID: LCS 400-339729/9
Matrix: Water
Analysis Batch: 339729

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

Lab Sample ID: MRL 400-339729/5
Matrix: Water
Analysis Batch: 339729

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	4.39	J	mg/L		88	50 - 150

Lab Sample ID: 400-132733-21 MS
Matrix: Water
Analysis Batch: 339729

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	3.8	J	10.0	14.5		mg/L		106	77 - 128

Lab Sample ID: 400-132733-21 MSD
Matrix: Water
Analysis Batch: 339729

Client Sample ID: MW-18
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	3.8	J	10.0	14.4		mg/L		106	77 - 128	0	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
 Client Contact: Mr. Dale Sellers
 Company: Southern Company
 Address: PO BOX 2641 GSC8
 City: Birmingham
 State, Zip: AL, 35291
 Phone: 205-992-7762(Tel)
 Email: CSSELLER@SOUTHERNCO.COM
 Project Name: CCR - Plant Daniel
 Site: Mississippi

Sample: Five Hydrocarbons / Surfer
 Lab Pk: Whitmore, Chyenne R
 Phone: 850-336-0192
 Email: chyenne.whitmore@testamerica.com

Carrier Tracking No(s):
 COC No: 400-61562-24634.1
 Page: Page 1 of 2
 Lab #:

Analysis Requested
 Due Date Requested:
 TAT Requested (days):
 PO #: SCS10328728
 MO #: 37180
 Project #: 40016521
 SSOW#:

Preservation Codes:
 A - HCL
 B - NaOH
 C - Zn Acetate
 D - Nitric Acid
 E - NaHSO4
 F - MeOH
 G - Amchlor
 H - Ascorbic Acid
 I - Ice
 J - DI Water
 K - EDTA
 L - EDA
 Other:
 M - Hexane
 N - None
 O - AsHClO2
 P - Na2CO3
 Q - Na2SO3
 R - Na2SO4
 S - H2SO4
 T - TSP Dodecahydrate
 U - Acetone
 V - MCAA
 W - pH 4.5
 X - EDTA
 Z - other (specify)

Special Instructions (Note):

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (Element, Compound, Distribution, or Particulate, AWP)	Analysis Requested
EB-01	1-16-17	1400	Water	Water	9310, Na220, B320, Pa220, 9M4500, Cl E, SM4500, SO4 E, 6020, Y470A, 2540C - Total Dissolved Solids, 4500 J, S - Fluoride
EB-02	1-16-17	1335	Water	Water	
EB-03	1-16-17	0710	Water	Water	
EB-04			Water	Water	
EB-05			Water	Water	
EB-06			Water	Water	
EB-07			Water	Water	
EB-08			Water	Water	
EB-09			Water	Water	
EB-10			Water	Water	
EB-11			Water	Water	
EB-12			Water	Water	
EB-13			Water	Water	
EB-14			Water	Water	
EB-15			Water	Water	
EB-16			Water	Water	
EB-17			Water	Water	
EB-18			Water	Water	
EB-19			Water	Water	
EB-20			Water	Water	

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant
 Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Requisitioned by:
 Requisitioned by: [Signature]
 Date: 1-17-17 1330
 Company: RAH EW

Requisitioned by:
 Requisitioned by: [Signature]
 Date: 1/17/17 1733
 Company: RAH EW

Requisitioned by:
 Requisitioned by: [Signature]
 Date: 1/17/17 1330
 Company: RAH EW

Cooler Temperature(s) °C and Other Remarks: 0.0°C, 0.0°C, 0.0°C TRG

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

Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

Client Information
 Client Contact:
 Mr. Cale Sellers
 Southern Company
 PO BOX 2841 GSC8
 Birmingham
 State, Zip:
 AL, 35291
 Phone:
 205-992-7762(Tel)
 E-Mail:
 CESELLER@SOUTHERNCO.COM
 Project Name:
 CR - Plant Dental
 Sizer
 Mississippi

Carrier Tracking No(s):
 Lab Pk#
 Whittire, Cheyenne R
 E-Mail
 cheyenne.whittire@testamericainc.com

IOC# No:
 400-61562-24534.2
 Page:
 Page 2 of 2
 63 #

Analysis Requested

8316	MS226, 9320, R228	SM4500, CL E, SM4500, SO4 E	602, 7470A	ZINC - Total Dissolved Solids	4500, F - Fluoride
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Sample Identification	Sample Date	Sample Time	Sample Type (C-Comp, G-grab)	Matrix (Invert, Susp, Chem, Soil, Water, Other)
MW-1	1-16-17	1258	G	Water
MW-2	1-16-17	1628	G	Water
MW-3	1-16-17	0810	G	Water
MW-4	1-16-17	1038	G	Water
MW-5	1-16-17	1139	G	Water
MW-6	1-16-17	0907	G	Water
MW-7	1-16-17	1345	G	Water
MW-8	1-17-17	1027	G	Water
MW-9	1-17-17	0927	G	Water
MW-10	1-17-17	1132	G	Water

Sample Identification	Sample Date	Sample Time	Sample Type (C-Comp, G-grab)	Matrix (Invert, Susp, Chem, Soil, Water, Other)	Special Instructions/Note
MW-1	1-16-17	1258	G	Water	
MW-2	1-16-17	1628	G	Water	
MW-3	1-16-17	0810	G	Water	
MW-4	1-16-17	1038	G	Water	
MW-5	1-16-17	1139	G	Water	
MW-6	1-16-17	0907	G	Water	
MW-7	1-16-17	1345	G	Water	
MW-8	1-17-17	1027	G	Water	
MW-9	1-17-17	0927	G	Water	
MW-10	1-17-17	1132	G	Water	

Possible Hazard Identification:
 Non-Hazard Flammable Skin Irritant
 Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Relinquished by:
 Relinquished by: [Signature]
 Relinquished on: 1/17/17
 Relinquished at: [Signature]
 Relinquished at: 1/17/17

Method of Shipment:
 Return To Client Disposal By Let Archive For Months

Special Instructions/CC Requirements:

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

Received by: [Signature] Date/Time: 1/17/17 1330 Company: KDH Env
 Received by: [Signature] Date/Time: 1-17-17 1733 Company:
 Received by: [Signature] Date/Time: 1-17-17 1733 Company:

Cooler Temperature(s) °C and Other Remarks: 0.0, 0.0, 0.0°C SR-6



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

Chain of Custody Record

TestAmerica
 METROLOGICAL TESTING

Client Information
 Client Contact: Mr. Date Sellers
 Company: Southern Company
 Address: PO BOX 2641 CSC8
 City: Birmingham
 State, Zip: AL, 35291
 Phone: 205-992-7762(Tel)
 PO #: SCS10328728
 WO#: 37180
 Project #: 40006621
 Project Name: CCR -Plant Daniel
 Site: Mississippi

Client Information
 Sampler: Brett Surles
 Lab Pkt: Whitmore, Cheryenne R
 E-Mail: cheryenne.whitmore@testamericainc.com
 Phone: 850 380 3458

Carrier Tracking Info:
 COC No: 400-61559-23825.1
 Pages: 1 of 2
 Page #:

Analysis Requested
 3918 Ra226, 9320 Ra228
 5M4500 Cl, E, 5M4500, SO4 E
 6020, 7470A
 6240C - Total Dissolved Solids
 4900 F, C - Fluoride

Preservation Codes:
 M - Hexane
 N - None
 O - Acids
 P - Na2OAS
 Q - Na2SO3
 R - Na2S2O3
 S - H2SO4
 T - TSP Dissolve/Grain
 U - Acetone
 V - MCAA
 W - pH 4.5
 Z - other (specify):

Sample ID	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (Water, Sewage, Onwater, Other)	Analysis Requested	Special Instructions/Notes
MW-11	1/19/17	1254	G	Water	3918 Ra226, 9320 Ra228	
MW-12	1/19/17	0950	G	Water	5M4500 Cl, E, 5M4500, SO4 E	
MW-13	1/19/17	1055	G	Water	6020, 7470A	
MW-14	1/18/17	1415	G	Water	6240C - Total Dissolved Solids	
MW-15	1/19/17	0903	G	Water	4900 F, C - Fluoride	
MW-16	1/18/17	0935	G	Water		
MW-17	1/18/17	1121	G	Water		
MW-18	1/18/17	1208	G	Water		
MW-19	1/18/17	1010	G	Water		
Dup-03	1/18/17	0910	G	Water		
EB-03	1/19/17	1305	G	Water		

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

Received by: [Signature]
 Date: 1/19/17
 Company: Southern Company
 Date Time: 1505
 Date Time: 5:10 C, 3:00 C
 IR6

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-132733-3

SDG Number: NAMU

Login Number: 132733

List Number: 1

Creator: Hughes, Nicholas T

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, 0.0°C, 0.0°C IR-6; 3.0°C, 5.1°C, 5.7°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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-3
SDG: NAMU

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-17
Louisiana (DW)	NELAP Secondary AB	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-132733-4

TestAmerica Sample Delivery Group: NAMU

Client Project/Site: CCR -Plant Daniel

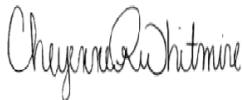
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:

3/28/2017 2:47:47 PM

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

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

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Case Narrative

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Job ID: 400-132733-4

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-132733-4

RAD

Method(s) PrecSep_0: Radium-228 Prep Batch 160-288794: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: MW-13 (400-132733-16), MW-14 (400-132733-17), MW-15 (400-132733-18), MW-16 (400-132733-19), MW-17 (400-132733-20), MW-18 (400-132733-21), MW-19 (400-132733-22), DUP-03 (400-132733-23), EB-03 (400-132733-24), FB-03 (400-132733-25) and DUP-04 (400-132733-26). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method(s) PrecSep_0: Radium-228 Prep Batch 160-288784: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: MW-11 (400-132733-14) and MW-12 (400-132733-15). 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 160-288791: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: MW-13 (400-132733-16), MW-14 (400-132733-17), MW-15 (400-132733-18), MW-16 (400-132733-19), MW-17 (400-132733-20), MW-18 (400-132733-21), MW-19 (400-132733-22), DUP-03 (400-132733-23), EB-03 (400-132733-24), FB-03 (400-132733-25) and DUP-04 (400-132733-26). 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 160-288776: Insufficient sample volume was available to perform a sample duplicate (DUP) for the following samples: MW-11 (400-132733-14) and MW-12 (400-132733-15). A laboratory control sample/ laboratory control sample duplicate (LCS/LCSD) were prepared instead to demonstrate batch precision.

Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-132733-14	MW-11	Water	01/19/17 12:54	01/19/17 15:05
400-132733-15	MW-12	Water	01/19/17 09:50	01/19/17 15:05
400-132733-16	MW-13	Water	01/19/17 10:55	01/19/17 15:05
400-132733-17	MW-14	Water	01/18/17 14:15	01/19/17 15:05
400-132733-18	MW-15	Water	01/19/17 09:03	01/19/17 15:05
400-132733-19	MW-16	Water	01/18/17 09:35	01/19/17 15:05
400-132733-20	MW-17	Water	01/18/17 11:21	01/19/17 15:05
400-132733-21	MW-18	Water	01/18/17 12:08	01/19/17 15:05
400-132733-22	MW-19	Water	01/18/17 10:10	01/19/17 15:05
400-132733-23	DUP-03	Water	01/18/17 09:10	01/19/17 15:05
400-132733-24	EB-03	Water	01/19/17 13:05	01/19/17 15:05
400-132733-25	FB-03	Water	01/19/17 10:15	01/19/17 15:05
400-132733-26	DUP-04	Water	01/19/17 08:03	01/19/17 15:05

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-11
Date Collected: 01/19/17 12:54
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-14
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	0.392		0.155	0.159	1.00	0.155	pCi/L	01/23/17 15:39	02/14/17 10:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.5		40 - 110					01/23/17 15:39	02/14/17 10:39	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.733		0.301	0.308	1.00	0.428	pCi/L	01/23/17 16:11	02/10/17 12:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	81.5		40 - 110					01/23/17 16:11	02/10/17 12:31	1
Y Carrier	89.7		40 - 110					01/23/17 16:11	02/10/17 12:31	1

Method: Ra226_Ra228 - Combined Radium-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		0.338	0.347	5.00	0.428	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-12
Date Collected: 01/19/17 09:50
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-15
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	0.693		0.205	0.215	1.00	0.182	pCi/L	01/23/17 15:39	02/14/17 10:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.9		40 - 110					01/23/17 15:39	02/14/17 10:39	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	1.63		0.405	0.432	1.00	0.515	pCi/L	01/23/17 16:11	02/10/17 12:31	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	78.9		40 - 110					01/23/17 16:11	02/10/17 12:31	1
Y Carrier	87.1		40 - 110					01/23/17 16:11	02/10/17 12:31	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	2.33		0.454	0.482	5.00	0.515	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-13
Date Collected: 01/19/17 10:55
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-16
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	0.684		0.285	0.292	1.00	0.293	pCi/L	01/23/17 17:08	02/14/17 06:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.3		40 - 110					01/23/17 17:08	02/14/17 06:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.348	U	0.295	0.297	1.00	0.473	pCi/L	01/23/17 17:42	02/13/17 13:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.3		40 - 110					01/23/17 17:42	02/13/17 13:26	1
Y Carrier	87.9		40 - 110					01/23/17 17:42	02/13/17 13:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.03		0.411	0.416	5.00	0.473	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-14
Date Collected: 01/18/17 14:15
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-17
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	0.894		0.326	0.336	1.00	0.311	pCi/L	01/23/17 17:08	02/14/17 06:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.6		40 - 110					01/23/17 17:08	02/14/17 06:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.859		0.348	0.357	1.00	0.489	pCi/L	01/23/17 17:42	02/13/17 13:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.6		40 - 110					01/23/17 17:42	02/13/17 13:26	1
Y Carrier	84.5		40 - 110					01/23/17 17:42	02/13/17 13:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.75		0.477	0.490	5.00	0.489	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-15
Date Collected: 01/19/17 09:03
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-18
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	0.506		0.259	0.263	1.00	0.317	pCi/L	01/23/17 17:08	02/14/17 06:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.2		40 - 110					01/23/17 17:08	02/14/17 06:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.273	U	0.253	0.254	1.00	0.408	pCi/L	01/23/17 17:42	02/13/17 13:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	83.2		40 - 110					01/23/17 17:42	02/13/17 13:26	1
Y Carrier	87.1		40 - 110					01/23/17 17:42	02/13/17 13:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.780		0.362	0.366	5.00	0.408	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
 SDG: NAMU

Client Sample ID: MW-16
Date Collected: 01/18/17 09:35
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-19
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	0.313		0.223	0.225	1.00	0.311	pCi/L	01/23/17 17:08	02/14/17 06:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.1		40 - 110					01/23/17 17:08	02/14/17 06:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.831		0.344	0.353	1.00	0.483	pCi/L	01/23/17 17:42	02/13/17 13:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	80.1		40 - 110					01/23/17 17:42	02/13/17 13:26	1
Y Carrier	76.3		40 - 110					01/23/17 17:42	02/13/17 13:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.14		0.410	0.418	5.00	0.483	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-17
Date Collected: 01/18/17 11:21
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-20
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	0.380		0.221	0.223	1.00	0.284	pCi/L	01/23/17 17:08	02/14/17 06:51	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.3		40 - 110					01/23/17 17:08	02/14/17 06:51	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.474		0.252	0.256	1.00	0.371	pCi/L	01/23/17 17:42	02/13/17 13:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.3		40 - 110					01/23/17 17:42	02/13/17 13:26	1
Y Carrier	88.6		40 - 110					01/23/17 17:42	02/13/17 13:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.854		0.335	0.340	5.00	0.371	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-18
Date Collected: 01/18/17 12:08
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-21
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	0.387		0.240	0.243	1.00	0.320	pCi/L	01/23/17 17:08	02/14/17 08:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.5		40 - 110					01/23/17 17:08	02/14/17 08:38	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.633		0.301	0.306	1.00	0.436	pCi/L	01/23/17 17:42	02/13/17 13:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	79.5		40 - 110					01/23/17 17:42	02/13/17 13:26	1
Y Carrier	87.5		40 - 110					01/23/17 17:42	02/13/17 13:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	1.02		0.385	0.391	5.00	0.436	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-19
Date Collected: 01/18/17 10:10
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-22
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	0.129	U	0.211	0.211	1.00	0.366	pCi/L	01/23/17 17:08	02/14/17 08:38	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.5		40 - 110					01/23/17 17:08	02/14/17 08:38	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.173	U	0.281	0.281	1.00	0.474	pCi/L	01/23/17 17:42	02/13/17 13:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	75.5		40 - 110					01/23/17 17:42	02/13/17 13:26	1
Y Carrier	85.2		40 - 110					01/23/17 17:42	02/13/17 13:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.302	U	0.351	0.352	5.00	0.474	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: DUP-03

Date Collected: 01/18/17 09:10

Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-23

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	0.164	U	0.177	0.178	1.00	0.281	pCi/L	01/23/17 17:08	02/14/17 08:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.3		40 - 110					01/23/17 17:08	02/14/17 08:39	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.491		0.258	0.262	1.00	0.378	pCi/L	01/23/17 17:42	02/13/17 13:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	84.3		40 - 110					01/23/17 17:42	02/13/17 13:26	1
Y Carrier	88.6		40 - 110					01/23/17 17:42	02/13/17 13:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.656		0.313	0.316	5.00	0.378	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
 SDG: NAMU

Client Sample ID: EB-03
Date Collected: 01/19/17 13:05
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-24
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	0.0438	U	0.165	0.165	1.00	0.317	pCi/L	01/23/17 17:08	02/14/17 08:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.6		40 - 110					01/23/17 17:08	02/14/17 08:39	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0228	U	0.222	0.222	1.00	0.403	pCi/L	01/23/17 17:42	02/13/17 13:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	82.6		40 - 110					01/23/17 17:42	02/13/17 13:27	1
Y Carrier	92.7		40 - 110					01/23/17 17:42	02/13/17 13:27	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0211	U	0.276	0.276	5.00	0.403	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: FB-03
Date Collected: 01/19/17 10:15
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-25
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	0.306		0.204	0.206	1.00	0.269	pCi/L	01/23/17 17:08	02/14/17 08:39	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.0		40 - 110					01/23/17 17:08	02/14/17 08:39	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.164	U	0.243	0.244	1.00	0.409	pCi/L	01/23/17 17:42	02/13/17 13:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	86.0		40 - 110					01/23/17 17:42	02/13/17 13:27	1
Y Carrier	88.2		40 - 110					01/23/17 17:42	02/13/17 13:27	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.469		0.318	0.319	5.00	0.409	pCi/L		02/17/17 09:22	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: DUP-04

Lab Sample ID: 400-132733-26

Date Collected: 01/19/17 08:03

Matrix: Water

Date Received: 01/19/17 15:05

Method: 9315 - Radium-226 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.485		0.268	0.272	1.00	0.350	pCi/L	01/23/17 17:08	02/14/17 08:40	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.8		40 - 110					01/23/17 17:08	02/14/17 08:40	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.304	U	0.273	0.275	1.00	0.438	pCi/L	01/23/17 17:42	02/13/17 13:27	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	77.8		40 - 110					01/23/17 17:42	02/13/17 13:27	1
Y Carrier	85.2		40 - 110					01/23/17 17:42	02/13/17 13:27	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.788		0.383	0.387	5.00	0.438	pCi/L		02/17/17 09:22	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-11
Date Collected: 01/19/17 12:54
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-14
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288776	01/23/17 15:39	AS	TAL SL
Total/NA	Analysis	9315		1	292221	02/14/17 10:39	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288784	01/23/17 16:11	AS	TAL SL
Total/NA	Analysis	9320		1	291912	02/10/17 12:31	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Client Sample ID: MW-12
Date Collected: 01/19/17 09:50
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288776	01/23/17 15:39	AS	TAL SL
Total/NA	Analysis	9315		1	292221	02/14/17 10:39	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288784	01/23/17 16:11	AS	TAL SL
Total/NA	Analysis	9320		1	291912	02/10/17 12:31	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Client Sample ID: MW-13
Date Collected: 01/19/17 10:55
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288791	01/23/17 17:08	AS	TAL SL
Total/NA	Analysis	9315		1	292221	02/14/17 06:51	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288794	01/23/17 17:42	AS	TAL SL
Total/NA	Analysis	9320		1	292017	02/13/17 13:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Client Sample ID: MW-14
Date Collected: 01/18/17 14:15
Date Received: 01/19/17 15:05

Lab Sample ID: 400-132733-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288791	01/23/17 17:08	AS	TAL SL
Total/NA	Analysis	9315		1	292221	02/14/17 06:51	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288794	01/23/17 17:42	AS	TAL SL
Total/NA	Analysis	9320		1	292017	02/13/17 13:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-15

Lab Sample ID: 400-132733-18

Date Collected: 01/19/17 09:03

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288791	01/23/17 17:08	AS	TAL SL
Total/NA	Analysis	9315		1	292221	02/14/17 06:51	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288794	01/23/17 17:42	AS	TAL SL
Total/NA	Analysis	9320		1	292017	02/13/17 13:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Client Sample ID: MW-16

Lab Sample ID: 400-132733-19

Date Collected: 01/18/17 09:35

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288791	01/23/17 17:08	AS	TAL SL
Total/NA	Analysis	9315		1	292221	02/14/17 06:51	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288794	01/23/17 17:42	AS	TAL SL
Total/NA	Analysis	9320		1	292017	02/13/17 13:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Client Sample ID: MW-17

Lab Sample ID: 400-132733-20

Date Collected: 01/18/17 11:21

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288791	01/23/17 17:08	AS	TAL SL
Total/NA	Analysis	9315		1	292221	02/14/17 06:51	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288794	01/23/17 17:42	AS	TAL SL
Total/NA	Analysis	9320		1	292017	02/13/17 13:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Client Sample ID: MW-18

Lab Sample ID: 400-132733-21

Date Collected: 01/18/17 12:08

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288791	01/23/17 17:08	AS	TAL SL
Total/NA	Analysis	9315		1	292220	02/14/17 08:38	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288794	01/23/17 17:42	AS	TAL SL
Total/NA	Analysis	9320		1	292017	02/13/17 13:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: MW-19

Lab Sample ID: 400-132733-22

Date Collected: 01/18/17 10:10

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288791	01/23/17 17:08	AS	TAL SL
Total/NA	Analysis	9315		1	292220	02/14/17 08:38	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288794	01/23/17 17:42	AS	TAL SL
Total/NA	Analysis	9320		1	292017	02/13/17 13:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Client Sample ID: DUP-03

Lab Sample ID: 400-132733-23

Date Collected: 01/18/17 09:10

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288791	01/23/17 17:08	AS	TAL SL
Total/NA	Analysis	9315		1	292220	02/14/17 08:39	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288794	01/23/17 17:42	AS	TAL SL
Total/NA	Analysis	9320		1	292017	02/13/17 13:26	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Client Sample ID: EB-03

Lab Sample ID: 400-132733-24

Date Collected: 01/19/17 13:05

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288791	01/23/17 17:08	AS	TAL SL
Total/NA	Analysis	9315		1	292220	02/14/17 08:39	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288794	01/23/17 17:42	AS	TAL SL
Total/NA	Analysis	9320		1	292017	02/13/17 13:27	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Client Sample ID: FB-03

Lab Sample ID: 400-132733-25

Date Collected: 01/19/17 10:15

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288791	01/23/17 17:08	AS	TAL SL
Total/NA	Analysis	9315		1	292220	02/14/17 08:39	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288794	01/23/17 17:42	AS	TAL SL
Total/NA	Analysis	9320		1	292017	02/13/17 13:27	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	RTM	TAL SL

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Client Sample ID: DUP-04

Lab Sample ID: 400-132733-26

Date Collected: 01/19/17 08:03

Matrix: Water

Date Received: 01/19/17 15:05

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			288791	01/23/17 17:08	AS	TAL SL
Total/NA	Analysis	9315		1	292221	02/14/17 08:40	RTM	TAL SL
Total/NA	Prep	PrecSep_0			288794	01/23/17 17:42	AS	TAL SL
Total/NA	Analysis	9320		1	292017	02/13/17 13:27	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	293069	02/17/17 09:22	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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Rad

Prep Batch: 288776

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-14	MW-11	Total/NA	Water	PrecSep-21	
400-132733-15	MW-12	Total/NA	Water	PrecSep-21	

Prep Batch: 288784

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-14	MW-11	Total/NA	Water	PrecSep_0	
400-132733-15	MW-12	Total/NA	Water	PrecSep_0	

Prep Batch: 288791

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-16	MW-13	Total/NA	Water	PrecSep-21	
400-132733-17	MW-14	Total/NA	Water	PrecSep-21	
400-132733-18	MW-15	Total/NA	Water	PrecSep-21	
400-132733-19	MW-16	Total/NA	Water	PrecSep-21	
400-132733-20	MW-17	Total/NA	Water	PrecSep-21	
400-132733-21	MW-18	Total/NA	Water	PrecSep-21	
400-132733-22	MW-19	Total/NA	Water	PrecSep-21	
400-132733-23	DUP-03	Total/NA	Water	PrecSep-21	
400-132733-24	EB-03	Total/NA	Water	PrecSep-21	
400-132733-25	FB-03	Total/NA	Water	PrecSep-21	
400-132733-26	DUP-04	Total/NA	Water	PrecSep-21	
MB 160-288791/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-288791/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-288791/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 288794

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-132733-16	MW-13	Total/NA	Water	PrecSep_0	
400-132733-17	MW-14	Total/NA	Water	PrecSep_0	
400-132733-18	MW-15	Total/NA	Water	PrecSep_0	
400-132733-19	MW-16	Total/NA	Water	PrecSep_0	
400-132733-20	MW-17	Total/NA	Water	PrecSep_0	
400-132733-21	MW-18	Total/NA	Water	PrecSep_0	
400-132733-22	MW-19	Total/NA	Water	PrecSep_0	
400-132733-23	DUP-03	Total/NA	Water	PrecSep_0	
400-132733-24	EB-03	Total/NA	Water	PrecSep_0	
400-132733-25	FB-03	Total/NA	Water	PrecSep_0	
400-132733-26	DUP-04	Total/NA	Water	PrecSep_0	
MB 160-288794/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-288794/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-288794/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-288791/1-A
Matrix: Water
Analysis Batch: 292221

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 288791

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.1040	U	0.176	0.176	1.00	0.310	pCi/L	01/23/17 17:08	02/14/17 06:51	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.1		40 - 110					01/23/17 17:08	02/14/17 06:51	1

Lab Sample ID: LCS 160-288791/2-A
Matrix: Water
Analysis Batch: 292777

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 288791

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	6.01	6.572		0.848	1.00	0.224	pCi/L	109	68 - 137
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	79.5		40 - 110						

Lab Sample ID: LCSD 160-288791/3-A
Matrix: Water
Analysis Batch: 292777

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 288791

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	6.01	6.794		0.876	1.00	0.214	pCi/L	113	68 - 137	0.13	1
Carrier	LCSD %Yield	LCSD Qualifier	Limits								
Ba Carrier	79.5		40 - 110								

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-288794/1-A
Matrix: Water
Analysis Batch: 292017

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 288794

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.3625	U	0.268	0.270	1.00	0.532	pCi/L	01/23/17 17:42	02/13/17 13:25	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	74.1		40 - 110					01/23/17 17:42	02/13/17 13:25	1
Y Carrier	89.7		40 - 110					01/23/17 17:42	02/13/17 13:25	1

QC Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
 SDG: NAMU

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

Lab Sample ID: LCS 160-288794/2-A
Matrix: Water
Analysis Batch: 292017

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 288794

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	13.9	15.06		1.65	1.00	0.488	pCi/L	109	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	79.5		40 - 110
Y Carrier	89.7		40 - 110

Lab Sample ID: LCSD 160-288794/3-A
Matrix: Water
Analysis Batch: 292017

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 288794

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	13.9	17.63		1.89	1.00	0.483	pCi/L	127	56 - 140	0.73	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	79.5		40 - 110
Y Carrier	87.5		40 - 110

TestAmerica Pensacola
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Chain of Custody Record

TestAmerica
 THE LEADER IN ENVIRONMENTAL TESTING

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 Project Name: *CCR - Plant Daniel*
 Site: *Mississippi*

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 Email: *cheyenne.wilmitre@testamerica.com*

Sample:
Five Hydrocarbons / Surfer
 Phone: *850-336-0192*

Carrier Tracking No(s):
 COC No: *400-61562-24634.1*
 Page: *Page 1 of 2*
 Lab #:

Due Date Requested	Analysis Requested	Preservation Codes:
TAT Requested (days):	9310, Na2S2O8, B220, P2220 9M4500, Cl E, SM4500, SO4 E 6020, Y470A 2540C - Total Dissolved Solids 4500, J, S - Fluoride	A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:
PO #: SCS10328728		M - Hexane N - Nore O - Aqueous P - Na2CO3 Q - Na2SO3 R - Na2SO4 S - H2SO4 T - TSP Dodecylhydrate U - Acetone V - MCAA W - pH 4.5 X - EDTA Z - other (specify)
MO #: 37180		
Project #: 40006521		
SSOWE:		

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (Element, Compound, Distribution, Preparation, Analyte)	Analysis Requested
EB-01	1-16-17	1400	Water	Water	X X X X X
EB-02			Water	Water	
EB-03			Water	Water	
EB-04	1-16-17	1335	Water	Water	X X X X X
EB-05			Water	Water	
EB-06			Water	Water	
DUP-01	1-16-17	0710	Water	Water	X X X X X
DUP-02			Water	Water	
DUP-03			Water	Water	

Possible Hazard Identification
 Non-Hazard Flammable Skin Irritant
 Deliverable Requested: I, II, III, IV, Other (specify)

Empty Kit Requisitioned by:
 Requisitioned by: *[Signature]*
 Date: *1-17-17 1330*
 Company: *RAH EW*

Requisitioned by:
 Requisitioned by: *[Signature]*
 Date: *1/17/17 1733*
 Company: *RAH EW*

Requisitioned by:
 Requisitioned by: *[Signature]*
 Date: *1/17/17 1330*
 Company: *RAH EW*

Special Instructions (QC Requirements):
 Return To Client Disposal By Lab Archive For _____ Months

Cooler Temperature(s) °C and Other Remarks: *0.0°C, 0.0°C, 0.0°C TRG*

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

Chain of Custody Record

TestAmerica
 METROLOGICAL TESTING

Client Information
 Client Contact: Mr. Dale Sellers
 Company: Southern Company
 Address: PO BOX 2641 CSC8
 City: Birmingham
 State, Zip: AL, 35291
 Phone: 205-992-7762(Tel)
 PO #: SCS10328728
 FPO #: 37180
 Project #: 40006621
 CCR #: Plant Daniel
 Site: Mississippi

Sampler: Brett Surles
 Lab Pkt: Whitmore, Cherylene R
 E-Mail: cherylene.whitmore@testamerica.com
 Phone: 850 380 3458

Carrier Tracking No.: 400-81559-23825.1
 Pages: 1 of 2
 Page #:

Analysis Requested
 3918 Ra226, 9320 Ra228
 5M4500 Cl, E, 5M4500, SO4 E
 8020, 7470A
 820C - Total Dissolved Solids
 4800 F, C - Fluoride

Preservation Codes:
 M - Hexane
 N - None
 O - AsksO2
 P - N2/OAS
 Q - N2/SO3
 R - N2/SO3
 S - H2SO4
 T - TSP Doosepyrate
 U - Acetone
 V - MCAA
 W - pH 4.5
 Z - other (specify):

Special Instructions/Notes:

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix (Water, Sewage, On-water, Air)	Analysis Requested
MW-11	1/19/17	1254	G	Water	X X X X X
MW-12	1/19/17	0950		Water	X X X X X
MW-13	1/19/17	1055		Water	X X X X X
MW-14	1/18/17	1415		Water	X X X X X
MW-15	1/19/17	0903		Water	X X X X X
MW-16	1/18/17	0935		Water	X X X X X
MW-17	1/18/17	1121		Water	X X X X X
MW-18	1/18/17	1208		Water	X X X X X
MW-19	1/18/17	1010		Water	X X X X X
Dup-03	1/18/17	0910		Water	X X X X X
EB-03	1/19/17	1305	G	Water	X X X X X

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

Special Instructions/QC Requirements:

Received by: [Signature] Date: 1/19/17
 Received by: [Signature] Date: 1/19/17
 Received by: [Signature] Date: 1/19/17

Company: Southern Company
 Custody Seals Intact: Yes No
 Delta: 5.7°C, 5.1°C, 3.0°C IR6

SERIAL NUMBER: 83540

TestAmerica
THE LEADER IN ENVIRONMENTAL TESTING

ANALYSIS REQUEST AND CHAIN OF CUSTODY RECORD

TestAmerica Pensacola
3355 McLemore Drive
Pensacola, FL 32514
Phone: 850-474-1001
Fax: 850-478-2671
Website: www.testamericainc.com

QUOTE NO. BOTTLE ORDER NO. ORDER - LOG-IN NO. **C**

CLIENT: Southern Co
PROJECT NO. 20 Box 2641 GSC 8
CLIENT PROJECT MANAGER: Benjamin AI 35291
SAMPLED BY: CCR - Daniel
CONTRACT / P.O. NO.: Cate Sellers
CLIENT PHONE: RDH ENV
CLIENT E-MAIL OR FAX:
205 992-7762
TAT REQUESTED: RUSH NEEDS LAB PREAPPROVAL NORMAL 10 BUSINESS DAYS
 1 DAY 2 DAYS 3 DAYS 5 DAYS 20 DAYS (Package) OTHER:
SAMPLE DISPOSAL: RETURN TO CLIENT DISPOSAL BY LAB
 SEE CONTRACT OTHER:

ADDRESS: 20 Box 2641 GSC 8
PROJECT LOC. (STATE): MS
PRESERVATIVE: HCL - Hydrochloric Acid, HNO3 - Nitric Acid, H2SO4 - Sulfuric Acid or H3PO4, NaOH - Sodium Hydroxide, CH3OH - Methanol, NAHSO4 - Sodium Bisulfate, NA2SO3 - Sodium Thiosulfate, Other:

MATRIX: Drinking Water, Aqueous GW, SW, WW, Solid, Semisolid, Sediment, Air, NonAqueous (Oil, Solvent, etc.)

REQUESTED ANALYSIS: 9315-R-226, R-228, 8M4500-C1E, 8M4500-C2F, 6620, 7470A, 8546C-TDS, 4500-f.c.-Fluoride

DATE	TIME	SAMPLE IDENTIFICATION	RELINQUISHED BY: (SIGNATURE)	DATE	TIME	RECEIVED BY: (SIGNATURE)	DATE	TIME
1/19/17	1015	FB-03	[Signature]	1/19/17	1505	[Signature]		
1/19/17	0803	DUP 04	[Signature]					

NO. OF COOLERS PER SHIPMENT: 4500-f.c.-Fluoride

SPECIAL INSTRUCTIONS/CONDITIONS OF RECEIPT:

RECEIVED FOR LABORATORY BY: [Signature]
DATE: 1/19/17 TIME: 1505
CUSTODY SEAL NO. A YES NO

REMARKS:



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-132733-4

SDG Number: NAMU

Login Number: 132733

List Number: 1

Creator: Hughes, Nicholas T

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C, 0.0°C, 0.0°C IR-6; 3.0°C, 5.1°C, 5.7°C IR-6
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
 SDG: NAMU

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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-132733-4
SDG: NAMU

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.

TestAmerica Pensacola

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: 400-133837-1

TestAmerica Sample Delivery Group: NAMU

Client Project/Site: CCR -Plant Daniel

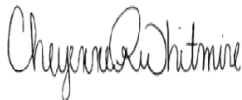
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:

2/28/2017 5:48:43 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

LINKS

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results through

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www.testamericainc.com

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

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

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

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Case Narrative

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-1
SDG: NAMU

Job ID: 400-133837-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-133837-1

General Chemistry

Method(s) SM 4500 F C: The sample duplicate precision for the following sample associated with batch 342495 was outside control limits. Both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL. (400-133689-D-3 DU).

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- 14

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-1
SDG: NAMU

Client Sample ID: MW-19

Lab Sample ID: 400-133837-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00080	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.030		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.58		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00047	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	28		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	5.4		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	5.14				SU	1		Field Sampling	Total/NA

Client Sample ID: FB-01

Lab Sample ID: 400-133837-2

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-1
SDG: NAMU

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
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
Field Sampling	Field Sampling	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-1
SDG: NAMU

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-133837-1	MW-19	Water	02/10/17 09:57	02/10/17 15:45
400-133837-2	FB-01	Water	02/10/17 09:35	02/10/17 15:45

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- 13
- 14

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-1
SDG: NAMU

Client Sample ID: MW-19
Date Collected: 02/10/17 09:57
Date Received: 02/10/17 15:45

Lab Sample ID: 400-133837-1
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		02/13/17 09:10	02/20/17 15:31	5
Arsenic	0.00080	J	0.0013	0.00046	mg/L		02/13/17 09:10	02/20/17 15:31	5
Barium	0.030		0.0025	0.00049	mg/L		02/13/17 09:10	02/20/17 15:31	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		02/13/17 09:10	02/20/17 15:31	5
Boron	<0.021		0.050	0.021	mg/L		02/13/17 09:10	02/20/17 15:31	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		02/13/17 09:10	02/20/17 15:31	5
Calcium	0.58		0.25	0.13	mg/L		02/13/17 09:10	02/20/17 15:31	5
Chromium	<0.0011		0.0025	0.0011	mg/L		02/13/17 09:10	02/20/17 15:31	5
Cobalt	0.00047	J	0.0025	0.00040	mg/L		02/13/17 09:10	02/20/17 15:31	5
Lead	<0.00035		0.0013	0.00035	mg/L		02/13/17 09:10	02/20/17 15:31	5
Lithium	<0.0032		0.0050	0.0032	mg/L		02/13/17 09:10	02/20/17 15:31	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		02/13/17 09:10	02/20/17 15:31	5
Selenium	<0.00024		0.0013	0.00024	mg/L		02/13/17 09:10	02/20/17 15:31	5
Thallium	<0.000085		0.00050	0.000085	mg/L		02/13/17 09:10	02/20/17 15:31	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		02/13/17 09:16	02/14/17 14:13	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	28		5.0	3.4	mg/L			02/16/17 17:15	1
Chloride	5.4		2.0	0.60	mg/L			02/17/17 11:39	1
Fluoride	<0.032		0.10	0.032	mg/L			02/15/17 18:01	1
Sulfate	<1.4		5.0	1.4	mg/L			02/17/17 12:12	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.14				SU			02/10/17 09:57	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-1
SDG: NAMU

Client Sample ID: FB-01
Date Collected: 02/10/17 09:35
Date Received: 02/10/17 15:45

Lab Sample ID: 400-133837-2
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		02/13/17 09:10	02/20/17 15:35	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		02/13/17 09:10	02/20/17 15:35	5
Barium	<0.00049		0.0025	0.00049	mg/L		02/13/17 09:10	02/20/17 15:35	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		02/13/17 09:10	02/20/17 15:35	5
Boron	<0.021		0.050	0.021	mg/L		02/13/17 09:10	02/20/17 15:35	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		02/13/17 09:10	02/20/17 15:35	5
Calcium	<0.13		0.25	0.13	mg/L		02/13/17 09:10	02/20/17 15:35	5
Chromium	<0.0011		0.0025	0.0011	mg/L		02/13/17 09:10	02/20/17 15:35	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		02/13/17 09:10	02/20/17 15:35	5
Lead	<0.00035		0.0013	0.00035	mg/L		02/13/17 09:10	02/20/17 15:35	5
Lithium	<0.0032		0.0050	0.0032	mg/L		02/13/17 09:10	02/20/17 15:35	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		02/13/17 09:10	02/20/17 15:35	5
Selenium	<0.00024		0.0013	0.00024	mg/L		02/13/17 09:10	02/20/17 15:35	5
Thallium	<0.000085		0.00050	0.000085	mg/L		02/13/17 09:10	02/20/17 15:35	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		02/13/17 09:16	02/14/17 14:15	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			02/16/17 17:15	1
Chloride	<0.60		2.0	0.60	mg/L			02/17/17 11:39	1
Fluoride	<0.032		0.10	0.032	mg/L			02/15/17 18:03	1
Sulfate	<1.4		5.0	1.4	mg/L			02/17/17 12:12	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-1
SDG: NAMU

Qualifiers

Metals

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.

General Chemistry

Qualifier	Qualifier Description
F5	Duplicate RPD exceeds limit, and one or both sample results are less than 5 times RL. The data are considered valid because the absolute difference is less than the RL.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

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

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-1
SDG: NAMU

Client Sample ID: MW-19

Date Collected: 02/10/17 09:57

Date Received: 02/10/17 15:45

Lab Sample ID: 400-133837-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			341971	02/13/17 09:10	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	343047	02/20/17 15:31	DRE	TAL PEN
Total/NA	Prep	7470A			341984	02/13/17 09:16	JAP	TAL PEN
Total/NA	Analysis	7470A		1	342270	02/14/17 14:13	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	342600	02/16/17 17:15	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	342769	02/17/17 11:39	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	342495	02/15/17 18:01	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	342773	02/17/17 12:12	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	343304	02/10/17 09:57	BWS	TAL PEN

Client Sample ID: FB-01

Date Collected: 02/10/17 09:35

Date Received: 02/10/17 15:45

Lab Sample ID: 400-133837-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			341971	02/13/17 09:10	RJB	TAL PEN
Total Recoverable	Analysis	6020		5	343047	02/20/17 15:35	DRE	TAL PEN
Total/NA	Prep	7470A			341984	02/13/17 09:16	JAP	TAL PEN
Total/NA	Analysis	7470A		1	342270	02/14/17 14:15	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	342600	02/16/17 17:15	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	342769	02/17/17 11:39	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	342495	02/15/17 18:03	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	342773	02/17/17 12:12	BJB	TAL PEN

Laboratory References:

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

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-1
SDG: NAMU

Metals

Prep Batch: 341971

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-133837-1	MW-19	Total Recoverable	Water	3005A	
400-133837-2	FB-01	Total Recoverable	Water	3005A	
MB 400-341971/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-341971/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-133741-L-7-E MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-133741-L-7-F MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Prep Batch: 341984

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-133837-1	MW-19	Total/NA	Water	7470A	
400-133837-2	FB-01	Total/NA	Water	7470A	
MB 400-341984/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-341984/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-133768-F-1-B MS	Matrix Spike	Total/NA	Water	7470A	
400-133768-F-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 342270

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-133837-1	MW-19	Total/NA	Water	7470A	341984
400-133837-2	FB-01	Total/NA	Water	7470A	341984
MB 400-341984/14-A	Method Blank	Total/NA	Water	7470A	341984
LCS 400-341984/15-A	Lab Control Sample	Total/NA	Water	7470A	341984
400-133768-F-1-B MS	Matrix Spike	Total/NA	Water	7470A	341984
400-133768-F-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	341984

Analysis Batch: 342964

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MB 400-341971/1-A ^5	Method Blank	Total Recoverable	Water	6020	341971

Analysis Batch: 343047

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-133837-1	MW-19	Total Recoverable	Water	6020	341971
400-133837-2	FB-01	Total Recoverable	Water	6020	341971
MB 400-341971/1-A ^5	Method Blank	Total Recoverable	Water	6020	341971
LCS 400-341971/2-A	Lab Control Sample	Total Recoverable	Water	6020	341971
400-133741-L-7-E MS ^5	Matrix Spike	Total Recoverable	Water	6020	341971
400-133741-L-7-F MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	341971

General Chemistry

Analysis Batch: 342495

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-133837-1	MW-19	Total/NA	Water	SM 4500 F C	
400-133837-2	FB-01	Total/NA	Water	SM 4500 F C	
MB 400-342495/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-342495/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-133689-D-1 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-133689-D-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-133689-D-3 DU	Duplicate	Total/NA	Water	SM 4500 F C	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-1
SDG: NAMU

General Chemistry (Continued)

Analysis Batch: 342600

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-133837-1	MW-19	Total/NA	Water	SM 2540C	
400-133837-2	FB-01	Total/NA	Water	SM 2540C	
MB 400-342600/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-342600/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-133856-A-5 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 342769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-133837-1	MW-19	Total/NA	Water	SM 4500 Cl- E	
400-133837-2	FB-01	Total/NA	Water	SM 4500 Cl- E	
MB 400-342769/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-342769/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-133837-2 MS	FB-01	Total/NA	Water	SM 4500 Cl- E	
400-133837-2 MSD	FB-01	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 342773

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-133837-1	MW-19	Total/NA	Water	SM 4500 SO4 E	
400-133837-2	FB-01	Total/NA	Water	SM 4500 SO4 E	
MB 400-342773/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-342773/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-342773/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-133837-2 MS	FB-01	Total/NA	Water	SM 4500 SO4 E	
400-133837-2 MSD	FB-01	Total/NA	Water	SM 4500 SO4 E	

Field Service / Mobile Lab

Analysis Batch: 343304

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-133837-1	MW-19	Total/NA	Water	Field Sampling	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-1
SDG: NAMU

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-341971/1-A ^5
Matrix: Water
Analysis Batch: 342964

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 341971

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Arsenic	<0.00046		0.0013	0.00046	mg/L		02/13/17 09:10	02/18/17 18:24	5
Barium	<0.00049		0.0025	0.00049	mg/L		02/13/17 09:10	02/18/17 18:24	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		02/13/17 09:10	02/18/17 18:24	5
Boron	<0.021		0.050	0.021	mg/L		02/13/17 09:10	02/18/17 18:24	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		02/13/17 09:10	02/18/17 18:24	5
Chromium	<0.0011		0.0025	0.0011	mg/L		02/13/17 09:10	02/18/17 18:24	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		02/13/17 09:10	02/18/17 18:24	5
Lead	<0.00035		0.0013	0.00035	mg/L		02/13/17 09:10	02/18/17 18:24	5
Lithium	<0.0032		0.0050	0.0032	mg/L		02/13/17 09:10	02/18/17 18:24	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		02/13/17 09:10	02/18/17 18:24	5
Thallium	<0.000085		0.00050	0.000085	mg/L		02/13/17 09:10	02/18/17 18:24	5

Lab Sample ID: MB 400-341971/1-A ^5
Matrix: Water
Analysis Batch: 343047

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 341971

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		02/13/17 09:10	02/20/17 14:55	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		02/13/17 09:10	02/20/17 14:55	5
Barium	<0.00049		0.0025	0.00049	mg/L		02/13/17 09:10	02/20/17 14:55	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		02/13/17 09:10	02/20/17 14:55	5
Boron	<0.021		0.050	0.021	mg/L		02/13/17 09:10	02/20/17 14:55	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		02/13/17 09:10	02/20/17 14:55	5
Calcium	<0.13		0.25	0.13	mg/L		02/13/17 09:10	02/20/17 14:55	5
Chromium	<0.0011		0.0025	0.0011	mg/L		02/13/17 09:10	02/20/17 14:55	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		02/13/17 09:10	02/20/17 14:55	5
Lead	<0.00035		0.0013	0.00035	mg/L		02/13/17 09:10	02/20/17 14:55	5
Lithium	<0.0032		0.0050	0.0032	mg/L		02/13/17 09:10	02/20/17 14:55	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		02/13/17 09:10	02/20/17 14:55	5
Selenium	<0.00024		0.0013	0.00024	mg/L		02/13/17 09:10	02/20/17 14:55	5
Thallium	<0.000085		0.00050	0.000085	mg/L		02/13/17 09:10	02/20/17 14:55	5

Lab Sample ID: LCS 400-341971/2-A
Matrix: Water
Analysis Batch: 343047

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 341971

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Antimony	0.0500	0.0522		mg/L		104	80 - 120
Arsenic	0.0500	0.0475		mg/L		95	80 - 120
Barium	0.0500	0.0512		mg/L		102	80 - 120
Beryllium	0.0500	0.0526		mg/L		105	80 - 120
Boron	0.100	0.0978		mg/L		98	80 - 120
Cadmium	0.0500	0.0475		mg/L		95	80 - 120
Calcium	5.00	4.74		mg/L		95	80 - 120
Chromium	0.0500	0.0478		mg/L		96	80 - 120
Cobalt	0.0500	0.0466		mg/L		93	80 - 120
Lead	0.0500	0.0476		mg/L		95	80 - 120
Lithium	0.0500	0.0495		mg/L		99	80 - 120

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-1
SDG: NAMU

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: LCS 400-341971/2-A
Matrix: Water
Analysis Batch: 343047

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 341971

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Molybdenum	0.100	0.0941		mg/L		94	80 - 120
Selenium	0.0500	0.0484		mg/L		97	80 - 120
Thallium	0.0100	0.00987		mg/L		99	80 - 120

Lab Sample ID: 400-133741-L-7-E MS ^5
Matrix: Water
Analysis Batch: 343047

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 341971

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0010		0.0500	0.0514		mg/L		103	75 - 125
Arsenic	0.062		0.0500	0.112		mg/L		99	75 - 125
Beryllium	<0.00034		0.0500	0.0544		mg/L		109	75 - 125
Boron	0.37		0.100	0.480		mg/L		108	75 - 125
Cadmium	<0.00034		0.0500	0.0471		mg/L		94	75 - 125
Chromium	<0.0011		0.0500	0.0467		mg/L		93	75 - 125
Cobalt	0.00053	J	0.0500	0.0459		mg/L		91	75 - 125
Lead	<0.00035		0.0500	0.0485		mg/L		97	75 - 125
Lithium	0.027		0.0500	0.0759		mg/L		97	75 - 125
Molybdenum	<0.00085		0.100	0.0921		mg/L		92	75 - 125
Selenium	<0.00024		0.0500	0.0491		mg/L		98	75 - 125
Thallium	<0.00085		0.0100	0.00994		mg/L		99	75 - 125

Lab Sample ID: 400-133741-L-7-F MSD ^5
Matrix: Water
Analysis Batch: 343047

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 341971

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	Limit
Antimony	<0.0010		0.0500	0.0512		mg/L		102	75 - 125	0	20
Arsenic	0.062		0.0500	0.110		mg/L		97	75 - 125	1	20
Beryllium	<0.00034		0.0500	0.0531		mg/L		106	75 - 125	2	20
Boron	0.37		0.100	0.474		mg/L		102	75 - 125	1	20
Cadmium	<0.00034		0.0500	0.0476		mg/L		95	75 - 125	1	20
Chromium	<0.0011		0.0500	0.0472		mg/L		94	75 - 125	1	20
Cobalt	0.00053	J	0.0500	0.0454		mg/L		90	75 - 125	1	20
Lead	<0.00035		0.0500	0.0476		mg/L		95	75 - 125	2	20
Lithium	0.027		0.0500	0.0746		mg/L		95	75 - 125	2	20
Molybdenum	<0.00085		0.100	0.0927		mg/L		93	75 - 125	1	20
Selenium	<0.00024		0.0500	0.0479		mg/L		96	75 - 125	3	20
Thallium	<0.00085		0.0100	0.00970		mg/L		97	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-341984/14-A
Matrix: Water
Analysis Batch: 342270

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 341984

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		02/13/17 08:59	02/14/17 13:32	1

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-1
SDG: NAMU

Method: 7470A - Mercury (CVAA) (Continued)

Lab Sample ID: LCS 400-341984/15-A
Matrix: Water
Analysis Batch: 342270

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 341984

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00101	0.000995		mg/L		99	80 - 120

Lab Sample ID: 400-133768-F-1-B MS
Matrix: Water
Analysis Batch: 342270

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 341984

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.000070		0.00201	0.00168		mg/L		84	80 - 120

Lab Sample ID: 400-133768-F-1-C MSD
Matrix: Water
Analysis Batch: 342270

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 341984

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Mercury	<0.000070		0.00201	0.00162		mg/L		81	80 - 120	4	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 400-342600/1
Matrix: Water
Analysis Batch: 342600

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			02/16/17 17:15	1

Lab Sample ID: LCS 400-342600/2
Matrix: Water
Analysis Batch: 342600

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Total Dissolved Solids	293	272		mg/L		93	78 - 122

Lab Sample ID: 400-133856-A-5 DU
Matrix: Water
Analysis Batch: 342600

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	Limit
Total Dissolved Solids	100		100		mg/L		0	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-342769/6
Matrix: Water
Analysis Batch: 342769

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			02/17/17 10:36	1

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-1
SDG: NAMU

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: LCS 400-342769/7
Matrix: Water
Analysis Batch: 342769

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	31.8		mg/L		106	90 - 110

Lab Sample ID: 400-133837-2 MS
Matrix: Water
Analysis Batch: 342769

Client Sample ID: FB-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<0.60		10.0	11.2		mg/L		112	73 - 120

Lab Sample ID: 400-133837-2 MSD
Matrix: Water
Analysis Batch: 342769

Client Sample ID: FB-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<0.60		10.0	11.3		mg/L		113	73 - 120	1	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-342495/3
Matrix: Water
Analysis Batch: 342495

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			02/15/17 16:27	1

Lab Sample ID: LCS 400-342495/4
Matrix: Water
Analysis Batch: 342495

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	3.98		mg/L		100	90 - 110

Lab Sample ID: 400-133689-D-1 MS
Matrix: Water
Analysis Batch: 342495

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	1.10		mg/L		105	75 - 125

Lab Sample ID: 400-133689-D-1 MSD
Matrix: Water
Analysis Batch: 342495

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	1.06		mg/L		101	75 - 125	4	4

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-1
SDG: NAMU

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: 400-133689-D-3 DU
Matrix: Water
Analysis Batch: 342495

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride	0.10		0.110	F5	mg/L		10	4

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-342773/6
Matrix: Water
Analysis Batch: 342773

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			02/17/17 10:57	1

Lab Sample ID: LCS 400-342773/7
Matrix: Water
Analysis Batch: 342773

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	14.0		mg/L		93	90 - 110

Lab Sample ID: MRL 400-342773/3
Matrix: Water
Analysis Batch: 342773

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	4.62	J	mg/L		92	50 - 150

Lab Sample ID: 400-133837-2 MS
Matrix: Water
Analysis Batch: 342773

Client Sample ID: FB-01
Prep Type: Total/NA


Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	<1.4		10.0	10.6		mg/L		106	77 - 128

Lab Sample ID: 400-133837-2 MSD
Matrix: Water
Analysis Batch: 342773

Client Sample ID: FB-01
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	<1.4		10.0	10.5		mg/L		105	77 - 128	1	5

Chain of Custody Record

Client Information Client Contact: Rick Haysendorfer Mr. Cale Sellers Southern Company Address: PO BOX 2641 GSC8 Birmingham State, Zip: AL, 35291 Phone: 205-992-7762(Tel) Email: CBSSELLER@SOUTHERNCO.COM Project Name: CCR -Plant Daniel Site: NAMU		Lab P/N: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com Carrier Tracking No(s): COC No: 400-55446-23825.2 Page: Job #:	
Due Date Requested: TAT Requested (days): PO #: Purchase Order not required WO #: Project #: 40006621 SSO/W#:		Analysis Requested  400-133837 COC	
Sample Identification MW-19 FB-01 FB-01		Field Sampling Parameters Mercury Total Dissolved Solids, 4500 F, C - Fluoride 9316_Ra226, 9320_Ra228, Ra226Ra228_GFP 9316_Ra226, 9320_Ra228, Ra226Ra228_GFP	
Sample Identification Sample Date: 2-10-17 0957 2-10-17 0935 Sample Type (C=Comp, G=grab): 6 6 Matrix (W=Water, S=Soil, O=Other): Water Water Field Filtered Sample (Yes or No): Perform MS/MSD (Yes or No): Field Filled Sample (Yes or No):		Special Instructions/Note: Total Number of Containers: 3 3	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological			
Deliverable Requested: 1, II, III, IV, Other (specify)			
Empty Kit Relinquished by:			
Relinquished by: [Signature] Date/Time: 2-10-17 1545 Company: ROH ENV		Relinquished by: [Signature] Date/Time: 2-10-17 1545 Company: TA-PEN	
Relinquished by: [Signature] Date/Time: 2-10-17 1545 Company: ROH ENV		Relinquished by: [Signature] Date/Time: 2-10-17 1545 Company: TA-PEN	
Relinquished by: [Signature] Date/Time: 2-10-17 1545 Company: ROH ENV		Relinquished by: [Signature] Date/Time: 2-10-17 1545 Company: TA-PEN	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No Custody Seal No.:		Cooler Temperature(s) °C and Other Remarks: 0.0C IRT	



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-133837-1

SDG Number: NAMU

Login Number: 133837

List Number: 1

Creator: Franklin, Justin H

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-1
SDG: NAMU

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Certification ID	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-17
Louisiana (DW)	NELAP Secondary AB	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Pensacola

3355 McLemore Drive

Pensacola, FL 32514

Tel: (850)474-1001

TestAmerica Job ID: 400-133837-2

TestAmerica Sample Delivery Group: NAMU

Client Project/Site: CCR -Plant Daniel

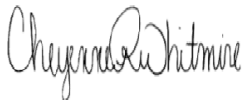
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:

3/14/2017 2:16:00 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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-2
SDG: NAMU

Job ID: 400-133837-2

Laboratory: TestAmerica Pensacola

Narrative

**Job Narrative
400-133837-2**

RAD

Method(s) PrecSep_0: Radium 228; Prep Batch 292626. Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate/sample duplicate (MS/MSD/DUP) associated with preparation batch 160-292626. An LCS/LCSD were prepped to demonstrate batch precision.

Method(s) PrecSep-21: Radium 226; Prep Batch 292551. Insufficient sample volume was available to perform a sample duplicate (DU) associated . An LCS/LCSD were prepped to demonstrate batch precision. MW-19 (400-133837-1) and FB-01 (400-133837-2)

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Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-2
SDG: NAMU

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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-2
SDG: NAMU

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-133837-1	MW-19	Water	02/10/17 09:57	02/10/17 15:45
400-133837-2	FB-01	Water	02/10/17 09:35	02/10/17 15:45

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-2
SDG: NAMU

Client Sample ID: MW-19
Date Collected: 02/10/17 09:57
Date Received: 02/10/17 15:45

Lab Sample ID: 400-133837-1
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	0.164	U	0.121	0.122	1.00	0.170	pCi/L	02/15/17 09:56	03/09/17 05:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					02/15/17 09:56	03/09/17 05:54	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.412		0.235	0.238	1.00	0.354	pCi/L	02/15/17 15:27	03/06/17 10:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					02/15/17 15:27	03/06/17 10:26	1
Y Carrier	86.0		40 - 110					02/15/17 15:27	03/06/17 10:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.576		0.265	0.268	5.00	0.354	pCi/L		03/09/17 12:02	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-2
SDG: NAMU

Client Sample ID: FB-01
Date Collected: 02/10/17 09:35
Date Received: 02/10/17 15:45

Lab Sample ID: 400-133837-2
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	0.0525	U	0.101	0.101	1.00	0.181	pCi/L	02/15/17 09:56	03/09/17 05:54	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					02/15/17 09:56	03/09/17 05:54	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0715	U	0.218	0.218	1.00	0.398	pCi/L	02/15/17 15:27	03/06/17 10:26	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.6		40 - 110					02/15/17 15:27	03/06/17 10:26	1
Y Carrier	88.2		40 - 110					02/15/17 15:27	03/06/17 10:26	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0190	U	0.241	0.241	5.00	0.398	pCi/L		03/09/17 12:02	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-2
SDG: NAMU

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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-2
SDG: NAMU

Client Sample ID: MW-19

Date Collected: 02/10/17 09:57

Date Received: 02/10/17 15:45

Lab Sample ID: 400-133837-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			292551	02/15/17 09:56	PJM	TAL SL
Total/NA	Analysis	9315		1	296684	03/09/17 05:54	RTM	TAL SL
Total/NA	Prep	PrecSep_0			292626	02/15/17 15:27	MBC	TAL SL
Total/NA	Analysis	9320		1	296099	03/06/17 10:26	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	296901	03/09/17 12:02	RTM	TAL SL

Client Sample ID: FB-01

Date Collected: 02/10/17 09:35

Date Received: 02/10/17 15:45

Lab Sample ID: 400-133837-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			292551	02/15/17 09:56	PJM	TAL SL
Total/NA	Analysis	9315		1	296684	03/09/17 05:54	RTM	TAL SL
Total/NA	Prep	PrecSep_0			292626	02/15/17 15:27	MBC	TAL SL
Total/NA	Analysis	9320		1	296099	03/06/17 10:26	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	296901	03/09/17 12:02	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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-2
SDG: NAMU

Rad

Prep Batch: 292551

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-133837-1	MW-19	Total/NA	Water	PrecSep-21	
400-133837-2	FB-01	Total/NA	Water	PrecSep-21	
MB 160-292551/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-292551/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
LCSD 160-292551/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep-21	

Prep Batch: 292626

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-133837-1	MW-19	Total/NA	Water	PrecSep_0	
400-133837-2	FB-01	Total/NA	Water	PrecSep_0	
MB 160-292626/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-292626/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
LCSD 160-292626/3-A	Lab Control Sample Dup	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-2
SDG: NAMU

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-292551/1-A
Matrix: Water
Analysis Batch: 296683

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 292551

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.04152	U	0.104	0.104	1.00	0.190	pCi/L	02/15/17 09:56	03/09/17 05:50	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.3		40 - 110					02/15/17 09:56	03/09/17 05:50	1

Lab Sample ID: LCS 160-292551/2-A
Matrix: Water
Analysis Batch: 296683

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 292551

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	11.3	10.40		1.17	1.00	0.197	pCi/L	92	68 - 137
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	87.9		40 - 110						

Lab Sample ID: LCSD 160-292551/3-A
Matrix: Water
Analysis Batch: 296683

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 292551

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-226	11.3	11.96		1.31	1.00	0.177	pCi/L	106	68 - 137	0.63	1
Carrier	LCSD %Yield	LCSD Qualifier	Limits								
Ba Carrier	87.6		40 - 110								

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-292626/1-A
Matrix: Water
Analysis Batch: 296097

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 292626

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.3759	U	0.321	0.323	1.00	0.513	pCi/L	02/15/17 15:27	03/06/17 10:22	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	87.3		40 - 110					02/15/17 15:27	03/06/17 10:22	1
Y Carrier	87.1		40 - 110					02/15/17 15:27	03/06/17 10:22	1

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-2
SDG: NAMU

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

Lab Sample ID: LCS 160-292626/2-A
Matrix: Water
Analysis Batch: 296097

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 292626

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-228	18.3	18.45		1.99	1.00	0.489	pCi/L	101	56 - 140

Carrier	LCS %Yield	LCS Qualifier	Limits
Ba Carrier	87.9		40 - 110
Y Carrier	88.6		40 - 110

Lab Sample ID: LCSD 160-292626/3-A
Matrix: Water
Analysis Batch: 296097

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA
Prep Batch: 292626

Analyte	Spike Added	LCSD Result	LCSD Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
Radium-228	18.3	18.66		2.00	1.00	0.452	pCi/L	102	56 - 140	0.05	1

Carrier	LCSD %Yield	LCSD Qualifier	Limits
Ba Carrier	87.6		40 - 110
Y Carrier	92.7		40 - 110


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

Lab Sample ID: 400-133856-A-8 DU
Matrix: Water
Analysis Batch: 296901

Client Sample ID: Duplicate
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	0.0400	U	0.1677	U	0.218	5.00	0.323	pCi/L	0.28	

Chain of Custody Record

Client Information Client Contact: <i>Rick Haysendorfer</i> Mr. Cale Sellers Southern Company Address: PO BOX 2641 GSC8 Birmingham State, Zip: AL, 35291 Phone: 205-992-7762(Tel) Email: CBSSELLER@SOUTHERNCO.COM Project Name: CCR -Plant Daniel Site: NAMU		Lab P/N: Whitmire, Chyenne R E-Mail: chyenne.whitmire@testamericainc.com Carrier Tracking No(s): COC No: 400-55446-23825.2 Page: Job #:	
Due Date Requested: TAT Requested (days): PO #: Purchase Order not required WO #:		Analysis Requested  400-133837 COC	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:	
Empty Kit Relinquished by:		Method of Shipment:	
Relinquished by: <i>[Signature]</i> Relinquished by:		Received by: <i>[Signature]</i> Received by:	
Relinquished by:		Received by:	
Relinquished by:		Received by:	
Date/Time: 2-10-17 0957 Date/Time: 2-10-17 0935		Date/Time: 2/10/17 1545 Date/Time:	
Date/Time:		Date/Time:	
Custody Seals Intact: <input type="checkbox"/> Yes <input type="checkbox"/> No		Cooler Temperature(s) °C and Other Remarks: 0.0°C IRT	



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-133837-2

SDG Number: NAMU

Login Number: 133837

List Number: 1

Creator: Franklin, Justin H

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Certification Summary

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-2
 SDG: NAMU

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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-133837-2
SDG: NAMU

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.

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: 400-136664-1

TestAmerica Sample Delivery Group: NAMU

Client Project/Site: CCR -Plant Daniel

For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:

4/28/2017 4:01:02 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

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

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

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

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Case Narrative

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-1
SDG: NAMU

Job ID: 400-136664-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative 400-136664-1

General Chemistry

Method(s) SM 4500 Cl- E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 351372 were outside control limits. Sample matrix interference and/or non-homogeneity are suspected because the associated laboratory control sample (LCS) recovery was within acceptance limits.

Method(s) SM 4500 Cl- E: The method blank for analytical batch 351372 contained Chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) SM 4500 Cl- E: The sample duplicate precision for the following sample associated with analytical batch 351372 was outside control limits: (400-136862-A-10 MSD).

Method(s) SM 4500 SO4 E: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for analytical batch 351368 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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-1
SDG: NAMU

Client Sample ID: MW-19

Lab Sample ID: 400-136664-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Barium	0.029		0.0025	0.00049	mg/L	5		6020	Total
Calcium	0.51		0.25	0.13	mg/L	5		6020	Recoverable Total
Cobalt	0.00051	J	0.0025	0.00040	mg/L	5		6020	Recoverable Total
Total Dissolved Solids	14		5.0	3.4	mg/L	1		SM 2540C	Recoverable Total/NA
Chloride	4.9	B	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	1.5	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	5.07				SU	1		Field Sampling	Total/NA

Client Sample ID: FB-01

Lab Sample ID: 400-136664-2

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-1
SDG: NAMU

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
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
Field Sampling	Field Sampling	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-1
SDG: NAMU

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-136664-1	MW-19	Water	04/14/17 09:38	04/14/17 17:35
400-136664-2	FB-01	Water	04/14/17 09:55	04/14/17 17:35

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- 10
- 11
- 12
- 13
- 14

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-1
SDG: NAMU

Client Sample ID: MW-19
Date Collected: 04/14/17 09:38
Date Received: 04/14/17 17:35

Lab Sample ID: 400-136664-1
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		04/24/17 09:48	04/26/17 13:31	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/24/17 09:48	04/26/17 13:31	5
Barium	0.029		0.0025	0.00049	mg/L		04/24/17 09:48	04/26/17 13:31	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/24/17 09:48	04/26/17 13:31	5
Boron	<0.021		0.050	0.021	mg/L		04/24/17 09:48	04/26/17 13:31	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/24/17 09:48	04/26/17 13:31	5
Calcium	0.51		0.25	0.13	mg/L		04/24/17 09:48	04/26/17 13:31	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/24/17 09:48	04/26/17 13:31	5
Cobalt	0.00051	J	0.0025	0.00040	mg/L		04/24/17 09:48	04/26/17 13:31	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/24/17 09:48	04/26/17 13:31	5
Lithium	<0.0032		0.0050	0.0032	mg/L		04/24/17 09:48	04/26/17 13:31	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/24/17 09:48	04/26/17 13:31	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/24/17 09:48	04/26/17 13:31	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/24/17 09:48	04/26/17 13:31	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		04/25/17 14:15	04/26/17 12:58	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	14		5.0	3.4	mg/L			04/20/17 14:19	1
Chloride	4.9	B	2.0	0.60	mg/L			04/26/17 08:35	1
Fluoride	<0.032		0.10	0.032	mg/L			04/25/17 17:05	1
Sulfate	1.5	J	5.0	1.4	mg/L			04/26/17 08:40	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.07				SU			04/14/17 09:38	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-1
SDG: NAMU

Client Sample ID: FB-01
Date Collected: 04/14/17 09:55
Date Received: 04/14/17 17:35

Lab Sample ID: 400-136664-2
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		04/24/17 09:48	04/26/17 13:38	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/24/17 09:48	04/26/17 13:38	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/24/17 09:48	04/26/17 13:38	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/24/17 09:48	04/26/17 13:38	5
Boron	<0.021		0.050	0.021	mg/L		04/24/17 09:48	04/26/17 13:38	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/24/17 09:48	04/26/17 13:38	5
Calcium	<0.13		0.25	0.13	mg/L		04/24/17 09:48	04/26/17 13:38	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/24/17 09:48	04/26/17 13:38	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/24/17 09:48	04/26/17 13:38	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/24/17 09:48	04/26/17 13:38	5
Lithium	<0.0032		0.0050	0.0032	mg/L		04/24/17 09:48	04/26/17 13:38	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/24/17 09:48	04/26/17 13:38	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/24/17 09:48	04/26/17 13:38	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/24/17 09:48	04/26/17 13:38	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		04/25/17 14:15	04/26/17 13:00	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			04/20/17 14:19	1
Chloride	<0.60		2.0	0.60	mg/L			04/26/17 09:14	1
Fluoride	<0.032		0.10	0.032	mg/L			04/25/17 17:10	1
Sulfate	<1.4		5.0	1.4	mg/L			04/26/17 08:40	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-1
SDG: NAMU

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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.
B	Compound was found in the blank and sample.
F1	MS and/or MSD Recovery is outside acceptance limits.
F2	MS/MSD RPD exceeds control limits

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
α	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, 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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-1
SDG: NAMU

Client Sample ID: MW-19
Date Collected: 04/14/17 09:38
Date Received: 04/14/17 17:35

Lab Sample ID: 400-136664-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			350974	04/24/17 09:48	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	351496	04/26/17 13:31	DRE	TAL PEN
Total/NA	Prep	7470A			351232	04/25/17 14:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	351428	04/26/17 12:58	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	350596	04/20/17 14:19	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	351372	04/26/17 08:35	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	351313	04/25/17 17:05	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	351368	04/26/17 08:40	BJB	TAL PEN
Total/NA	Analysis	Field Sampling		1	351509	04/14/17 09:38	BWS	TAL PEN

Client Sample ID: FB-01
Date Collected: 04/14/17 09:55
Date Received: 04/14/17 17:35

Lab Sample ID: 400-136664-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			350974	04/24/17 09:48	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	351496	04/26/17 13:38	DRE	TAL PEN
Total/NA	Prep	7470A			351232	04/25/17 14:15	JAP	TAL PEN
Total/NA	Analysis	7470A		1	351428	04/26/17 13:00	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	350596	04/20/17 14:19	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	351372	04/26/17 09:14	BJB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	351313	04/25/17 17:10	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	351368	04/26/17 08:40	BJB	TAL PEN

Laboratory References:

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

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-1
SDG: NAMU

Metals

Prep Batch: 350974

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136664-1	MW-19	Total Recoverable	Water	3005A	
400-136664-2	FB-01	Total Recoverable	Water	3005A	
MB 400-350974/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-350974/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-136660-B-3-A MS ^5	Matrix Spike	Dissolved	Water	3005A	
400-136660-B-3-B MSD ^5	Matrix Spike Duplicate	Dissolved	Water	3005A	

Prep Batch: 351232

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136664-1	MW-19	Total/NA	Water	7470A	
400-136664-2	FB-01	Total/NA	Water	7470A	
MB 400-351232/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-351232/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-136587-D-3-D MS	Matrix Spike	Total/NA	Water	7470A	
400-136587-D-3-E MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Analysis Batch: 351428

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136664-1	MW-19	Total/NA	Water	7470A	351232
400-136664-2	FB-01	Total/NA	Water	7470A	351232
MB 400-351232/14-A	Method Blank	Total/NA	Water	7470A	351232
LCS 400-351232/15-A	Lab Control Sample	Total/NA	Water	7470A	351232
400-136587-D-3-D MS	Matrix Spike	Total/NA	Water	7470A	351232
400-136587-D-3-E MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	351232

Analysis Batch: 351496

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136664-1	MW-19	Total Recoverable	Water	6020	350974
400-136664-2	FB-01	Total Recoverable	Water	6020	350974
MB 400-350974/1-A ^5	Method Blank	Total Recoverable	Water	6020	350974
LCS 400-350974/2-A	Lab Control Sample	Total Recoverable	Water	6020	350974
400-136660-B-3-A MS ^5	Matrix Spike	Dissolved	Water	6020	350974
400-136660-B-3-B MSD ^5	Matrix Spike Duplicate	Dissolved	Water	6020	350974

General Chemistry

Analysis Batch: 350596

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136664-1	MW-19	Total/NA	Water	SM 2540C	
400-136664-2	FB-01	Total/NA	Water	SM 2540C	
MB 400-350596/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-350596/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-136664-1 DU	MW-19	Total/NA	Water	SM 2540C	

Analysis Batch: 351313

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136664-1	MW-19	Total/NA	Water	SM 4500 F C	
400-136664-2	FB-01	Total/NA	Water	SM 4500 F C	
MB 400-351313/4	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-351313/5	Lab Control Sample	Total/NA	Water	SM 4500 F C	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-1
SDG: NAMU

General Chemistry (Continued)

Analysis Batch: 351313 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136545-B-15 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-136545-B-15 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-136664-1 DU	MW-19	Total/NA	Water	SM 4500 F C	

Analysis Batch: 351368

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136664-1	MW-19	Total/NA	Water	SM 4500 SO4 E	
400-136664-2	FB-01	Total/NA	Water	SM 4500 SO4 E	
MB 400-351368/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-351368/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-351368/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-136862-A-10 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-136862-A-10 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 351372

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136664-1	MW-19	Total/NA	Water	SM 4500 Cl- E	
400-136664-2	FB-01	Total/NA	Water	SM 4500 Cl- E	
MB 400-351372/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-351372/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-351372/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-136862-A-10 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-136862-A-10 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	

Field Service / Mobile Lab

Analysis Batch: 351509

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136664-1	MW-19	Total/NA	Water	Field Sampling	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-1
SDG: NAMU

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-350974/1-A ^5
Matrix: Water
Analysis Batch: 351496

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 350974

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		04/24/17 09:48	04/26/17 12:15	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		04/24/17 09:48	04/26/17 12:15	5
Barium	<0.00049		0.0025	0.00049	mg/L		04/24/17 09:48	04/26/17 12:15	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		04/24/17 09:48	04/26/17 12:15	5
Boron	<0.021		0.050	0.021	mg/L		04/24/17 09:48	04/26/17 12:15	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		04/24/17 09:48	04/26/17 12:15	5
Calcium	<0.13		0.25	0.13	mg/L		04/24/17 09:48	04/26/17 12:15	5
Chromium	<0.0011		0.0025	0.0011	mg/L		04/24/17 09:48	04/26/17 12:15	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		04/24/17 09:48	04/26/17 12:15	5
Lead	<0.00035		0.0013	0.00035	mg/L		04/24/17 09:48	04/26/17 12:15	5
Lithium	<0.0032		0.0050	0.0032	mg/L		04/24/17 09:48	04/26/17 12:15	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		04/24/17 09:48	04/26/17 12:15	5
Selenium	<0.00024		0.0013	0.00024	mg/L		04/24/17 09:48	04/26/17 12:15	5
Thallium	<0.000085		0.00050	0.000085	mg/L		04/24/17 09:48	04/26/17 12:15	5

Lab Sample ID: LCS 400-350974/2-A
Matrix: Water
Analysis Batch: 351496

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 350974

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0542		mg/L		108	80 - 120
Arsenic	0.0500	0.0506		mg/L		101	80 - 120
Barium	0.0500	0.0500		mg/L		100	80 - 120
Beryllium	0.0500	0.0491		mg/L		98	80 - 120
Boron	0.100	0.0987		mg/L		99	80 - 120
Cadmium	0.0500	0.0506		mg/L		101	80 - 120
Calcium	5.00	4.77		mg/L		95	80 - 120
Chromium	0.0500	0.0497		mg/L		99	80 - 120
Cobalt	0.0500	0.0517		mg/L		103	80 - 120
Lead	0.0500	0.0514		mg/L		103	80 - 120
Lithium	0.0500	0.0514		mg/L		103	80 - 120
Molybdenum	0.100	0.100		mg/L		100	80 - 120
Selenium	0.0500	0.0495		mg/L		99	80 - 120
Thallium	0.0100	0.0102		mg/L		102	80 - 120

Lab Sample ID: 400-136660-B-3-A MS ^5
Matrix: Water
Analysis Batch: 351496

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 350974

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0010		0.0500	0.0573		mg/L		115	75 - 125
Arsenic	0.00068	J	0.0500	0.0517		mg/L		102	75 - 125
Barium	0.067		0.0500	0.121		mg/L		109	75 - 125
Beryllium	<0.00034		0.0500	0.0490		mg/L		98	75 - 125
Boron	0.027	J	0.100	0.126		mg/L		99	75 - 125
Cadmium	<0.00034		0.0500	0.0521		mg/L		104	75 - 125
Calcium	80		5.00	88.2	4	mg/L		165	75 - 125
Chromium	<0.0011		0.0500	0.0542		mg/L		108	75 - 125

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-1
SDG: NAMU

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 400-136660-B-3-A MS ^5
Matrix: Water
Analysis Batch: 351496

Client Sample ID: Matrix Spike
Prep Type: Dissolved
Prep Batch: 350974

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Cobalt	<0.00040		0.0500	0.0509		mg/L		102	75 - 125
Lead	<0.00035		0.0500	0.0513		mg/L		103	75 - 125
Lithium	<0.0032		0.0500	0.0468		mg/L		94	75 - 125
Molybdenum	0.0093	J	0.100	0.111		mg/L		102	75 - 125
Selenium	0.0043		0.0500	0.0554		mg/L		102	75 - 125
Thallium	<0.000085		0.0100	0.00983		mg/L		98	75 - 125

Lab Sample ID: 400-136660-B-3-B MSD ^5
Matrix: Water
Analysis Batch: 351496

Client Sample ID: Matrix Spike Duplicate
Prep Type: Dissolved
Prep Batch: 350974

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	<0.0010		0.0500	0.0536		mg/L		107	75 - 125	7	20
Arsenic	0.00068	J	0.0500	0.0510		mg/L		101	75 - 125	1	20
Barium	0.067		0.0500	0.116		mg/L		99	75 - 125	4	20
Beryllium	<0.00034		0.0500	0.0481		mg/L		96	75 - 125	2	20
Boron	0.027	J	0.100	0.119		mg/L		92	75 - 125	6	20
Cadmium	<0.00034		0.0500	0.0497		mg/L		99	75 - 125	5	20
Calcium	80		5.00	87.2	4	mg/L		144	75 - 125	1	20
Chromium	<0.0011		0.0500	0.0525		mg/L		105	75 - 125	3	20
Cobalt	<0.00040		0.0500	0.0509		mg/L		102	75 - 125	0	20
Lead	<0.00035		0.0500	0.0508		mg/L		102	75 - 125	1	20
Lithium	<0.0032		0.0500	0.0455		mg/L		91	75 - 125	3	20
Molybdenum	0.0093	J	0.100	0.104		mg/L		95	75 - 125	7	20
Selenium	0.0043		0.0500	0.0521		mg/L		95	75 - 125	6	20
Thallium	<0.000085		0.0100	0.0100		mg/L		100	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-351232/14-A
Matrix: Water
Analysis Batch: 351428

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 351232

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		04/25/17 13:58	04/26/17 12:27	1

Lab Sample ID: LCS 400-351232/15-A
Matrix: Water
Analysis Batch: 351428

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 351232

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00101	0.000922		mg/L		92	80 - 120

Lab Sample ID: 400-136587-D-3-D MS
Matrix: Water
Analysis Batch: 351428

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 351232

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.000070		0.00201	0.00185		mg/L		92	80 - 120

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-1
SDG: NAMU

Lab Sample ID: 400-136587-D-3-E MSD
Matrix: Water
Analysis Batch: 351428

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 351232

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.000070		0.00201	0.00185		mg/L		92	80 - 120	0	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 400-350596/1
Matrix: Water
Analysis Batch: 350596

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			04/20/17 14:19	1

Lab Sample ID: LCS 400-350596/2
Matrix: Water
Analysis Batch: 350596

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	294		mg/L		100	78 - 122

Lab Sample ID: 400-136664-1 DU
Matrix: Water
Analysis Batch: 350596

Client Sample ID: MW-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	14		14.0		mg/L		0	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-351372/6
Matrix: Water
Analysis Batch: 351372

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.661	J	2.0	0.60	mg/L			04/26/17 08:09	1

Lab Sample ID: LCS 400-351372/7
Matrix: Water
Analysis Batch: 351372

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	32.9		mg/L		110	90 - 110

Lab Sample ID: MRL 400-351372/3
Matrix: Water
Analysis Batch: 351372

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	1.43	J	mg/L		72	50 - 150

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-1
SDG: NAMU

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: 400-136862-A-10 MS
Matrix: Water
Analysis Batch: 351372

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	<0.60	F1 F2	10.0	17.9	F1	mg/L		179	73 - 120

Lab Sample ID: 400-136862-A-10 MSD
Matrix: Water
Analysis Batch: 351372

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	<0.60	F1 F2	10.0	13.8	F1 F2	mg/L		138	73 - 120	26	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-351313/4
Matrix: Water
Analysis Batch: 351313

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			04/25/17 15:42	1

Lab Sample ID: LCS 400-351313/5
Matrix: Water
Analysis Batch: 351313

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: 400-136545-B-15 MS
Matrix: Water
Analysis Batch: 351313

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	0.84		2.00	2.82		mg/L		99	75 - 125

Lab Sample ID: 400-136545-B-15 MSD
Matrix: Water
Analysis Batch: 351313

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	0.84		2.00	2.82		mg/L		99	75 - 125	0	4

Lab Sample ID: 400-136664-1 DU
Matrix: Water
Analysis Batch: 351313

Client Sample ID: MW-19
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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-1
SDG: NAMU

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-351368/6
Matrix: Water
Analysis Batch: 351368

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.4		5.0	1.4	mg/L			04/26/17 08:11	1

Lab Sample ID: LCS 400-351368/7
Matrix: Water
Analysis Batch: 351368

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	14.4		mg/L		96	90 - 110

Lab Sample ID: MRL 400-351368/3
Matrix: Water
Analysis Batch: 351368

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	4.41	J	mg/L		88	50 - 150

Lab Sample ID: 400-136862-A-10 MS
Matrix: Water
Analysis Batch: 351368

Client Sample ID: Matrix Spike
Prep Type: Total/NA




Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	2.9	J F1	10.0	8.61	F1	mg/L		57	77 - 128

Lab Sample ID: 400-136862-A-10 MSD
Matrix: Water
Analysis Batch: 351368

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	2.9	J F1	10.0	8.90	F1	mg/L		60	77 - 128	3	5

Chain of Custody Record

Client Information Client Contact: Mr. Cale Sellers Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: 205-992-7762(Tel) Email: CBSSELLER@SOUTHERNCO.COM Project Name: CCR -Plant Daniel Site: Mississippi		Lab PM: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com Camer Tracking No(s): COC No: 400-63831-26214.1 Page: Page 1 of 1 Job #:	
Due Date Requested: TAT Requested (days): PO #: SCS10328728 WO #: 37180 Project #: 40006621 SSOW#:		Analysis Requested  400-136664 COC	
Sample Identification MW-19 FB-01		Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No 9315_Ra226, 9320_Ra228 5M4500_C1_E, 5M4500_S04_E 6020, 7470A 2540C - Total Dissolved Solids 4500_F_C - Fluoride	
Sample Date Sample Time Sample Type (C=comp, G=grab) Matrix (W=water, S=solid, O=wastefoil, BT=Blank, A=Air) Preservation Code:		Total Number of Containers Special Instructions/Note:	
Sample Date: 4-14-17 Sample Time: 0938 Sample Type: F Matrix: Water		Total Number of Containers:	
Sample Date: 4-14-17 Sample Time: 0955 Sample Type: G Matrix: Water		Total Number of Containers:	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months	
Deliverable Requested: I, II, III, IV, Other (specify)		Special Instructions/QC Requirements:	
Empty Kit Relinquished by:		Method of Shipment:	
Relinquished by:  Date/Time: 4-14-17 1735 Company: SDA		Received by:  Date/Time: 4-14-17 1735 Company:	
Relinquished by:		Received by:	
Relinquished by:		Received by:	
Custody Seals Intact: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks: 0.9°C IRZ	



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-136664-1

SDG Number: NAMU

Login Number: 136664

List Number: 1

Creator: Perez, Trina M

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.9°C IR-2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-1
 SDG: NAMU

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-17
Louisiana (DW)	NELAP Secondary AB	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	05-06-17
New Jersey	NELAP	2	FL006	06-30-17
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17
Tennessee	State Program	4	TN02907	06-30-17
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-17
Washington	State Program	10	C915	05-15-17
West Virginia DEP	State Program	3	136	06-30-17



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: 400-136664-2

TestAmerica Sample Delivery Group: NAMU

Client Project/Site: CCR -Plant Daniel

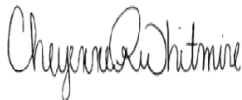
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:

5/17/2017 9:05:06 PM

Cheyenne Whitmire, Project Manager II

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

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

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

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Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-2
SDG: NAMU

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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-2
SDG: NAMU

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-136664-1	MW-19	Water	04/14/17 09:38	04/14/17 17:35
400-136664-2	FB-01	Water	04/14/17 09:55	04/14/17 17:35

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Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-2
 SDG: NAMU

Client Sample ID: MW-19
Date Collected: 04/14/17 09:38
Date Received: 04/14/17 17:35

Lab Sample ID: 400-136664-1
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	0.184		0.0896	0.0912	1.00	0.0976	pCi/L	04/21/17 10:52	05/15/17 05:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.8		40 - 110					04/21/17 10:52	05/15/17 05:45	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.115	U	0.189	0.190	1.00	0.363	pCi/L	04/21/17 11:16	05/08/17 14:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	93.8		40 - 110					04/21/17 11:16	05/08/17 14:46	1
Y Carrier	84.5		40 - 110					04/21/17 11:16	05/08/17 14:46	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0697	U	0.210	0.210	5.00	0.363	pCi/L		05/16/17 18:11	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-2
SDG: NAMU

Client Sample ID: FB-01
Date Collected: 04/14/17 09:55
Date Received: 04/14/17 17:35

Lab Sample ID: 400-136664-2
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	-0.0212	U	0.0600	0.0600	1.00	0.130	pCi/L	04/21/17 10:52	05/15/17 05:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					04/21/17 10:52	05/15/17 05:46	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0707	U	0.185	0.185	1.00	0.345	pCi/L	04/21/17 11:16	05/08/17 14:46	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	95.3		40 - 110					04/21/17 11:16	05/08/17 14:46	1
Y Carrier	91.2		40 - 110					04/21/17 11:16	05/08/17 14:46	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	-0.0920	U	0.195	0.195	5.00	0.345	pCi/L		05/16/17 18:11	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-2
SDG: NAMU

Qualifiers

Rad

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

Glossary

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

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-2
SDG: NAMU

Client Sample ID: MW-19
Date Collected: 04/14/17 09:38
Date Received: 04/14/17 17:35

Lab Sample ID: 400-136664-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			304717	04/21/17 10:52	LDE	TAL SL
Total/NA	Analysis	9315		1	308490	05/15/17 05:45	RTM	TAL SL
Total/NA	Prep	PrecSep_0			304718	04/21/17 11:16	LDE	TAL SL
Total/NA	Analysis	9320		1	307662	05/08/17 14:46	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	308890	05/16/17 18:11	RTM	TAL SL

Client Sample ID: FB-01
Date Collected: 04/14/17 09:55
Date Received: 04/14/17 17:35

Lab Sample ID: 400-136664-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			304717	04/21/17 10:52	LDE	TAL SL
Total/NA	Analysis	9315		1	308498	05/15/17 05:46	ALD	TAL SL
Total/NA	Prep	PrecSep_0			304718	04/21/17 11:16	LDE	TAL SL
Total/NA	Analysis	9320		1	307662	05/08/17 14:46	RTM	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	308890	05/16/17 18:11	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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-2
SDG: NAMU

Rad

Prep Batch: 304717

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136664-1	MW-19	Total/NA	Water	PrecSep-21	
400-136664-2	FB-01	Total/NA	Water	PrecSep-21	
MB 160-304717/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-304717/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-136545-A-15-B MS	Matrix Spike	Total/NA	Water	PrecSep-21	
400-136545-A-15-C MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 304718

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-136664-1	MW-19	Total/NA	Water	PrecSep_0	
400-136664-2	FB-01	Total/NA	Water	PrecSep_0	
MB 160-304718/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-304718/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-136545-A-15-E MS	Matrix Spike	Total/NA	Water	PrecSep_0	
400-136545-A-15-F MSD	Matrix Spike Duplicate	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-2
SDG: NAMU

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-304717/1-A
Matrix: Water
Analysis Batch: 308490

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 304717

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.03445	U	0.0559	0.0560	1.00	0.0980	pCi/L	04/21/17 10:52	05/15/17 05:42	1
Carrier	MB %Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	92.3		40 - 110					04/21/17 10:52	05/15/17 05:42	1

Lab Sample ID: LCS 160-304717/2-A
Matrix: Water
Analysis Batch: 308490

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 304717

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	11.4	10.62		1.12	1.00	0.115	pCi/L	93	68 - 137
Carrier	LCS %Yield	LCS Qualifier	Limits						
Ba Carrier	95.6		40 - 110						

Lab Sample ID: 400-136545-A-15-B MS
Matrix: Water
Analysis Batch: 308490

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 304717

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	46.4		15.1	59.44		5.58	1.00	0.149	pCi/L	86	75 - 138
Carrier	MS %Yield	MS Qualifier	Limits								
Ba Carrier	92.6		40 - 110								

Lab Sample ID: 400-136545-A-15-C MSD
Matrix: Water
Analysis Batch: 308490

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 304717

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	46.4		15.2	57.77		5.44	1.00	0.167	pCi/L	75	75 - 138	0.15	1
Carrier	MSD %Yield	MSD Qualifier	Limits										
Ba Carrier	92.6		40 - 110										

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-2
SDG: NAMU

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-304718/1-A
Matrix: Water
Analysis Batch: 307547

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 304718

Analyte	MB MB		Count	Total	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
	Result	Qualifier	Uncert. (2σ+/-)	Uncert. (2σ+/-)						
Radium-228	0.1085	U	0.289	0.289	1.00	0.494	pCi/L	04/21/17 11:16	05/08/17 14:52	1
Carrier	MB MB		Limits		Prepared	Analyzed	Dil Fac			
	%Yield	Qualifier								
Ba Carrier	92.3		40 - 110		04/21/17 11:16	05/08/17 14:52	1			
Y Carrier	85.2		40 - 110		04/21/17 11:16	05/08/17 14:52	1			

Lab Sample ID: LCS 160-304718/2-A
Matrix: Water
Analysis Batch: 307547

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 304718

Analyte	Spike Added	LCS Result	LCS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
				Uncert. (2σ+/-)					
Radium-228	13.5	15.16		1.61	1.00	0.381	pCi/L	112	56 - 140
Carrier	LCS LCS		Limits		Prepared	Analyzed	Dil Fac		
	%Yield	Qualifier							
Ba Carrier	95.6		40 - 110						
Y Carrier	88.2		40 - 110						

Lab Sample ID: 400-136545-A-15-E MS
Matrix: Water
Analysis Batch: 307662

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 304718

Analyte	Sample Result	Sample Qual	Spike Added	MS Result	MS Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits
						Uncert. (2σ+/-)					
Radium-228	6.24		18.0	25.62		2.66	1.00	0.542	pCi/L	108	45 - 150
Carrier	MS MS		Limits		Prepared	Analyzed	Dil Fac				
	%Yield	Qualifier									
Ba Carrier	92.6		40 - 110								
Y Carrier	86.7		40 - 110								

Lab Sample ID: 400-136545-A-15-F MSD
Matrix: Water
Analysis Batch: 307662

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 304718

Analyte	Sample Result	Sample Qual	Spike Added	MSD Result	MSD Qual	Total	RL	MDC	Unit	%Rec	%Rec. Limits	RER	RER Limit
						Uncert. (2σ+/-)							
Radium-228	6.24		18.0	25.00		2.59	1.00	0.495	pCi/L	104	45 - 150	0.12	1
Carrier	MSD MSD		Limits		Prepared	Analyzed	Dil Fac						
	%Yield	Qualifier											
Ba Carrier	92.6		40 - 110										
Y Carrier	90.8		40 - 110										

QC Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-2
 SDG: NAMU

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

Lab Sample ID: 400-136455-A-29 DU
Matrix: Water
Analysis Batch: 308890

Client Sample ID: Duplicate
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	0.189	U	0.2589	U	0.248	5.00	0.390	pCi/L	0.14	

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Chain of Custody Record

<p>Client Information</p> <p>Client Contact: Mr. Cale Sellers Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: 205-992-7762(Tel) Email: CBSSELLER@SOUTHERNCO.COM Project Name: CCR -Plant Daniel Site: Mississippi</p>		<p>Lab PM: Whitmire, Cheyenne R E-Mail: cheyenne.whitmire@testamericainc.com</p>		<p>Carmer Tracking No(s): 400-63831-26214.1 Page: Page 1 of 1 Job #:</p>	
<p>Due Date Requested: TAT Requested (days): PO #: SCS10328728 WG #: 37180 Project #: 40006621 SSOW#: </p>		<p>Analysis Requested</p> <p>4500_F_C - Fluoride 2540C - Total Dissolved Solids 6020, 7470A SM4500_C1_E, SM4500_S04_E 9315_Ra226, 9320_Ra228</p>		<p>Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:</p>	
<p>Sample Identification</p> <p>MW-19 FB-01</p>		<p>Field Filtered Sample (Yes or No) <input checked="" type="checkbox"/> Perform MS/MSD (Yes or No) <input checked="" type="checkbox"/> 9315_Ra226, 9320_Ra228 SM4500_C1_E, SM4500_S04_E 6020, 7470A 2540C - Total Dissolved Solids 4500_F_C - Fluoride</p>		<p>Total Number of Containers</p>	
<p>Sample Date 4-14-17 0938 4-14-17 0955</p>		<p>Sample Type (C=comp, G=grab) F G</p>		<p>Matrix (W=water, S=solid, O=wastefoil, BT=Blank, A=Air) Water Water</p>	
<p>Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological</p>		<p>Special Instructions/Note:</p>		<p>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months</p>	
<p>Empty Kit Relinquished by:</p>		<p>Relinquished by: <i>[Signature]</i> Date/Time: 4-14-17 1735 Company: <i>[Signature]</i></p>		<p>Method of Shipment:</p>	
<p>Relinquished by:</p>		<p>Relinquished by:</p>		<p>Relinquished by:</p>	
<p>Custody Seals Intact: Δ Yes Δ No</p>		<p>Custody Seal No.:</p>		<p>Cooler Temperature(s) °C and Other Remarks: 0.9°C IRZ</p>	



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-136664-2

SDG Number: NAMU

Login Number: 136664

List Number: 1

Creator: Perez, Trina M

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.9°C IR-2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-2
SDG: NAMU

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-17
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-17
Georgia	State Program	4	N/A	06-30-17
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-17
Louisiana (DW)	NELAP Secondary AB	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-17
Massachusetts	State Program	1	M-FL094	06-30-17
Michigan	State Program	5	9912	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

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska	State Program	10	MO00054	06-30-17 *
California	State Program	9	2886	03-31-18 *
Connecticut	State Program	1	PH-0241	03-31-19
Florida	NELAP	4	E87689	06-30-17 *
Illinois	NELAP	5	200023	11-30-17
Iowa	State Program	7	373	02-01-18
Kansas	NELAP	7	E-10236	10-31-17
Kentucky (DW)	State Program	4	90125	12-31-17
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-17 *
Louisiana (DW)	NELAP	6	LA170011	12-31-17
Maryland	State Program	3	310	09-30-17
Missouri	State Program	7	780	06-30-17 *
Nevada	State Program	9	MO000542017-1	07-31-17
New Jersey	NELAP	2	MO002	06-30-17 *
New York	NELAP	2	11616	03-31-18

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

TestAmerica Pensacola

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-136664-2
SDG: NAMU

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
North Dakota	State Program	8	R207	06-30-17
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-17
Pennsylvania	NELAP	3	68-00540	02-21-18
South Carolina	State Program	4	85002001	06-30-17 *
Texas	NELAP	6	T104704193-16-10	07-31-17
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		P330-17-0028	02-02-20
Utah	NELAP	8	MO000542016-8	07-31-17
Virginia	NELAP	3	460230	06-14-17 *
Washington	State Program	10	C592	08-30-17
West Virginia DEP	State Program	3	381	08-31-17 *

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

TestAmerica Pensacola

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: 400-139817-1

TestAmerica Sample Delivery Group: CCR -Plant Daniel

Client Project/Site: CCR -Plant Daniel

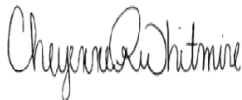
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:

7/31/2017 2:36:02 PM

Cheyenne Whitmire, Project Manager II

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

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

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Case Narrative

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-1
SDG: CCR -Plant Daniel

Job ID: 400-139817-1

Laboratory: TestAmerica Pensacola

Narrative

Job Narrative
400-139817-1

Metals

Method(s) 6020: The serial dilution performed for the following sample associated with batch 359473 was outside control limits for Selenium: (400-139715-B-2-B SD)

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Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-1
SDG: CCR -Plant Daniel

Client Sample ID: MW-19

Lab Sample ID: 400-139817-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Arsenic	0.00065	J	0.0013	0.00046	mg/L	5		6020	Total Recoverable
Barium	0.029		0.0025	0.00049	mg/L	5		6020	Total Recoverable
Calcium	0.66		0.25	0.13	mg/L	5		6020	Total Recoverable
Cobalt	0.00051	J	0.0025	0.00040	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	34		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	5.4		2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	1.5	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.93				SU	1		Field Sampling	Total/NA

Client Sample ID: FB-01

Lab Sample ID: 400-139817-2

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-1
SDG: CCR -Plant Daniel

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
7470A	Mercury (CVAA)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
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
Field Sampling	Field Sampling	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-1
SDG: CCR -Plant Daniel

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-139817-1	MW-19	Water	06/26/17 10:53	06/26/17 12:55
400-139817-2	FB-01	Water	06/26/17 10:15	06/26/17 12:55

- 1
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- 13
- 14

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-1
SDG: CCR -Plant Daniel

Client Sample ID: MW-19
Date Collected: 06/26/17 10:53
Date Received: 06/26/17 12:55

Lab Sample ID: 400-139817-1
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		07/01/17 13:38	07/05/17 14:17	5
Arsenic	0.00065	J	0.0013	0.00046	mg/L		07/01/17 13:38	07/05/17 14:17	5
Barium	0.029		0.0025	0.00049	mg/L		07/01/17 13:38	07/05/17 14:17	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/01/17 13:38	07/05/17 14:17	5
Boron	<0.021		0.050	0.021	mg/L		07/01/17 13:38	07/05/17 14:17	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/01/17 13:38	07/05/17 14:17	5
Calcium	0.66		0.25	0.13	mg/L		07/01/17 13:38	07/05/17 14:17	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/01/17 13:38	07/05/17 14:17	5
Cobalt	0.00051	J	0.0025	0.00040	mg/L		07/01/17 13:38	07/05/17 14:17	5
Lead	<0.00035		0.0013	0.00035	mg/L		07/01/17 13:38	07/05/17 14:17	5
Lithium	<0.0032		0.0050	0.0032	mg/L		07/01/17 13:38	07/05/17 14:17	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/01/17 13:38	07/05/17 14:17	5
Selenium	<0.00024		0.0013	0.00024	mg/L		07/01/17 13:38	07/05/17 14:17	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/01/17 13:38	07/05/17 14:17	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/30/17 13:48	07/05/17 15:04	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	34		5.0	3.4	mg/L			06/29/17 16:16	1
Chloride	5.4		2.0	0.60	mg/L			07/05/17 14:06	1
Fluoride	<0.032		0.10	0.032	mg/L			07/06/17 15:23	1
Sulfate	1.5	J	5.0	1.4	mg/L			07/06/17 08:13	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.93				SU			06/26/17 10:53	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-1
SDG: CCR -Plant Daniel

Client Sample ID: FB-01
Date Collected: 06/26/17 10:15
Date Received: 06/26/17 12:55

Lab Sample ID: 400-139817-2
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		07/01/17 13:38	07/05/17 14:22	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		07/01/17 13:38	07/05/17 14:22	5
Barium	<0.00049		0.0025	0.00049	mg/L		07/01/17 13:38	07/05/17 14:22	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/01/17 13:38	07/05/17 14:22	5
Boron	<0.021		0.050	0.021	mg/L		07/01/17 13:38	07/05/17 14:22	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/01/17 13:38	07/05/17 14:22	5
Calcium	<0.13		0.25	0.13	mg/L		07/01/17 13:38	07/05/17 14:22	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/01/17 13:38	07/05/17 14:22	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		07/01/17 13:38	07/05/17 14:22	5
Lead	<0.00035		0.0013	0.00035	mg/L		07/01/17 13:38	07/05/17 14:22	5
Lithium	<0.0032		0.0050	0.0032	mg/L		07/01/17 13:38	07/05/17 14:22	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/01/17 13:38	07/05/17 14:22	5
Selenium	<0.00024		0.0013	0.00024	mg/L		07/01/17 13:38	07/05/17 14:22	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/01/17 13:38	07/05/17 14:22	5

Method: 7470A - Mercury (CVAA)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/30/17 13:48	07/05/17 15:06	1

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			06/29/17 16:16	1
Chloride	<0.60		2.0	0.60	mg/L			07/05/17 14:06	1
Fluoride	<0.032		0.10	0.032	mg/L			07/06/17 15:30	1
Sulfate	<1.4		5.0	1.4	mg/L			07/06/17 08:13	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-1
SDG: CCR -Plant Daniel

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

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

Glossary

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

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-1
SDG: CCR -Plant Daniel

Client Sample ID: MW-19
Date Collected: 06/26/17 10:53
Date Received: 06/26/17 12:55

Lab Sample ID: 400-139817-1
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			359131	07/01/17 13:38	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	359473	07/05/17 14:17	DRE	TAL PEN
Total/NA	Prep	7470A			359010	06/30/17 13:48	JAP	TAL PEN
Total/NA	Analysis	7470A		1	359443	07/05/17 15:04	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	358873	06/29/17 16:16	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	359437	07/05/17 14:06	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359578	07/06/17 15:23	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	359576	07/06/17 08:13	RRC	TAL PEN
Total/NA	Analysis	Field Sampling		1	362325	06/26/17 10:53	BWS	TAL PEN

Client Sample ID: FB-01
Date Collected: 06/26/17 10:15
Date Received: 06/26/17 12:55

Lab Sample ID: 400-139817-2
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			359131	07/01/17 13:38	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	359473	07/05/17 14:22	DRE	TAL PEN
Total/NA	Prep	7470A			359010	06/30/17 13:48	JAP	TAL PEN
Total/NA	Analysis	7470A		1	359443	07/05/17 15:06	JAP	TAL PEN
Total/NA	Analysis	SM 2540C		1	358873	06/29/17 16:16	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	359437	07/05/17 14:06	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	359578	07/06/17 15:30	SLT	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	359576	07/06/17 08:13	RRC	TAL PEN

Laboratory References:

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

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-1
SDG: CCR -Plant Daniel

Metals

Prep Batch: 359010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139817-1	MW-19	Total/NA	Water	7470A	
400-139817-2	FB-01	Total/NA	Water	7470A	
MB 400-359010/14-A	Method Blank	Total/NA	Water	7470A	
LCS 400-359010/15-A	Lab Control Sample	Total/NA	Water	7470A	
400-139746-B-1-B MS	Matrix Spike	Total/NA	Water	7470A	
400-139746-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	

Prep Batch: 359131

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139817-1	MW-19	Total Recoverable	Water	3005A	
400-139817-2	FB-01	Total Recoverable	Water	3005A	
MB 400-359131/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-359131/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-139715-B-2-C MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-139715-B-2-D MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 359443

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139817-1	MW-19	Total/NA	Water	7470A	359010
400-139817-2	FB-01	Total/NA	Water	7470A	359010
MB 400-359010/14-A	Method Blank	Total/NA	Water	7470A	359010
LCS 400-359010/15-A	Lab Control Sample	Total/NA	Water	7470A	359010
400-139746-B-1-B MS	Matrix Spike	Total/NA	Water	7470A	359010
400-139746-B-1-C MSD	Matrix Spike Duplicate	Total/NA	Water	7470A	359010

Analysis Batch: 359473

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139817-1	MW-19	Total Recoverable	Water	6020	359131
400-139817-2	FB-01	Total Recoverable	Water	6020	359131
MB 400-359131/1-A ^5	Method Blank	Total Recoverable	Water	6020	359131
LCS 400-359131/2-A	Lab Control Sample	Total Recoverable	Water	6020	359131
400-139715-B-2-C MS ^5	Matrix Spike	Total Recoverable	Water	6020	359131
400-139715-B-2-D MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	359131

General Chemistry

Analysis Batch: 358873

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139817-1	MW-19	Total/NA	Water	SM 2540C	
400-139817-2	FB-01	Total/NA	Water	SM 2540C	
MB 400-358873/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-358873/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-139817-1 DU	MW-19	Total/NA	Water	SM 2540C	

Analysis Batch: 359437

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139817-1	MW-19	Total/NA	Water	SM 4500 CI- E	
400-139817-2	FB-01	Total/NA	Water	SM 4500 CI- E	
MB 400-359437/6	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 400-359437/7	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-1
SDG: CCR -Plant Daniel

General Chemistry (Continued)

Analysis Batch: 359437 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
MRL 400-359437/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-140034-A-1 MS	Matrix Spike	Total/NA	Water	SM 4500 Cl- E	
400-140034-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 359576

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139817-1	MW-19	Total/NA	Water	SM 4500 SO4 E	
400-139817-2	FB-01	Total/NA	Water	SM 4500 SO4 E	
MB 400-359576/6	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-359576/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-359576/3	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-139785-A-10 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-139785-A-10 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 359578

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139817-1	MW-19	Total/NA	Water	SM 4500 F C	
400-139817-2	FB-01	Total/NA	Water	SM 4500 F C	
MB 400-359578/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-359578/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-139470-A-29 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-139470-A-29 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-139817-1 DU	MW-19	Total/NA	Water	SM 4500 F C	

Field Service / Mobile Lab

Analysis Batch: 362325

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139817-1	MW-19	Total/NA	Water	Field Sampling	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-1
SDG: CCR -Plant Daniel

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-359131/1-A ^5
Matrix: Water
Analysis Batch: 359473

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 359131

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Antimony	<0.0010		0.0025	0.0010	mg/L		07/01/17 13:38	07/05/17 11:49	5
Arsenic	<0.00046		0.0013	0.00046	mg/L		07/01/17 13:38	07/05/17 11:49	5
Barium	<0.00049		0.0025	0.00049	mg/L		07/01/17 13:38	07/05/17 11:49	5
Beryllium	<0.00034		0.0025	0.00034	mg/L		07/01/17 13:38	07/05/17 11:49	5
Boron	<0.021		0.050	0.021	mg/L		07/01/17 13:38	07/05/17 11:49	5
Cadmium	<0.00034		0.0025	0.00034	mg/L		07/01/17 13:38	07/05/17 11:49	5
Calcium	<0.13		0.25	0.13	mg/L		07/01/17 13:38	07/05/17 11:49	5
Chromium	<0.0011		0.0025	0.0011	mg/L		07/01/17 13:38	07/05/17 11:49	5
Cobalt	<0.00040		0.0025	0.00040	mg/L		07/01/17 13:38	07/05/17 11:49	5
Lead	<0.00035		0.0013	0.00035	mg/L		07/01/17 13:38	07/05/17 11:49	5
Lithium	<0.0032		0.0050	0.0032	mg/L		07/01/17 13:38	07/05/17 11:49	5
Molybdenum	<0.00085		0.015	0.00085	mg/L		07/01/17 13:38	07/05/17 11:49	5
Selenium	<0.00024		0.0013	0.00024	mg/L		07/01/17 13:38	07/05/17 11:49	5
Thallium	<0.000085		0.00050	0.000085	mg/L		07/01/17 13:38	07/05/17 11:49	5

Lab Sample ID: LCS 400-359131/2-A
Matrix: Water
Analysis Batch: 359473

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 359131

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	0.0500	0.0553		mg/L		111	80 - 120
Arsenic	0.0500	0.0540		mg/L		108	80 - 120
Barium	0.0500	0.0549		mg/L		110	80 - 120
Beryllium	0.0500	0.0531		mg/L		106	80 - 120
Boron	0.100	0.0922		mg/L		92	80 - 120
Cadmium	0.0500	0.0529		mg/L		106	80 - 120
Calcium	5.00	4.95		mg/L		99	80 - 120
Chromium	0.0500	0.0526		mg/L		105	80 - 120
Cobalt	0.0500	0.0551		mg/L		110	80 - 120
Lead	0.0500	0.0523		mg/L		105	80 - 120
Lithium	0.0500	0.0555		mg/L		111	80 - 120
Molybdenum	0.100	0.102		mg/L		102	80 - 120
Selenium	0.0500	0.0527		mg/L		105	80 - 120
Thallium	0.0100	0.0107		mg/L		107	80 - 120

Lab Sample ID: 400-139715-B-2-C MS ^5
Matrix: Water
Analysis Batch: 359473

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 359131

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Antimony	<0.0010		0.0500	0.0571		mg/L		114	75 - 125
Arsenic	<0.00046		0.0500	0.0559		mg/L		112	75 - 125
Barium	0.034		0.0500	0.0887		mg/L		109	75 - 125
Beryllium	<0.00034		0.0500	0.0523		mg/L		105	75 - 125
Boron	0.13		0.100	0.237		mg/L		108	75 - 125
Cadmium	<0.00034		0.0500	0.0522		mg/L		104	75 - 125
Calcium	110		5.00	119	4	mg/L		142	75 - 125
Chromium	<0.0011		0.0500	0.0537		mg/L		107	75 - 125

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-1
SDG: CCR -Plant Daniel

Method: 6020 - Metals (ICP/MS) (Continued)

Lab Sample ID: 400-139715-B-2-C MS ^5
Matrix: Water
Analysis Batch: 359473

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 359131

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Cobalt	<0.00040		0.0500	0.0559		mg/L		112	75 - 125
Lead	<0.00035		0.0500	0.0526		mg/L		105	75 - 125
Lithium	0.0052		0.0500	0.0527		mg/L		95	75 - 125
Molybdenum	<0.00085		0.100	0.107		mg/L		107	75 - 125
Selenium	0.019		0.0500	0.0747		mg/L		111	75 - 125
Thallium	<0.00085		0.0100	0.0107		mg/L		107	75 - 125

Lab Sample ID: 400-139715-B-2-D MSD ^5
Matrix: Water
Analysis Batch: 359473

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 359131

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	Limits	RPD	Limit
Antimony	<0.0010		0.0500	0.0552		mg/L		110	75 - 125	3	20
Arsenic	<0.00046		0.0500	0.0542		mg/L		108	75 - 125	3	20
Barium	0.034		0.0500	0.0871		mg/L		106	75 - 125	2	20
Beryllium	<0.00034		0.0500	0.0525		mg/L		105	75 - 125	0	20
Boron	0.13		0.100	0.234		mg/L		105	75 - 125	1	20
Cadmium	<0.00034		0.0500	0.0510		mg/L		102	75 - 125	2	20
Calcium	110		5.00	116	4	mg/L		80	75 - 125	3	20
Chromium	<0.0011		0.0500	0.0529		mg/L		106	75 - 125	1	20
Cobalt	<0.00040		0.0500	0.0538		mg/L		108	75 - 125	4	20
Lead	<0.00035		0.0500	0.0549		mg/L		110	75 - 125	4	20
Lithium	0.0052		0.0500	0.0514		mg/L		92	75 - 125	2	20
Molybdenum	<0.00085		0.100	0.102		mg/L		102	75 - 125	4	20
Selenium	0.019		0.0500	0.0727		mg/L		107	75 - 125	3	20
Thallium	<0.00085		0.0100	0.0104		mg/L		104	75 - 125	2	20

Method: 7470A - Mercury (CVAA)

Lab Sample ID: MB 400-359010/14-A
Matrix: Water
Analysis Batch: 359443

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 359010

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Mercury	<0.000070		0.00020	0.000070	mg/L		06/30/17 12:45	07/05/17 13:49	1

Lab Sample ID: LCS 400-359010/15-A
Matrix: Water
Analysis Batch: 359443

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 359010

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits
Mercury	0.00101	0.000928		mg/L		92	80 - 120

Lab Sample ID: 400-139746-B-1-B MS
Matrix: Water
Analysis Batch: 359443

Client Sample ID: Matrix Spike
Prep Type: Total/NA
Prep Batch: 359010

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	Limits
Mercury	<0.000070		0.00201	0.00187		mg/L		93	80 - 120

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-1
SDG: CCR -Plant Daniel

Lab Sample ID: 400-139746-B-1-C MSD
Matrix: Water
Analysis Batch: 359443

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA
Prep Batch: 359010

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Mercury	<0.000070		0.00201	0.00191		mg/L		95	80 - 120	2	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 400-358873/1
Matrix: Water
Analysis Batch: 358873

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			06/29/17 16:16	1

Lab Sample ID: LCS 400-358873/2
Matrix: Water
Analysis Batch: 358873

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	294		mg/L		100	78 - 122

Lab Sample ID: 400-139817-1 DU
Matrix: Water
Analysis Batch: 358873

Client Sample ID: MW-19
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	34		34.0		mg/L		0	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-359437/6
Matrix: Water
Analysis Batch: 359437

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			07/05/17 13:28	1

Lab Sample ID: LCS 400-359437/7
Matrix: Water
Analysis Batch: 359437

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	30.8		mg/L		103	90 - 110

Lab Sample ID: MRL 400-359437/3
Matrix: Water
Analysis Batch: 359437

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	2.00	1.94	J	mg/L		97	50 - 150

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-1
SDG: CCR -Plant Daniel

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: 400-140034-A-1 MS
Matrix: Water
Analysis Batch: 359437

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	11		10.0	21.3		mg/L		105	73 - 120

Lab Sample ID: 400-140034-A-1 MSD
Matrix: Water
Analysis Batch: 359437

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	11		10.0	21.1		mg/L		102	73 - 120	1	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-359578/3
Matrix: Water
Analysis Batch: 359578

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Fluoride	<0.032		0.10	0.032	mg/L			07/06/17 14:46	1

Lab Sample ID: LCS 400-359578/4
Matrix: Water
Analysis Batch: 359578

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	4.00	4.18		mg/L		105	90 - 110

Lab Sample ID: 400-139470-A-29 MS
Matrix: Water
Analysis Batch: 359578

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	0.63		1.00	1.74		mg/L		111	75 - 125

Lab Sample ID: 400-139470-A-29 MSD
Matrix: Water
Analysis Batch: 359578

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Fluoride	0.63		1.00	1.74		mg/L		111	75 - 125	0	4

Lab Sample ID: 400-139817-1 DU
Matrix: Water
Analysis Batch: 359578

Client Sample ID: MW-19
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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-1
SDG: CCR -Plant Daniel

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-359576/6
Matrix: Water
Analysis Batch: 359576

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Sulfate	<1.4		5.0	1.4	mg/L			07/06/17 07:47	1

Lab Sample ID: LCS 400-359576/7
Matrix: Water
Analysis Batch: 359576

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	15.5		mg/L		104	90 - 110

Lab Sample ID: MRL 400-359576/3
Matrix: Water
Analysis Batch: 359576

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

Analyte	Spike Added	MRL Result	MRL Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	5.00	3.89	J	mg/L		78	50 - 150

Lab Sample ID: 400-139785-A-10 MS
Matrix: Water
Analysis Batch: 359576

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	2.5	J	10.0	13.7		mg/L		112	77 - 128

Lab Sample ID: 400-139785-A-10 MSD
Matrix: Water
Analysis Batch: 359576

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	2.5	J	10.0	13.9		mg/L		114	77 - 128	1	5

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-139817-1
SDG Number: CCR -Plant Daniel

Login Number: 139817

List Number: 1

Creator: Perez, Trina M

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.9°C IR-2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-1
SDG: CCR -Plant Daniel

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-18
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-18
Georgia	State Program	4	N/A	06-30-18
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17 *
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-18
Massachusetts	State Program	1	M-FL094	06-30-18
Michigan	State Program	5	9912	06-30-18
New Jersey	NELAP	2	FL006	06-30-18
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17 *
Tennessee	State Program	4	TN02907	06-30-18
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-18
Washington	State Program	10	C915	05-15-18
West Virginia DEP	State Program	3	136	06-30-18

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

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

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

TestAmerica Job ID: 400-139817-2
Client Project/Site: CCR -Plant Daniel

For:
Southern Company
PO BOX 2641 GSC8
Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:
7/26/2017 4:33:18 PM

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

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

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

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

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Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-2

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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-2

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-139817-1	MW-19	Water	06/26/17 10:53	06/26/17 12:55
400-139817-2	FB-01	Water	06/26/17 10:15	06/26/17 12:55

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-2

Client Sample ID: MW-19
Date Collected: 06/26/17 10:53
Date Received: 06/26/17 12:55

Lab Sample ID: 400-139817-1
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	0.180		0.0786	0.0802	1.00	0.0795	pCi/L	06/30/17 07:35	07/26/17 06:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/30/17 07:35	07/26/17 06:45	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.0365	U	0.188	0.188	1.00	0.348	pCi/L	06/30/17 08:44	07/14/17 11:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	101		40 - 110					06/30/17 08:44	07/14/17 11:14	1
Y Carrier	77.4		40 - 110					06/30/17 08:44	07/14/17 11:14	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.144	U	0.203	0.204	5.00	0.348	pCi/L		07/26/17 16:06	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-2

Client Sample ID: FB-01
Date Collected: 06/26/17 10:15
Date Received: 06/26/17 12:55

Lab Sample ID: 400-139817-2
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	0.0300	U	0.0475	0.0476	1.00	0.0827	pCi/L	06/30/17 07:35	07/26/17 06:45	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	105		40 - 110					06/30/17 07:35	07/26/17 06:45	1

Method: 9320 - Radium-228 (GFPC)

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	-0.00619	U	0.259	0.259	1.00	0.457	pCi/L	06/30/17 08:44	07/14/17 11:14	1
Carrier	%Yield	Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	105		40 - 110					06/30/17 08:44	07/14/17 11:14	1
Y Carrier	77.8		40 - 110					06/30/17 08:44	07/14/17 11:14	1

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

Analyte	Result	Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Combined Radium 226 + 228	0.0239	U	0.263	0.263	5.00	0.457	pCi/L		07/26/17 16:06	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-2

Qualifiers

Rad

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

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
▫	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-2

Client Sample ID: MW-19

Date Collected: 06/26/17 10:53

Date Received: 06/26/17 12:55

Lab Sample ID: 400-139817-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			315886	06/30/17 07:35	BME	TAL SL
Total/NA	Analysis	9315		1	319212	07/26/17 06:45	RTM	TAL SL
Total/NA	Prep	PrecSep_0			315900	06/30/17 08:44	LDE	TAL SL
Total/NA	Analysis	9320		1	317427	07/14/17 11:14	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319365	07/26/17 16:06	RTM	TAL SL

Client Sample ID: FB-01

Date Collected: 06/26/17 10:15

Date Received: 06/26/17 12:55

Lab Sample ID: 400-139817-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	PrecSep-21			315886	06/30/17 07:35	BME	TAL SL
Total/NA	Analysis	9315		1	319212	07/26/17 06:45	RTM	TAL SL
Total/NA	Prep	PrecSep_0			315900	06/30/17 08:44	LDE	TAL SL
Total/NA	Analysis	9320		1	317427	07/14/17 11:14	ALD	TAL SL
Total/NA	Analysis	Ra226_Ra228		1	319365	07/26/17 16:06	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: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-2

Rad

Prep Batch: 315886

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139817-1	MW-19	Total/NA	Water	PrecSep-21	
400-139817-2	FB-01	Total/NA	Water	PrecSep-21	
MB 160-315886/1-A	Method Blank	Total/NA	Water	PrecSep-21	
LCS 160-315886/2-A	Lab Control Sample	Total/NA	Water	PrecSep-21	
400-139746-A-14-A DU	Duplicate	Total/NA	Water	PrecSep-21	

Prep Batch: 315900

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-139817-1	MW-19	Total/NA	Water	PrecSep_0	
400-139817-2	FB-01	Total/NA	Water	PrecSep_0	
MB 160-315900/1-A	Method Blank	Total/NA	Water	PrecSep_0	
LCS 160-315900/2-A	Lab Control Sample	Total/NA	Water	PrecSep_0	
400-139746-A-6-B DU	Duplicate	Total/NA	Water	PrecSep_0	
400-139746-A-14-B DU	Duplicate	Total/NA	Water	PrecSep_0	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-2

Method: 9315 - Radium-226 (GFPC)

Lab Sample ID: MB 160-315886/1-A
Matrix: Water
Analysis Batch: 319213

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 315886

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-226	0.03967	U	0.0446	0.0448	1.00	0.0708	pCi/L	06/30/17 07:35	07/26/17 06:42	1
Carrier	%Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110					06/30/17 07:35	07/26/17 06:42	1

Lab Sample ID: LCS 160-315886/2-A
Matrix: Water
Analysis Batch: 319213

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 315886

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits
Radium-226	11.4	9.719		1.00	1.00	0.0622	pCi/L	86	68 - 137
Carrier	%Yield	LCS Qualifier	Limits						
Ba Carrier	102		40 - 110						

Lab Sample ID: 400-139746-A-14-A DU
Matrix: Water
Analysis Batch: 319212

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 315886

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit
Radium-226	0.0619	U	0.02457	U	0.0400	1.00	0.0703	pCi/L	0.42	1
Carrier	%Yield	DU Qualifier	Limits							
Ba Carrier	97.6		40 - 110							

Method: 9320 - Radium-228 (GFPC)

Lab Sample ID: MB 160-315900/1-A
Matrix: Water
Analysis Batch: 317417

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 315900

Analyte	MB Result	MB Qualifier	Count Uncert. (2σ+/-)	Total Uncert. (2σ+/-)	RL	MDC	Unit	Prepared	Analyzed	Dil Fac
Radium-228	0.2214	U	0.249	0.250	1.00	0.410	pCi/L	06/30/17 08:44	07/14/17 11:09	1
Carrier	%Yield	MB Qualifier	Limits					Prepared	Analyzed	Dil Fac
Ba Carrier	97.9		40 - 110					06/30/17 08:44	07/14/17 11:09	1
Y Carrier	79.3		40 - 110					06/30/17 08:44	07/14/17 11:09	1

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-2

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

Lab Sample ID: LCS 160-315900/2-A
Matrix: Water
Analysis Batch: 317417

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 315900

Analyte	Spike Added	LCS Result	LCS Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	%Rec	%Rec. Limits												
Radium-228	13.2	14.32		1.54	1.00	0.365	pCi/L	109	56 - 140												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Carrier</th> <th>LCS %Yield</th> <th>LCS Qualifier</th> <th>Limits</th> </tr> </thead> <tbody> <tr> <td>Ba Carrier</td> <td>102</td> <td></td> <td>40 - 110</td> </tr> <tr> <td>Y Carrier</td> <td>77.8</td> <td></td> <td>40 - 110</td> </tr> </tbody> </table>										Carrier	LCS %Yield	LCS Qualifier	Limits	Ba Carrier	102		40 - 110	Y Carrier	77.8		40 - 110
Carrier	LCS %Yield	LCS Qualifier	Limits																		
Ba Carrier	102		40 - 110																		
Y Carrier	77.8		40 - 110																		

Lab Sample ID: 400-139746-A-6-B DU
Matrix: Water
Analysis Batch: 317417

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 315900

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit												
Radium-228	-0.0764	U	0.2839	U	0.225	1.00	0.352	pCi/L	0.85	1												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Carrier</th> <th>DU %Yield</th> <th>DU Qualifier</th> <th>Limits</th> </tr> </thead> <tbody> <tr> <td>Ba Carrier</td> <td>100</td> <td></td> <td>40 - 110</td> </tr> <tr> <td>Y Carrier</td> <td>77.4</td> <td></td> <td>40 - 110</td> </tr> </tbody> </table>											Carrier	DU %Yield	DU Qualifier	Limits	Ba Carrier	100		40 - 110	Y Carrier	77.4		40 - 110
Carrier	DU %Yield	DU Qualifier	Limits																			
Ba Carrier	100		40 - 110																			
Y Carrier	77.4		40 - 110																			

Lab Sample ID: 400-139746-A-14-B DU
Matrix: Water
Analysis Batch: 317417

Client Sample ID: Duplicate
Prep Type: Total/NA
Prep Batch: 315900

Analyte	Sample Result	Sample Qual	DU Result	DU Qual	Total Uncert. (2σ+/-)	RL	MDC	Unit	RER	RER Limit												
Radium-228	-0.0609	U	0.03055	U	0.233	1.00	0.413	pCi/L	0.20	1												
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>Carrier</th> <th>DU %Yield</th> <th>DU Qualifier</th> <th>Limits</th> </tr> </thead> <tbody> <tr> <td>Ba Carrier</td> <td>97.6</td> <td></td> <td>40 - 110</td> </tr> <tr> <td>Y Carrier</td> <td>72.5</td> <td></td> <td>40 - 110</td> </tr> </tbody> </table>											Carrier	DU %Yield	DU Qualifier	Limits	Ba Carrier	97.6		40 - 110	Y Carrier	72.5		40 - 110
Carrier	DU %Yield	DU Qualifier	Limits																			
Ba Carrier	97.6		40 - 110																			
Y Carrier	72.5		40 - 110																			

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

Lab Sample ID: 400-139648-A-6 DU
Matrix: Water
Analysis Batch: 319365

Client Sample ID: Duplicate
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	0.153	U	0.3273	U	0.260	5.00	0.408	pCi/L	0.36	

Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-139817-2

SDG Number:

Login Number: 139817

List Number: 1

Creator: Perez, Trina M

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	3.9°C IR-2
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	



Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-2

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-18
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-17
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-18
Georgia	State Program	4	N/A	06-30-18
Illinois	NELAP	5	200041	10-09-17
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	10-31-17
Kentucky (UST)	State Program	4	53	06-30-17 *
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-18
Massachusetts	State Program	1	M-FL094	06-30-18
Michigan	State Program	5	9912	06-30-18
New Jersey	NELAP	2	FL006	06-30-18
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-17
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-17 *
Tennessee	State Program	4	TN02907	06-30-18
Texas	NELAP	6	T104704286-16-10	09-30-17
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-18
Washington	State Program	10	C915	05-15-18
West Virginia DEP	State Program	3	136	06-30-18

Laboratory: TestAmerica St. Louis

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alaska	State Program	10	MO00054	06-30-18
California	State Program	9	2886	03-31-18 *
Connecticut	State Program	1	PH-0241	03-31-19
Florida	NELAP	4	E87689	06-30-18
Illinois	NELAP	5	200023	11-30-17
Iowa	State Program	7	373	02-01-18
Kansas	NELAP	7	E-10236	10-31-17
Kentucky (DW)	State Program	4	90125	12-31-17
L-A-B	DoD ELAP		L2305	04-06-19
Louisiana	NELAP	6	04080	06-30-18
Louisiana (DW)	NELAP	6	LA170011	12-31-17
Maryland	State Program	3	310	09-30-18
Missouri	State Program	7	780	06-30-17 *
Nevada	State Program	9	MO000542017-1	07-31-17 *
New Jersey	NELAP	2	MO002	06-30-18
New York	NELAP	2	11616	03-31-18

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

TestAmerica Pensacola

Accreditation/Certification Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-139817-2

Laboratory: TestAmerica St. Louis (Continued)

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

Authority	Program	EPA Region	Identification Number	Expiration Date
North Dakota	State Program	8	R207	06-30-17 *
NRC	NRC		24-24817-01	12-31-22
Oklahoma	State Program	6	9997	08-31-17 *
Pennsylvania	NELAP	3	68-00540	02-21-18
South Carolina	State Program	4	85002001	06-30-17 *
Texas	NELAP	6	T104704193-16-10	07-31-17 *
US Fish & Wildlife	Federal		LE058448-0	10-31-17
USDA	Federal		P330-17-0028	02-02-20
Utah	NELAP	8	MO000542016-8	07-31-17 *
Virginia	NELAP	3	460230	06-14-18
Washington	State Program	10	C592	08-30-17 *
West Virginia DEP	State Program	3	381	08-31-17 *

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

TestAmerica Pensacola

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: 400-144780-1

TestAmerica SDG: Plant Daniel NAMU App III

Client Project/Site: CCR -Plant Daniel

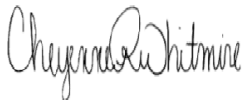
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:

11/3/2017 9:40:24 AM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

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

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

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

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Case Narrative

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
SDG: Plant Daniel NAMU App III

Job ID: 400-144780-1

Laboratory: TestAmerica Pensacola

Narrative

**Job Narrative
400-144780-1**

Metals

Method(s) 6020: The post digestion spike % recovery for Calcium associated with batch 373007 was outside of control limits.

General Chemistry

Method(s) SM 4500 Cl- E: The method blank for analytical batch 372765 contained Chloride above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

Method(s) SM 4500 SO4 E: The sample duplicate precision for the following sample associated with analytical batch 372769 was outside control limits: (400-144781-A-8 MSD). The associated Laboratory Control Sample (LCS) precision met acceptance criteria.

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Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
SDG: Plant Daniel NAMU App III

Client Sample ID: MW-11

Lab Sample ID: 400-144780-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	2.0		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	34		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	15	B	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
Field pH	4.72				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-14

Lab Sample ID: 400-144780-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	3.7		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	8.0		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	10	B	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	5.01				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-15

Lab Sample ID: 400-144780-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	1.1		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	58		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	7.1	B	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.62				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-16

Lab Sample ID: 400-144780-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	1.1		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	58		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	9.9	B	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.51				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-17

Lab Sample ID: 400-144780-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	0.96		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	26		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	6.5	B	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	1.8	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	5.00				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-18

Lab Sample ID: 400-144780-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Boron	0.025	J	0.050	0.021	mg/L	5		6020	Total Recoverable
Calcium	0.69		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	32		5.0	3.4	mg/L	1		SM 2540C	Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
SDG: Plant Daniel NAMU App III

Client Sample ID: MW-18 (Continued)

Lab Sample ID: 400-144780-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Chloride	8.6	B	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Sulfate	3.4	J	5.0	1.4	mg/L	1		SM 4500 SO4 E	Total/NA
Field pH	4.61				SU	1		Field Sampling	Total/NA

Client Sample ID: MW-19

Lab Sample ID: 400-144780-7

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	0.58		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	42		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	5.4	B	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA
Field pH	4.93				SU	1		Field Sampling	Total/NA

Client Sample ID: DUP-02

Lab Sample ID: 400-144780-8

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	1.1		0.25	0.13	mg/L	5		6020	Total Recoverable
Total Dissolved Solids	62		5.0	3.4	mg/L	1		SM 2540C	Total/NA
Chloride	9.6	B	2.0	0.60	mg/L	1		SM 4500 Cl- E	Total/NA

Client Sample ID: FB-02

Lab Sample ID: 400-144780-9

No Detections.

Client Sample ID: EB-02

Lab Sample ID: 400-144780-10

No Detections.

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
SDG: Plant Daniel NAMU App III

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
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
Field Sampling	Field Sampling	EPA	TAL PEN

Protocol References:

EPA = US Environmental Protection Agency

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

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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

Sample Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
SDG: Plant Daniel NAMU App III

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-144780-1	MW-11	Water	10/17/17 11:03	10/18/17 14:05
400-144780-2	MW-14	Water	10/17/17 00:00	10/18/17 14:05
400-144780-3	MW-15	Water	10/17/17 06:46	10/18/17 14:05
400-144780-4	MW-16	Water	10/17/17 07:40	10/18/17 14:05
400-144780-5	MW-17	Water	10/17/17 09:10	10/18/17 14:05
400-144780-6	MW-18	Water	10/17/17 09:58	10/18/17 14:05
400-144780-7	MW-19	Water	10/17/17 08:30	10/18/17 14:05
400-144780-8	DUP-02	Water	10/17/17 06:40	10/18/17 14:05
400-144780-9	FB-02	Water	10/17/17 10:25	10/18/17 14:05
400-144780-10	EB-02	Water	10/17/17 12:25	10/18/17 14:05

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Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
 SDG: Plant Daniel NAMU App III

Client Sample ID: MW-11
Date Collected: 10/17/17 11:03
Date Received: 10/18/17 14:05

Lab Sample ID: 400-144780-1
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.021		0.050	0.021	mg/L		10/20/17 13:09	10/23/17 15:24	5
Calcium	2.0		0.25	0.13	mg/L		10/20/17 13:09	10/23/17 15:24	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	34		5.0	3.4	mg/L			10/21/17 15:56	1
Chloride	15	B	2.0	0.60	mg/L			10/21/17 10:26	1
Fluoride	0.040	J	0.10	0.032	mg/L			11/02/17 09:38	1
Sulfate	<1.4		5.0	1.4	mg/L			10/21/17 13:06	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.72				SU			10/17/17 11:03	1

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
 SDG: Plant Daniel NAMU App III

Client Sample ID: MW-14
Date Collected: 10/17/17 00:00
Date Received: 10/18/17 14:05

Lab Sample ID: 400-144780-2
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.021		0.050	0.021	mg/L		10/20/17 13:09	10/23/17 15:29	5
Calcium	3.7		0.25	0.13	mg/L		10/20/17 13:09	10/23/17 15:29	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	8.0		5.0	3.4	mg/L			10/21/17 15:56	1
Chloride	10	B	2.0	0.60	mg/L			10/21/17 10:26	1
Fluoride	<0.032		0.10	0.032	mg/L			11/02/17 09:41	1
Sulfate	<1.4		5.0	1.4	mg/L			10/21/17 13:13	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.01				SU			10/17/17 00:00	1

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Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
 SDG: Plant Daniel NAMU App III

Client Sample ID: MW-15
Date Collected: 10/17/17 06:46
Date Received: 10/18/17 14:05

Lab Sample ID: 400-144780-3
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.021		0.050	0.021	mg/L		10/20/17 13:09	10/23/17 15:33	5
Calcium	1.1		0.25	0.13	mg/L		10/20/17 13:09	10/23/17 15:33	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	58		5.0	3.4	mg/L			10/21/17 17:05	1
Chloride	7.1	B	2.0	0.60	mg/L			10/21/17 10:26	1
Fluoride	<0.032		0.10	0.032	mg/L			11/02/17 09:44	1
Sulfate	<1.4		5.0	1.4	mg/L			10/21/17 13:13	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.62				SU			10/17/17 06:46	1

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Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
 SDG: Plant Daniel NAMU App III

Client Sample ID: MW-16
Date Collected: 10/17/17 07:40
Date Received: 10/18/17 14:05

Lab Sample ID: 400-144780-4
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.021		0.050	0.021	mg/L		10/20/17 13:09	10/23/17 15:38	5
Calcium	1.1		0.25	0.13	mg/L		10/20/17 13:09	10/23/17 15:38	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	58		5.0	3.4	mg/L			10/21/17 17:05	1
Chloride	9.9	B	2.0	0.60	mg/L			10/21/17 10:26	1
Fluoride	<0.032		0.10	0.032	mg/L			11/02/17 10:17	1
Sulfate	<1.4		5.0	1.4	mg/L			10/21/17 13:13	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.51				SU			10/17/17 07:40	1

Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
SDG: Plant Daniel NAMU App III

Client Sample ID: MW-17
Date Collected: 10/17/17 09:10
Date Received: 10/18/17 14:05

Lab Sample ID: 400-144780-5
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.021		0.050	0.021	mg/L		10/20/17 13:09	10/23/17 15:42	5
Calcium	0.96		0.25	0.13	mg/L		10/20/17 13:09	10/23/17 15:42	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	26		5.0	3.4	mg/L			10/21/17 17:05	1
Chloride	6.5	B	2.0	0.60	mg/L			10/21/17 10:26	1
Fluoride	<0.032		0.10	0.032	mg/L			11/02/17 10:20	1
Sulfate	1.8	J	5.0	1.4	mg/L			10/21/17 13:13	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	5.00				SU			10/17/17 09:10	1

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
SDG: Plant Daniel NAMU App III

Client Sample ID: MW-18
Date Collected: 10/17/17 09:58
Date Received: 10/18/17 14:05

Lab Sample ID: 400-144780-6
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	0.025	J	0.050	0.021	mg/L		10/20/17 13:09	10/23/17 15:47	5
Calcium	0.69		0.25	0.13	mg/L		10/20/17 13:09	10/23/17 15:47	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	32		5.0	3.4	mg/L			10/21/17 17:05	1
Chloride	8.6	B	2.0	0.60	mg/L			10/21/17 10:26	1
Fluoride	<0.032		0.10	0.032	mg/L			11/02/17 10:23	1
Sulfate	3.4	J	5.0	1.4	mg/L			10/21/17 13:13	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.61				SU			10/17/17 09:58	1

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
 SDG: Plant Daniel NAMU App III

Client Sample ID: MW-19
Date Collected: 10/17/17 08:30
Date Received: 10/18/17 14:05

Lab Sample ID: 400-144780-7
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.021		0.050	0.021	mg/L		10/20/17 13:09	10/23/17 15:51	5
Calcium	0.58		0.25	0.13	mg/L		10/20/17 13:09	10/23/17 15:51	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	42		5.0	3.4	mg/L			10/21/17 17:05	1
Chloride	5.4	B	2.0	0.60	mg/L			10/21/17 10:26	1
Fluoride	<0.032		0.10	0.032	mg/L			11/02/17 10:26	1
Sulfate	<1.4		5.0	1.4	mg/L			10/21/17 13:13	1

Method: Field Sampling - Field Sampling

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Field pH	4.93				SU			10/17/17 08:30	1

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
 SDG: Plant Daniel NAMU App III

Client Sample ID: DUP-02
Date Collected: 10/17/17 06:40
Date Received: 10/18/17 14:05

Lab Sample ID: 400-144780-8
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.021		0.050	0.021	mg/L		10/20/17 13:09	10/23/17 15:56	5
Calcium	1.1		0.25	0.13	mg/L		10/20/17 13:09	10/23/17 15:56	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	62		5.0	3.4	mg/L			10/21/17 17:05	1
Chloride	9.6	B	2.0	0.60	mg/L			10/21/17 10:29	1
Fluoride	<0.032		0.10	0.032	mg/L			11/02/17 10:29	1
Sulfate	<1.4		5.0	1.4	mg/L			10/21/17 13:13	1



Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
SDG: Plant Daniel NAMU App III

Client Sample ID: FB-02
Date Collected: 10/17/17 10:25
Date Received: 10/18/17 14:05

Lab Sample ID: 400-144780-9
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.021		0.050	0.021	mg/L		10/20/17 13:09	10/23/17 16:23	5
Calcium	<0.13		0.25	0.13	mg/L		10/20/17 13:09	10/23/17 16:23	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			10/21/17 17:05	1
Chloride	<0.60		2.0	0.60	mg/L			10/21/17 10:29	1
Fluoride	<0.032		0.10	0.032	mg/L			11/02/17 10:31	1
Sulfate	<1.4		5.0	1.4	mg/L			10/21/17 13:13	1

Client Sample Results

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
 SDG: Plant Daniel NAMU App III

Client Sample ID: EB-02
Date Collected: 10/17/17 12:25
Date Received: 10/18/17 14:05

Lab Sample ID: 400-144780-10
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.021		0.050	0.021	mg/L		10/20/17 13:09	10/23/17 16:27	5
Calcium	<0.13		0.25	0.13	mg/L		10/20/17 13:09	10/23/17 16:27	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			10/21/17 17:05	1
Chloride	<0.60		2.0	0.60	mg/L			10/21/17 10:29	1
Fluoride	<0.032		0.10	0.032	mg/L			11/02/17 10:34	1
Sulfate	<1.4		5.0	1.4	mg/L			10/21/17 13:13	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
SDG: Plant Daniel NAMU App III

Qualifiers

Metals

Qualifier	Qualifier Description
4	MS, MSD: The analyte present in the original sample is greater than 4 times the matrix spike concentration; therefore, control limits are not applicable.
E	Result exceeded calibration range.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

General Chemistry

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

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
SDG: Plant Daniel NAMU App III

Client Sample ID: MW-11

Date Collected: 10/17/17 11:03

Date Received: 10/18/17 14:05

Lab Sample ID: 400-144780-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			372678	10/20/17 13:09	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	373007	10/23/17 15:24	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	372778	10/21/17 15:56	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	372765	10/21/17 10:26	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	374380	11/02/17 09:38	RRC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	372769	10/21/17 13:06	JLB	TAL PEN
Total/NA	Analysis	Field Sampling		1	373534	10/17/17 11:03	BWS	TAL PEN

Client Sample ID: MW-14

Date Collected: 10/17/17 00:00

Date Received: 10/18/17 14:05

Lab Sample ID: 400-144780-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			372678	10/20/17 13:09	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	373007	10/23/17 15:29	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	372778	10/21/17 15:56	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	372765	10/21/17 10:26	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	374380	11/02/17 09:41	RRC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	372769	10/21/17 13:13	JLB	TAL PEN
Total/NA	Analysis	Field Sampling		1	373534	10/17/17 00:00	BWS	TAL PEN

Client Sample ID: MW-15

Date Collected: 10/17/17 06:46

Date Received: 10/18/17 14:05

Lab Sample ID: 400-144780-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			372678	10/20/17 13:09	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	373007	10/23/17 15:33	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	372779	10/21/17 17:05	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	372765	10/21/17 10:26	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	374380	11/02/17 09:44	RRC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	372769	10/21/17 13:13	JLB	TAL PEN
Total/NA	Analysis	Field Sampling		1	373534	10/17/17 06:46	BWS	TAL PEN

Client Sample ID: MW-16

Date Collected: 10/17/17 07:40

Date Received: 10/18/17 14:05

Lab Sample ID: 400-144780-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			372678	10/20/17 13:09	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	373007	10/23/17 15:38	DRE	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
SDG: Plant Daniel NAMU App III

Client Sample ID: MW-16

Date Collected: 10/17/17 07:40

Date Received: 10/18/17 14:05

Lab Sample ID: 400-144780-4

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	372779	10/21/17 17:05	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	372765	10/21/17 10:26	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	374406	11/02/17 10:17	RRC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	372769	10/21/17 13:13	JLB	TAL PEN
Total/NA	Analysis	Field Sampling		1	373534	10/17/17 07:40	BWS	TAL PEN

Client Sample ID: MW-17

Date Collected: 10/17/17 09:10

Date Received: 10/18/17 14:05

Lab Sample ID: 400-144780-5

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			372678	10/20/17 13:09	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	373007	10/23/17 15:42	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	372779	10/21/17 17:05	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	372765	10/21/17 10:26	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	374406	11/02/17 10:20	RRC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	372769	10/21/17 13:13	JLB	TAL PEN
Total/NA	Analysis	Field Sampling		1	373534	10/17/17 09:10	BWS	TAL PEN

Client Sample ID: MW-18

Date Collected: 10/17/17 09:58

Date Received: 10/18/17 14:05

Lab Sample ID: 400-144780-6

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			372678	10/20/17 13:09	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	373007	10/23/17 15:47	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	372779	10/21/17 17:05	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	372765	10/21/17 10:26	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	374406	11/02/17 10:23	RRC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	372769	10/21/17 13:13	JLB	TAL PEN
Total/NA	Analysis	Field Sampling		1	373534	10/17/17 09:58	BWS	TAL PEN

Client Sample ID: MW-19

Date Collected: 10/17/17 08:30

Date Received: 10/18/17 14:05

Lab Sample ID: 400-144780-7

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			372678	10/20/17 13:09	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	373007	10/23/17 15:51	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	372779	10/21/17 17:05	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	372765	10/21/17 10:26	JLB	TAL PEN

TestAmerica Pensacola

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
SDG: Plant Daniel NAMU App III

Client Sample ID: MW-19
Date Collected: 10/17/17 08:30
Date Received: 10/18/17 14:05

Lab Sample ID: 400-144780-7
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	374406	11/02/17 10:26	RRC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	372769	10/21/17 13:13	JLB	TAL PEN
Total/NA	Analysis	Field Sampling		1	373534	10/17/17 08:30	BWS	TAL PEN

Client Sample ID: DUP-02
Date Collected: 10/17/17 06:40
Date Received: 10/18/17 14:05

Lab Sample ID: 400-144780-8
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			372678	10/20/17 13:09	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	373007	10/23/17 15:56	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	372779	10/21/17 17:05	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	372765	10/21/17 10:29	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	374406	11/02/17 10:29	RRC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	372769	10/21/17 13:13	JLB	TAL PEN

Client Sample ID: FB-02
Date Collected: 10/17/17 10:25
Date Received: 10/18/17 14:05

Lab Sample ID: 400-144780-9
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			372678	10/20/17 13:09	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	373007	10/23/17 16:23	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	372779	10/21/17 17:05	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	372765	10/21/17 10:29	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	374406	11/02/17 10:31	RRC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	372769	10/21/17 13:13	JLB	TAL PEN

Client Sample ID: EB-02
Date Collected: 10/17/17 12:25
Date Received: 10/18/17 14:05

Lab Sample ID: 400-144780-10
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			372678	10/20/17 13:09	DN1	TAL PEN
Total Recoverable	Analysis	6020		5	373007	10/23/17 16:27	DRE	TAL PEN
Total/NA	Analysis	SM 2540C		1	372779	10/21/17 17:05	TET	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	372765	10/21/17 10:29	JLB	TAL PEN
Total/NA	Analysis	SM 4500 F C		1	374406	11/02/17 10:34	RRC	TAL PEN
Total/NA	Analysis	SM 4500 SO4 E		1	372769	10/21/17 13:13	JLB	TAL PEN

Laboratory References:

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

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
SDG: Plant Daniel NAMU App III

Metals

Prep Batch: 372678

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-144780-1	MW-11	Total Recoverable	Water	3005A	
400-144780-2	MW-14	Total Recoverable	Water	3005A	
400-144780-3	MW-15	Total Recoverable	Water	3005A	
400-144780-4	MW-16	Total Recoverable	Water	3005A	
400-144780-5	MW-17	Total Recoverable	Water	3005A	
400-144780-6	MW-18	Total Recoverable	Water	3005A	
400-144780-7	MW-19	Total Recoverable	Water	3005A	
400-144780-8	DUP-02	Total Recoverable	Water	3005A	
400-144780-9	FB-02	Total Recoverable	Water	3005A	
400-144780-10	EB-02	Total Recoverable	Water	3005A	
MB 400-372678/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-372678/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-144674-B-1-E MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-144674-B-1-F MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 373007

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-144780-1	MW-11	Total Recoverable	Water	6020	372678
400-144780-2	MW-14	Total Recoverable	Water	6020	372678
400-144780-3	MW-15	Total Recoverable	Water	6020	372678
400-144780-4	MW-16	Total Recoverable	Water	6020	372678
400-144780-5	MW-17	Total Recoverable	Water	6020	372678
400-144780-6	MW-18	Total Recoverable	Water	6020	372678
400-144780-7	MW-19	Total Recoverable	Water	6020	372678
400-144780-8	DUP-02	Total Recoverable	Water	6020	372678
400-144780-9	FB-02	Total Recoverable	Water	6020	372678
400-144780-10	EB-02	Total Recoverable	Water	6020	372678
MB 400-372678/1-A ^5	Method Blank	Total Recoverable	Water	6020	372678
LCS 400-372678/2-A	Lab Control Sample	Total Recoverable	Water	6020	372678
400-144674-B-1-E MS ^5	Matrix Spike	Total Recoverable	Water	6020	372678
400-144674-B-1-F MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	372678

General Chemistry

Analysis Batch: 372765

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-144780-1	MW-11	Total/NA	Water	SM 4500 CI- E	
400-144780-2	MW-14	Total/NA	Water	SM 4500 CI- E	
400-144780-3	MW-15	Total/NA	Water	SM 4500 CI- E	
400-144780-4	MW-16	Total/NA	Water	SM 4500 CI- E	
400-144780-5	MW-17	Total/NA	Water	SM 4500 CI- E	
400-144780-6	MW-18	Total/NA	Water	SM 4500 CI- E	
400-144780-7	MW-19	Total/NA	Water	SM 4500 CI- E	
400-144780-8	DUP-02	Total/NA	Water	SM 4500 CI- E	
400-144780-9	FB-02	Total/NA	Water	SM 4500 CI- E	
400-144780-10	EB-02	Total/NA	Water	SM 4500 CI- E	
MB 400-372765/6	Method Blank	Total/NA	Water	SM 4500 CI- E	
LCS 400-372765/7	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
MRL 400-372765/3	Lab Control Sample	Total/NA	Water	SM 4500 CI- E	
400-144780-1 MS	MW-11	Total/NA	Water	SM 4500 CI- E	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
SDG: Plant Daniel NAMU App III

General Chemistry (Continued)

Analysis Batch: 372765 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-144780-1 MSD	MW-11	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 372769

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-144780-1	MW-11	Total/NA	Water	SM 4500 SO4 E	
400-144780-2	MW-14	Total/NA	Water	SM 4500 SO4 E	
400-144780-3	MW-15	Total/NA	Water	SM 4500 SO4 E	
400-144780-4	MW-16	Total/NA	Water	SM 4500 SO4 E	
400-144780-5	MW-17	Total/NA	Water	SM 4500 SO4 E	
400-144780-6	MW-18	Total/NA	Water	SM 4500 SO4 E	
400-144780-7	MW-19	Total/NA	Water	SM 4500 SO4 E	
400-144780-8	DUP-02	Total/NA	Water	SM 4500 SO4 E	
400-144780-9	FB-02	Total/NA	Water	SM 4500 SO4 E	
400-144780-10	EB-02	Total/NA	Water	SM 4500 SO4 E	
MB 400-372769/10	Method Blank	Total/NA	Water	SM 4500 SO4 E	
LCS 400-372769/11	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
MRL 400-372769/7	Lab Control Sample	Total/NA	Water	SM 4500 SO4 E	
400-144781-A-8 MS	Matrix Spike	Total/NA	Water	SM 4500 SO4 E	
400-144781-A-8 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 SO4 E	

Analysis Batch: 372778

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-144780-1	MW-11	Total/NA	Water	SM 2540C	
400-144780-2	MW-14	Total/NA	Water	SM 2540C	
MB 400-372778/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-372778/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-144780-1 DU	MW-11	Total/NA	Water	SM 2540C	

Analysis Batch: 372779

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-144780-3	MW-15	Total/NA	Water	SM 2540C	
400-144780-4	MW-16	Total/NA	Water	SM 2540C	
400-144780-5	MW-17	Total/NA	Water	SM 2540C	
400-144780-6	MW-18	Total/NA	Water	SM 2540C	
400-144780-7	MW-19	Total/NA	Water	SM 2540C	
400-144780-8	DUP-02	Total/NA	Water	SM 2540C	
400-144780-9	FB-02	Total/NA	Water	SM 2540C	
400-144780-10	EB-02	Total/NA	Water	SM 2540C	
MB 400-372779/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-372779/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-144837-A-1 DU	Duplicate	Total/NA	Water	SM 2540C	
400-144842-A-3 DU	Duplicate	Total/NA	Water	SM 2540C	

Analysis Batch: 374380

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-144780-1	MW-11	Total/NA	Water	SM 4500 F C	
400-144780-2	MW-14	Total/NA	Water	SM 4500 F C	
400-144780-3	MW-15	Total/NA	Water	SM 4500 F C	
MB 400-374380/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-374380/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-144723-A-148 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	

TestAmerica Pensacola

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
SDG: Plant Daniel NAMU App III

General Chemistry (Continued)

Analysis Batch: 374380 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-144723-A-148 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-144723-A-156 DU	Duplicate	Total/NA	Water	SM 4500 F C	

Analysis Batch: 374406

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-144780-4	MW-16	Total/NA	Water	SM 4500 F C	
400-144780-5	MW-17	Total/NA	Water	SM 4500 F C	
400-144780-6	MW-18	Total/NA	Water	SM 4500 F C	
400-144780-7	MW-19	Total/NA	Water	SM 4500 F C	
400-144780-8	DUP-02	Total/NA	Water	SM 4500 F C	
400-144780-9	FB-02	Total/NA	Water	SM 4500 F C	
400-144780-10	EB-02	Total/NA	Water	SM 4500 F C	
MB 400-374406/3	Method Blank	Total/NA	Water	SM 4500 F C	
LCS 400-374406/4	Lab Control Sample	Total/NA	Water	SM 4500 F C	
400-144837-A-1 MS	Matrix Spike	Total/NA	Water	SM 4500 F C	
400-144837-A-1 MSD	Matrix Spike Duplicate	Total/NA	Water	SM 4500 F C	
400-144837-A-2 DU	Duplicate	Total/NA	Water	SM 4500 F C	

Field Service / Mobile Lab

Analysis Batch: 373534

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-144780-1	MW-11	Total/NA	Water	Field Sampling	
400-144780-2	MW-14	Total/NA	Water	Field Sampling	
400-144780-3	MW-15	Total/NA	Water	Field Sampling	
400-144780-4	MW-16	Total/NA	Water	Field Sampling	
400-144780-5	MW-17	Total/NA	Water	Field Sampling	
400-144780-6	MW-18	Total/NA	Water	Field Sampling	
400-144780-7	MW-19	Total/NA	Water	Field Sampling	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
SDG: Plant Daniel NAMU App III

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-372678/1-A ^5
Matrix: Water
Analysis Batch: 373007

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 372678

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Boron	<0.021		0.050	0.021	mg/L		10/20/17 13:09	10/23/17 14:28	5
Calcium	<0.13		0.25	0.13	mg/L		10/20/17 13:09	10/23/17 14:28	5

Lab Sample ID: LCS 400-372678/2-A
Matrix: Water
Analysis Batch: 373007

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 372678

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.100	0.109		mg/L		109	80 - 120
Calcium	5.00	5.23		mg/L		105	80 - 120

Lab Sample ID: 400-144674-B-1-E MS ^5
Matrix: Water
Analysis Batch: 373007

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 372678

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Boron	0.27		0.100	0.380		mg/L		111	75 - 125
Calcium	170	E	5.00	169	E 4	mg/L		-98	75 - 125

Lab Sample ID: 400-144674-B-1-F MSD ^5
Matrix: Water
Analysis Batch: 373007

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 372678

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Boron	0.27		0.100	0.385		mg/L		116	75 - 125	1	20
Calcium	170	E	5.00	172	E 4	mg/L		-41	75 - 125	2	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 400-372778/1
Matrix: Water
Analysis Batch: 372778

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			10/21/17 15:56	1

Lab Sample ID: LCS 400-372778/2
Matrix: Water
Analysis Batch: 372778

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	278		mg/L		95	78 - 122

Lab Sample ID: 400-144780-1 DU
Matrix: Water
Analysis Batch: 372778

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	34		34.0		mg/L		0	5

TestAmerica Pensacola

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
SDG: Plant Daniel NAMU App III

Method: SM 2540C - Solids, Total Dissolved (TDS) (Continued)

Lab Sample ID: MB 400-372779/1
Matrix: Water
Analysis Batch: 372779

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			10/21/17 17:05	1

Lab Sample ID: LCS 400-372779/2
Matrix: Water
Analysis Batch: 372779

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	304		mg/L		104	78 - 122

Lab Sample ID: 400-144837-A-1 DU
Matrix: Water
Analysis Batch: 372779

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	1600		1570		mg/L		0	5

Lab Sample ID: 400-144842-A-3 DU
Matrix: Water
Analysis Batch: 372779

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	60		60.0		mg/L		0	5

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-372765/6
Matrix: Water
Analysis Batch: 372765

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	0.635	J	2.0	0.60	mg/L			10/21/17 09:59	1

Lab Sample ID: LCS 400-372765/7
Matrix: Water
Analysis Batch: 372765

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	29.6		mg/L		99	90 - 110

Lab Sample ID: MRL 400-372765/3
Matrix: Water
Analysis Batch: 372765

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	2.26		mg/L		113	50 - 150

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
SDG: Plant Daniel NAMU App III

Method: SM 4500 Cl- E - Chloride, Total (Continued)

Lab Sample ID: 400-144780-1 MS
Matrix: Water
Analysis Batch: 372765

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	15	B	10.0	24.7		mg/L		99	73 - 120

Lab Sample ID: 400-144780-1 MSD
Matrix: Water
Analysis Batch: 372765

Client Sample ID: MW-11
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	15	B	10.0	24.0		mg/L		91	73 - 120	3	8

Method: SM 4500 F C - Fluoride

Lab Sample ID: MB 400-374380/3
Matrix: Water
Analysis Batch: 374380

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			11/02/17 08:46	1

Lab Sample ID: LCS 400-374380/4
Matrix: Water
Analysis Batch: 374380

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	4.00	3.75		mg/L		94	90 - 110

Lab Sample ID: 400-144723-A-148 MS
Matrix: Water
Analysis Batch: 374380

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	0.21		1.00	1.17		mg/L		96	75 - 125

Lab Sample ID: 400-144723-A-148 MSD
Matrix: Water
Analysis Batch: 374380

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	0.21		1.00	1.19		mg/L		98	75 - 125	2	4

Lab Sample ID: 400-144723-A-156 DU
Matrix: Water
Analysis Batch: 374380

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

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
SDG: Plant Daniel NAMU App III

Method: SM 4500 F C - Fluoride (Continued)

Lab Sample ID: MB 400-374406/3
Matrix: Water
Analysis Batch: 374406

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			11/02/17 10:03	1

Lab Sample ID: LCS 400-374406/4
Matrix: Water
Analysis Batch: 374406

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Fluoride	4.00	3.75		mg/L		94	90 - 110

Lab Sample ID: 400-144837-A-1 MS
Matrix: Water
Analysis Batch: 374406

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	0.55		1.00	1.59		mg/L		104	75 - 125

Lab Sample ID: 400-144837-A-1 MSD
Matrix: Water
Analysis Batch: 374406

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	0.55		1.00	1.59		mg/L		104	75 - 125	0	4

Lab Sample ID: 400-144837-A-2 DU
Matrix: Water
Analysis Batch: 374406

Client Sample ID: Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Fluoride	0.36		0.360		mg/L		0	4

Method: SM 4500 SO4 E - Sulfate, Total

Lab Sample ID: MB 400-372769/10
Matrix: Water
Analysis Batch: 372769

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			10/21/17 13:06	1

Lab Sample ID: LCS 400-372769/11
Matrix: Water
Analysis Batch: 372769

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	15.0	14.0		mg/L		93	90 - 110

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
SDG: Plant Daniel NAMU App III

Method: SM 4500 SO4 E - Sulfate, Total (Continued)

Lab Sample ID: MRL 400-372769/7
Matrix: Water
Analysis Batch: 372769

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	4.14	J	mg/L		83	50 - 150

Lab Sample ID: 400-144781-A-8 MS
Matrix: Water
Analysis Batch: 372769

Client Sample ID: Matrix Spike
Prep Type: Total/NA


Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Sulfate	<1.4	F2	10.0	10.1		mg/L		101	77 - 128

Lab Sample ID: 400-144781-A-8 MSD
Matrix: Water
Analysis Batch: 372769

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Sulfate	<1.4	F2	10.0	9.51	F2	mg/L		95	77 - 128	6	5

Chain of Custody Record

Client Information Client Contact: Mr. Cale Sellers Company: Southern Company Address: PO BOX 2641 GSC8 City: Birmingham State, Zip: AL, 35291 Phone: 205-992-7762(Tel) Email: CBSSELLER@SOUTHERNCO.COM Project Name: CCR -Plant Daniel NAMU App III Site: Mississippi		Lab PM: Whitmire, Chyenne R E-Mail: chyenne.whitmire@testamericainc.com Phone: 850 380 3458 Carrier Tracking No(s): 400-68542-27817.1 Page: Page 1 of 3 Job #:	
Due Date Requested: TAT Requested (days): PO #: SCS10347656 WO #: Project #: 40006621 SSOW#:		Analysis Requested  400-144780 COC	
Sample Identification MW-11 MW-12 MW-13 MW-14 MW-15 MW-16 MW-17 MW-18 MW-19 DUP-02 FB-02		Field Filtered Sample (Yes or No) X Perform MS/MSD (Yes or No) X Fluoride, 2540C - Total Dissolved Solids 620 - Boron & Calcium Field Sampling - Field pH Total Number of containers	
Sample Date Sample Time Sample Type (C=Comp, G=grab) Matrix (W=water, S=solid, O=oil, BT=soil, A=air)		Preservation Codes: A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO4 F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other: M - Hexane N - None O - AsNaO2 P - Na2OHS Q - Na2SO3 R - Na2SO3 S - H2SO4 T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)	
Special Instructions/Note: NO Sample		Special Instructions/Note: Special Instructions/QC Requirements:	
Possible Hazard Identification <input type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown <input type="checkbox"/> Radiological		Sample Disposal (A fee may be assessed if samples are retained longer than 1 month) <input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For Months	
Empty Kit Requiring by:		Method of Shipment:	
Relinquished by: B. S. Hagan Date: 10/18/17 1255 Company: RSH		Received by: B. S. Hagan Date: 10/18/17 1255 Company: RSH	
Relinquished by: B. S. Hagan Date: 10/18/17 1405 Company: RSH		Received by: B. S. Hagan Date: 10/18/17 1405 Company: RSH	
Relinquished by:		Received by:	
Custody Seal No.: Δ Yes Δ No		Cooler Temperature(s) °C and Other Remarks: 1.7C IR 8 TO	



Chain of Custody Record

<p>Client Information</p> <p>Client Contact: <u>Mr. Cale Sellers</u></p> <p>Company: <u>Southern Company</u></p> <p>Address: <u>PO BOX 2641 GSC8</u></p> <p>City: <u>Birmingham</u></p> <p>State, Zip: <u>AL, 35291</u></p> <p>Phone: <u>205-992-7762(Tel)</u></p> <p>Email: <u>CBSELLER@SOUTHERNCO.COM</u></p> <p>Project Name: <u>CCR - Plant Daniel NAMU App III</u></p> <p>Site: <u>Mississippi</u></p>	<p>Lab PM: <u>Whitire, Cheyenne R</u></p> <p>E-Mail: <u>cheyenne.whitire@testamericainc.com</u></p> <p>Sampler: <u>Beth Sellers</u></p> <p>Phone: <u>850 380 3458</u></p> <p>Due Date Requested:</p> <p>TAT Requested (days):</p> <p>PO #: <u>SCS10347656</u></p> <p>WO #:</p> <p>Project #: <u>40006621</u></p> <p>SSOW#:</p>	<p>Carrier Tracking No(s):</p> <p>Job #:</p> <p>Analysis Requested</p> <p>Field Sampling - Field pH</p> <p>6020 - Boron & Calcium</p> <p>Fluoride, 2540C - Total Dissolved Solids</p> <p>SM4500 Cl⁻ Chloride, SM4500 SO₄²⁻ Sulfate, 4500 F⁻ Perform MS/MSD (Yes or No)</p> <p>Field Filtered Sample (Yes or No)</p> <p>Field Sampling - Field pH</p> <p>6020 - Boron & Calcium</p> <p>Fluoride, 2540C - Total Dissolved Solids</p> <p>SM4500 Cl⁻ Chloride, SM4500 SO₄²⁻ Sulfate, 4500 F⁻ Perform MS/MSD (Yes or No)</p> <p>Field Filtered Sample (Yes or No)</p>	<p>COC No: <u>400-68542-27817.1</u></p> <p>Page: <u>2</u></p> <p>Page of: <u>2</u></p> <p>Job #:</p> <p>Preservation Codes:</p> <p>A - HCL B - NaOH C - Zn Acetate D - Nitric Acid E - NaHSO₄ F - MeOH G - Amchlor H - Ascorbic Acid I - Ice J - DI Water K - EDTA L - EDA Other:</p> <p>M - Hexane N - None O - AsNaO₂ P - Na₂OAS Q - Na₂SO₃ R - Na₂SO₃ S - H₂SO₄ T - TSP Dodecahydrate U - Acetone V - MCAA W - pH 4-5 Z - other (specify)</p> <p>Special Instructions/Note:</p>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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<p>Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)</p> <p><input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months</p> <p>Special Instructions/QC Requirements:</p>																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			
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Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-144780-1
SDG Number: Plant Daniel NAMU App III

Login Number: 144780

List Number: 1

Creator: Siddoway, Benjamin

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	1.7°C IR-8
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	False	No sample time for MW-14
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-144780-1
 SDG: Plant Daniel NAMU App III

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-18
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-18
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-18
Georgia	State Program	4	N/A	06-30-18
Illinois	NELAP	5	200041	10-09-18
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	12-31-17
Kentucky (UST)	State Program	4	53	06-30-18
Kentucky (WW)	State Program	4	98030	12-31-17
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-18
Massachusetts	State Program	1	M-FL094	06-30-18
Michigan	State Program	5	9912	06-30-18
New Jersey	NELAP	2	FL006	06-30-18
North Carolina (WW/SW)	State Program	4	314	12-31-17
Oklahoma	State Program	6	9810	08-31-18
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-18
Tennessee	State Program	4	TN02907	06-30-18
Texas	NELAP	6	T104704286-17-12	09-30-18
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-18
Washington	State Program	10	C915	05-15-18
West Virginia DEP	State Program	3	136	06-30-18

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: 400-147465-1

TestAmerica Sample Delivery Group: NAMU

Client Project/Site: CCR -Plant Daniel

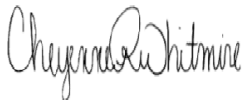
For:

Southern Company

PO BOX 2641 GSC8

Birmingham, Alabama 35291

Attn: Mr. Cale B. Sellers



Authorized for release by:

12/26/2017 5:49:44 PM

Cheyenne Whitmire, Project Manager II

(850)471-6222

cheyenne.whitmire@testamericainc.com

LINKS

Review your project
results through

TotalAccess

Have a Question?



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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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Detection Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-147465-1
SDG: NAMU

Client Sample ID: MW-16

Lab Sample ID: 400-147465-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	0.89		0.25	0.13	mg/L	5		6020	Total
Chloride	7.8		2.0	0.60	mg/L	1		SM 4500 Cl- E	Recoverable Total/NA

Client Sample ID: MW-15

Lab Sample ID: 400-147465-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Total Dissolved Solids	20		5.0	3.4	mg/L	1		SM 2540C	Total/NA

Client Sample ID: DUP-01

Lab Sample ID: 400-147465-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
Calcium	0.97		0.25	0.13	mg/L	5		6020	Total
Chloride	8.2		2.0	0.60	mg/L	1		SM 4500 Cl- E	Recoverable Total/NA

This Detection Summary does not include radiochemical test results.

TestAmerica Pensacola

Method Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-147465-1
SDG: NAMU

Method	Method Description	Protocol	Laboratory
6020	Metals (ICP/MS)	SW846	TAL PEN
SM 2540C	Solids, Total Dissolved (TDS)	SM	TAL PEN
SM 4500 Cl- E	Chloride, Total	SM	TAL PEN

Protocol References:

SM = "Standard Methods For The Examination Of Water And Wastewater",
SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

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



Sample Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-147465-1
SDG: NAMU

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
400-147465-1	MW-16	Water	12/15/17 14:18	12/18/17 09:24
400-147465-2	MW-15	Water	12/15/17 13:29	12/18/17 09:24
400-147465-3	DUP-01	Water	12/15/17 13:18	12/18/17 09:24

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Client Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-147465-1
SDG: NAMU

Client Sample ID: MW-16
Date Collected: 12/15/17 14:18
Date Received: 12/18/17 09:24

Lab Sample ID: 400-147465-1
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	0.89		0.25	0.13	mg/L		12/19/17 08:35	12/19/17 19:38	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	7.8		2.0	0.60	mg/L			12/19/17 14:11	1

Client Sample ID: MW-15
Date Collected: 12/15/17 13:29
Date Received: 12/18/17 09:24

Lab Sample ID: 400-147465-2
Matrix: Water

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	20		5.0	3.4	mg/L			12/21/17 16:38	1

Client Sample ID: DUP-01
Date Collected: 12/15/17 13:18
Date Received: 12/18/17 09:24

Lab Sample ID: 400-147465-3
Matrix: Water

Method: 6020 - Metals (ICP/MS) - Total Recoverable

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	0.97		0.25	0.13	mg/L		12/19/17 08:35	12/19/17 20:05	5

General Chemistry

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloride	8.2		2.0	0.60	mg/L			12/19/17 14:11	1

Definitions/Glossary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-147465-1
SDG: NAMU

Glossary

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

Lab Chronicle

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-147465-1
SDG: NAMU

Client Sample ID: MW-16

Date Collected: 12/15/17 14:18

Date Received: 12/18/17 09:24

Lab Sample ID: 400-147465-1

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			380230	12/19/17 08:35	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	380407	12/19/17 19:38	DRE	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	380486	12/19/17 14:11	RRC	TAL PEN

Client Sample ID: MW-15

Date Collected: 12/15/17 13:29

Date Received: 12/18/17 09:24

Lab Sample ID: 400-147465-2

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	SM 2540C		1	380671	12/21/17 16:38	TET	TAL PEN

Client Sample ID: DUP-01

Date Collected: 12/15/17 13:18

Date Received: 12/18/17 09:24

Lab Sample ID: 400-147465-3

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total Recoverable	Prep	3005A			380230	12/19/17 08:35	DRE	TAL PEN
Total Recoverable	Analysis	6020		5	380407	12/19/17 20:05	DRE	TAL PEN
Total/NA	Analysis	SM 4500 CI- E		1	380486	12/19/17 14:11	RRC	TAL PEN

Laboratory References:

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

QC Association Summary

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-147465-1
SDG: NAMU

Metals

Prep Batch: 380230

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-147465-1	MW-16	Total Recoverable	Water	3005A	
400-147465-3	DUP-01	Total Recoverable	Water	3005A	
MB 400-380230/1-A ^5	Method Blank	Total Recoverable	Water	3005A	
LCS 400-380230/2-A	Lab Control Sample	Total Recoverable	Water	3005A	
400-147462-A-1-B MS ^5	Matrix Spike	Total Recoverable	Water	3005A	
400-147462-A-1-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	3005A	

Analysis Batch: 380407

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-147465-1	MW-16	Total Recoverable	Water	6020	380230
400-147465-3	DUP-01	Total Recoverable	Water	6020	380230
MB 400-380230/1-A ^5	Method Blank	Total Recoverable	Water	6020	380230
LCS 400-380230/2-A	Lab Control Sample	Total Recoverable	Water	6020	380230
400-147462-A-1-B MS ^5	Matrix Spike	Total Recoverable	Water	6020	380230
400-147462-A-1-C MSD ^5	Matrix Spike Duplicate	Total Recoverable	Water	6020	380230

General Chemistry

Analysis Batch: 380486

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-147465-1	MW-16	Total/NA	Water	SM 4500 Cl- E	
400-147465-3	DUP-01	Total/NA	Water	SM 4500 Cl- E	
MB 400-380486/6	Method Blank	Total/NA	Water	SM 4500 Cl- E	
LCS 400-380486/7	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
MRL 400-380486/3	Lab Control Sample	Total/NA	Water	SM 4500 Cl- E	
400-147465-1 MS	MW-16	Total/NA	Water	SM 4500 Cl- E	
400-147465-1 MSD	MW-16	Total/NA	Water	SM 4500 Cl- E	

Analysis Batch: 380671

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
400-147465-2	MW-15	Total/NA	Water	SM 2540C	
MB 400-380671/1	Method Blank	Total/NA	Water	SM 2540C	
LCS 400-380671/2	Lab Control Sample	Total/NA	Water	SM 2540C	
400-147465-2 DU	MW-15	Total/NA	Water	SM 2540C	

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-147465-1
SDG: NAMU

Method: 6020 - Metals (ICP/MS)

Lab Sample ID: MB 400-380230/1-A ^5
Matrix: Water
Analysis Batch: 380407

Client Sample ID: Method Blank
Prep Type: Total Recoverable
Prep Batch: 380230

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Calcium	<0.13		0.25	0.13	mg/L		12/19/17 08:35	12/19/17 18:53	5

Lab Sample ID: LCS 400-380230/2-A
Matrix: Water
Analysis Batch: 380407

Client Sample ID: Lab Control Sample
Prep Type: Total Recoverable
Prep Batch: 380230

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	5.00	5.41		mg/L		108	80 - 120

Lab Sample ID: 400-147462-A-1-B MS ^5
Matrix: Water
Analysis Batch: 380407

Client Sample ID: Matrix Spike
Prep Type: Total Recoverable
Prep Batch: 380230

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Calcium	1.0		5.00	6.69		mg/L		113	75 - 125

Lab Sample ID: 400-147462-A-1-C MSD ^5
Matrix: Water
Analysis Batch: 380407

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total Recoverable
Prep Batch: 380230

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Calcium	1.0		5.00	6.74		mg/L		114	75 - 125	1	20

Method: SM 2540C - Solids, Total Dissolved (TDS)

Lab Sample ID: MB 400-380671/1
Matrix: Water
Analysis Batch: 380671

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Total Dissolved Solids	<3.4		5.0	3.4	mg/L			12/21/17 16:38	1

Lab Sample ID: LCS 400-380671/2
Matrix: Water
Analysis Batch: 380671

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Total Dissolved Solids	293	264		mg/L		90	78 - 122

Lab Sample ID: 400-147465-2 DU
Matrix: Water
Analysis Batch: 380671

Client Sample ID: MW-15
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	DU Result	DU Qualifier	Unit	D	RPD	RPD Limit
Total Dissolved Solids	20		20.0		mg/L		0	5

QC Sample Results

Client: Southern Company
Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-147465-1
SDG: NAMU

Method: SM 4500 Cl- E - Chloride, Total

Lab Sample ID: MB 400-380486/6
Matrix: Water
Analysis Batch: 380486

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			12/19/17 13:56	1

Lab Sample ID: LCS 400-380486/7
Matrix: Water
Analysis Batch: 380486

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	30.0	31.6		mg/L		105	90 - 110

Lab Sample ID: MRL 400-380486/3
Matrix: Water
Analysis Batch: 380486

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	2.03		mg/L		102	50 - 150

Lab Sample ID: 400-147465-1 MS
Matrix: Water
Analysis Batch: 380486

Client Sample ID: MW-16
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec. Limits
Chloride	7.8		10.0	18.8		mg/L		109	73 - 120

Lab Sample ID: 400-147465-1 MSD
Matrix: Water
Analysis Batch: 380486

Client Sample ID: MW-16
Prep Type: Total/NA


Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec. Limits	RPD	RPD Limit
Chloride	7.8		10.0	18.8		mg/L		110	73 - 120	0	8

Chain of Custody Record

Client Information		Lab PM: Whitmire, Cheyenne R		Carrier Tracking No(s): 400-69530-28150.1	
Client Contact: Mr. Cale Sellers		Phone: 850-336-0192		Page: Page 1 of 1	
Company: Southern Company		E-Mail: cheyenne.whitmire@testamericainc.com		Job #:	
Address: PO BOX 2641 GSC8		City: Birmingham		State, Zip: AL, 35291	
Phone: 205-992-7762(Tel)		PO #: SCS10347656		WO #:	
Email: CBSELLER@SOUTHERNCO.COM		Project #: 40006621		SSOW #:	
Project Name: CCR -Plant Daniel		Site: NAMU			

Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=grab)	Matrix (W=water, S=solid, O=wast/oil, BT=Total, A=Al)	Field Filtered Sample (Yes or No)		Perform MS/MSD (Yes or No)		2540C - Total Dissolved Solids		Total Number of Containers	Special Instructions/Note:
					N	D	N	D	N	D		
MW-16	12-15-17	1418	G	Water	X		X		X		2	
MW-15	12-15-17	1329	G	Water			X		X		1	
Dup-01	12-15-17	1318	G	Water	X		X		X		2	
				Water								
				Water								

400-147465 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
 Other:
 M - Hexane
 N - None
 O - As/NaO2
 P - Na2O4S
 Q - Na2SO3
 R - Na2SO3
 S - H2SO4
 T - TSP Dodecahydrate
 U - Acetone
 V - MCAA
 W - ph 4-5
 Z - other (specify)

Analysis Requested

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

Special Instructions/QC Requirements:

Relinquished by: <i>[Signature]</i>	Date/Time: 12-18-17 0855	Company: RDK EM
Relinquished by: <i>[Signature]</i>	Date/Time: 12-18-17 0924	Company: RDK
Relinquished by: <i>[Signature]</i>	Date/Time: 12-18-17 0924	Company: RDK

Custody Seals Intact: Yes No Δ

Custody Seal No.: _____

Relinquished by: *[Signature]* Date/Time: 12-18-17 0855 Company: RDK

Relinquished by: *[Signature]* Date/Time: 12-18-17 0924 Company: RDK

Relinquished by: *[Signature]* Date/Time: 12-18-17 0924 Company: RDK

Cooler Temperature(s) °C and Other Remarks: 0.0 FR



Login Sample Receipt Checklist

Client: Southern Company

Job Number: 400-147465-1

SDG Number: NAMU

Login Number: 147465

List Number: 1

Creator: Johnson, Jeremy N

List Source: TestAmerica Pensacola

Question	Answer	Comment
Radioactivity wasn't checked or is \leq background as measured by a survey meter.	N/A	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	0.0°C, IR-7
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time (excluding tests with immediate HTs)	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <math><6\text{mm}</math> (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Accreditation/Certification Summary

Client: Southern Company
 Project/Site: CCR -Plant Daniel

TestAmerica Job ID: 400-147465-1
 SDG: NAMU

Laboratory: TestAmerica Pensacola

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

Authority	Program	EPA Region	Identification Number	Expiration Date
Alabama	State Program	4	40150	06-30-18
Arizona	State Program	9	AZ0710	01-11-18
Arkansas DEQ	State Program	6	88-0689	09-01-18
California	ELAP	9	2510	03-31-18
Florida	NELAP	4	E81010	06-30-18
Georgia	State Program	4	N/A	06-30-18
Illinois	NELAP	5	200041	10-09-18
Iowa	State Program	7	367	08-01-18
Kansas	NELAP	7	E-10253	12-31-17
Kentucky (UST)	State Program	4	53	06-30-18
Kentucky (WW)	State Program	4	98030	12-31-18
L-A-B	ISO/IEC 17025		L2471	02-22-20
Louisiana	NELAP	6	30976	06-30-18
Louisiana (DW)	NELAP	6	LA170005	12-31-17
Maryland	State Program	3	233	09-30-18
Massachusetts	State Program	1	M-FL094	06-30-18
Michigan	State Program	5	9912	06-30-18
New Jersey	NELAP	2	FL006	06-30-18
North Carolina (WW/SW)	State Program	4	314	12-31-18
Oklahoma	State Program	6	9810	08-31-18
Pennsylvania	NELAP	3	68-00467	01-31-18
Rhode Island	State Program	1	LAO00307	12-30-17
South Carolina	State Program	4	96026	06-30-18
Tennessee	State Program	4	TN02907	06-30-18
Texas	NELAP	6	T104704286-17-12	09-30-18
USDA	Federal		P330-16-00172	05-24-19
Virginia	NELAP	3	460166	06-14-18
Washington	State Program	10	C915	05-15-18
West Virginia DEP	State Program	3	136	06-30-18



Product Name: Low-Flow System

Date: 2016-03-23 09:45:11

Project Information:

Operator Name Shane Bragg
Company Name RDH ENV
Project Name North Ash Management Area
Site Name Daniel
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter 0.17 in
Tubing Length 45 ft

Pump placement from TOC 30.5 ft

Well Information:

Well ID MW-11
Well diameter 2 in
Well Total Depth 33 ft
Screen Length 5 ft
Depth to Water 10.75 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.290854 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 36 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	09:21:16	4209.01	20.30	4.79	63.97	3.37	21.84	0.44	73.99
Last 5	09:26:16	4509.01	20.32	4.79	64.66	2.95	21.91	0.84	72.70
Last 5	09:31:16	4809.01	20.38	4.80	64.13	2.68	21.95	0.57	71.46
Last 5	09:36:17	5110.15	20.44	4.79	63.42	2.24	21.96	0.43	69.62
Last 5	09:41:18	5411.01	20.47	4.80	63.95	2.44	21.97	0.51	69.13
Variance 0			0.06	0.01	-0.53			-0.26	-1.25
Variance 1			0.06	-0.01	-0.70			-0.14	-1.84
Variance 2			0.03	0.01	0.53			0.08	-0.49

Notes

Temperature:68 degrees precipitation: none sampled@0945

Grab Samples

Product Name: Low-Flow System

Date: 2016-03-23 07:44:06

Project Information:

Operator Name Shane Bragg
Company Name RDH ENV
Project Name North Ash Management Area
Site Name Daniel
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter 0.17 in
Tubing Length 45 ft

Pump placement from TOC 38.2 ft

Well Information:

Well ID MW-14
Well diameter 2 in
Well Total Depth 40.7 ft
Screen Length 5 ft
Depth to Water 10.15 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.290854 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.05 in
Total Volume Pumped 1200 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	07:24:00	300.07	19.88	5.28	67.45	3.64	10.20	2.74	87.95
Last 5	07:29:00	600.01	20.01	5.44	73.58	3.68	10.20	2.43	85.69
Last 5	07:34:00	900.02	20.04	5.43	71.76	3.59	10.20	2.43	84.02
Last 5	07:39:00	1200.01	20.13	5.40	71.80	3.36	10.20	2.37	81.71
Last 5									
Variance 0			0.13	0.16	6.13			-0.31	-2.26
Variance 1			0.02	-0.00	-1.82			-0.00	-1.67
Variance 2			0.09	-0.03	0.04			-0.06	-2.31

Notes

Temperature: 57 degrees. Precipitation: none: sampled@0745

Grab Samples

Product Name: Low-Flow System

Date: 2016-03-22 14:38:51

Project Information:

Operator Name Shane Bragg
Company Name RDH ENV
Project Name North Ash Management Area
Site Name Daniel
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter 0.17 in
Tubing Length 45 ft

Pump placement from TOC 36.9 ft

Well Information:

Well ID MW-15
Well diameter 2 in
Well Total Depth 39.5 ft
Screen Length 5 ft
Depth to Water 9.26 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.290854 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.04 in
Total Volume Pumped 10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	14:14:44	300.05	21.84	4.78	45.10	0.80	9.30	1.18	196.14
Last 5	14:19:44	600.01	21.99	4.79	45.03	0.73	9.30	1.28	175.11
Last 5	14:24:44	900.01	22.01	4.78	44.82	0.60	9.30	1.26	165.18
Last 5	14:29:44	1200.01	22.08	4.77	44.88	0.45	9.30	1.21	159.22
Last 5	14:34:45	1501.01	22.12	4.77	44.77	0.62	9.30	1.18	157.05
Variance 0			0.03	-0.01	-0.21			-0.03	-9.93
Variance 1			0.06	-0.02	0.06			-0.04	-5.96
Variance 2			0.04	0.00	-0.11			-0.03	-2.17

Notes

Temperature:65 degrees. Precipitation: none. Sampled@1445 duplicate@1345

Grab Samples

Product Name: Low-Flow System

Date: 2016-03-22 17:39:40

Project Information:

Operator Name Rick Hagendorfer
Company Name RDH Env
Project Name Northern ash management unit
Site Name Plant Daniel
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type peristaltic
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 28 ft

Pump placement from TOC 25.8 ft

Well Information:

Well ID MW-16
Well diameter 2 in
Well Total Depth 28.3 ft
Screen Length 5 ft
Depth to Water 5.86 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.2149758 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.03 in
Total Volume Pumped 6.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	17:25:14	240.08	20.71	4.61	37.82	0.68	5.88	0.40	85.24
Last 5	17:29:14	480.03	20.93	4.65	37.53	0.62	5.88	0.27	78.60
Last 5	17:33:14	720.03	21.00	4.66	37.41	0.63	5.89	0.20	73.92
Last 5	17:37:14	960.03	21.03	4.68	37.28	0.57	5.89	0.17	70.51
Last 5									
Variance 0			0.22	0.04	-0.29			-0.14	-6.64
Variance 1			0.07	0.01	-0.12			-0.07	-4.67
Variance 2			0.03	0.01	-0.13			-0.03	-3.41

Notes

Sample time 1740. Sunny 62.

Grab Samples

Product Name: Low-Flow System

Date: 2016-03-22 17:02:38

Project Information:

Operator Name Shane Bragg
Company Name RDH ENV
Project Name North Ash Management Area
Site Name Daniel
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter 0.17 in
Tubing Length 35 ft

Pump placement from TOC 26 ft

Well Information:

Well ID MW-17
Well diameter 2 in
Well Total Depth 28.5 ft
Screen Length 5 ft
Depth to Water 4.10 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.2462198 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.01 in
Total Volume Pumped 10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	16:39:43	300.01	20.08	5.10	44.53	0.77	4.11	0.84	80.94
Last 5	16:44:43	600.06	20.08	4.91	41.87	0.82	4.11	0.41	94.86
Last 5	16:49:43	900.01	20.12	4.89	41.78	0.78	4.11	0.28	99.76
Last 5	16:54:43	1200.01	20.14	4.89	41.22	0.56	4.11	0.21	101.60
Last 5	16:59:43	1500.01	20.12	4.89	41.30	0.67	4.11	0.17	101.45
Variance 0			0.05	-0.02	-0.08			-0.13	4.90
Variance 1			0.02	-0.00	-0.57			-0.07	1.84
Variance 2			-0.02	-0.00	0.08			-0.04	-0.16

Notes

Sampled@1705

Grab Samples

Product Name: Low-Flow System

Date: 2016-03-22 15:47:20

Project Information:

Operator Name Shane Bragg
Company Name RDH ENV
Project Name North Ash Management Area
Site Name Daniel
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter 0.17 in
Tubing Length 50 ft

Pump placement from TOC 41.9 ft

Well Information:

Well ID MW-18
Well diameter 2 in
Well Total Depth 44.4 ft
Screen Length 5 ft
Depth to Water 14.29 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.3131711 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.01 in
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	15:28:49	300.01	21.58	4.63	55.82	0.59	14.30	0.19	120.63
Last 5	15:33:49	600.01	21.50	4.62	55.72	0.68	14.30	0.11	108.12
Last 5	15:38:49	900.01	21.45	4.62	55.79	0.74	14.30	0.13	104.32
Last 5	15:43:49	1200.01	21.44	4.63	55.20	0.66	14.30	0.15	100.46
Last 5									
Variance 0			-0.08	-0.01	-0.09			-0.08	-12.51
Variance 1			-0.04	0.00	0.07			0.01	-3.80
Variance 2			-0.01	0.02	-0.59			0.03	-3.86

Notes

Temperature: 64 degrees precipitation: none sampled@1350

Grab Samples

Product Name: Low-Flow System

Date: 2016-09-12 15:20:56

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BG -4
Site Name Plant Daniel NAMU BG-4
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 37 ft

Pump placement from TOC 27.4 ft

Well Information:

Well ID MW-19
Well diameter 2 in
Well Total Depth 32.4 ft
Screen Length 10 ft
Depth to Water 19.32 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.2551467 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.01 in
Total Volume Pumped 12 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	14:57:52	600.02	22.08	5.54	47.18	2.11	19.33	0.12	55.69
Last 5	15:02:52	900.02	22.09	5.56	49.57	1.82	19.33	0.10	47.07
Last 5	15:07:52	1200.02	22.16	5.59	49.79	1.54	19.33	0.09	40.69
Last 5	15:12:52	1500.04	22.18	5.57	48.90	1.68	19.33	0.09	36.30
Last 5	15:17:52	1800.03	22.21	5.55	48.98	1.43	19.33	0.09	32.76
Variance 0			0.07	0.03	0.22			-0.01	-6.39
Variance 1			0.01	-0.02	-0.90			-0.00	-4.39
Variance 2			0.03	-0.02	0.08			-0.00	-3.53

Notes

Sample@1520, cloudy 82

Grab Samples

Product Name: Low-Flow System

Date: 2016-03-23 09:45:11

Project Information:

Operator Name Shane Bragg
Company Name RDH ENV
Project Name North Ash Management Area
Site Name Daniel
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter 0.17 in
Tubing Length 45 ft

Pump placement from TOC 30.5 ft

Well Information:

Well ID MW-11
Well diameter 2 in
Well Total Depth 33 ft
Screen Length 5 ft
Depth to Water 10.75 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.290854 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 36 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	09:21:16	4209.01	20.30	4.79	63.97	3.37	21.84	0.44	73.99
Last 5	09:26:16	4509.01	20.32	4.79	64.66	2.95	21.91	0.84	72.70
Last 5	09:31:16	4809.01	20.38	4.80	64.13	2.68	21.95	0.57	71.46
Last 5	09:36:17	5110.15	20.44	4.79	63.42	2.24	21.96	0.43	69.62
Last 5	09:41:18	5411.01	20.47	4.80	63.95	2.44	21.97	0.51	69.13
Variance 0			0.06	0.01	-0.53			-0.26	-1.25
Variance 1			0.06	-0.01	-0.70			-0.14	-1.84
Variance 2			0.03	0.01	0.53			0.08	-0.49

Notes

Temperature:68 degrees precipitation: none sampled@0945

Grab Samples

Product Name: Low-Flow System

Date: 2016-03-23 07:44:06

Project Information:

Operator Name Shane Bragg
Company Name RDH ENV
Project Name North Ash Management Area
Site Name Daniel
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter 0.17 in
Tubing Length 45 ft

Pump placement from TOC 38.2 ft

Well Information:

Well ID MW-14
Well diameter 2 in
Well Total Depth 40.7 ft
Screen Length 5 ft
Depth to Water 10.15 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.290854 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.05 in
Total Volume Pumped 1200 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	07:24:00	300.07	19.88	5.28	67.45	3.64	10.20	2.74	87.95
Last 5	07:29:00	600.01	20.01	5.44	73.58	3.68	10.20	2.43	85.69
Last 5	07:34:00	900.02	20.04	5.43	71.76	3.59	10.20	2.43	84.02
Last 5	07:39:00	1200.01	20.13	5.40	71.80	3.36	10.20	2.37	81.71
Last 5									
Variance 0			0.13	0.16	6.13			-0.31	-2.26
Variance 1			0.02	-0.00	-1.82			-0.00	-1.67
Variance 2			0.09	-0.03	0.04			-0.06	-2.31

Notes

Temperature: 57 degrees. Precipitation: none: sampled@0745

Grab Samples

Product Name: Low-Flow System

Date: 2016-03-22 14:38:51

Project Information:

Operator Name Shane Bragg
Company Name RDH ENV
Project Name North Ash Management Area
Site Name Daniel
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter 0.17 in
Tubing Length 45 ft

Pump placement from TOC 36.9 ft

Well Information:

Well ID MW-15
Well diameter 2 in
Well Total Depth 39.5 ft
Screen Length 5 ft
Depth to Water 9.26 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.290854 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.04 in
Total Volume Pumped 10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	14:14:44	300.05	21.84	4.78	45.10	0.80	9.30	1.18	196.14
Last 5	14:19:44	600.01	21.99	4.79	45.03	0.73	9.30	1.28	175.11
Last 5	14:24:44	900.01	22.01	4.78	44.82	0.60	9.30	1.26	165.18
Last 5	14:29:44	1200.01	22.08	4.77	44.88	0.45	9.30	1.21	159.22
Last 5	14:34:45	1501.01	22.12	4.77	44.77	0.62	9.30	1.18	157.05
Variance 0			0.03	-0.01	-0.21			-0.03	-9.93
Variance 1			0.06	-0.02	0.06			-0.04	-5.96
Variance 2			0.04	0.00	-0.11			-0.03	-2.17

Notes

Temperature:65 degrees. Precipitation: none. Sampled@1445 duplicate@1345

Grab Samples

Product Name: Low-Flow System

Date: 2016-03-22 17:39:40

Project Information:

Operator Name Rick Hagendorfer
Company Name RDH Env
Project Name Northern ash management unit
Site Name Plant Daniel
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type peristaltic
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 28 ft

Pump placement from TOC 25.8 ft

Well Information:

Well ID MW-16
Well diameter 2 in
Well Total Depth 28.3 ft
Screen Length 5 ft
Depth to Water 5.86 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.2149758 L
Calculated Sample Rate 240 sec
Stabilization Drawdown 0.03 in
Total Volume Pumped 6.4 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	17:25:14	240.08	20.71	4.61	37.82	0.68	5.88	0.40	85.24
Last 5	17:29:14	480.03	20.93	4.65	37.53	0.62	5.88	0.27	78.60
Last 5	17:33:14	720.03	21.00	4.66	37.41	0.63	5.89	0.20	73.92
Last 5	17:37:14	960.03	21.03	4.68	37.28	0.57	5.89	0.17	70.51
Last 5									
Variance 0			0.22	0.04	-0.29			-0.14	-6.64
Variance 1			0.07	0.01	-0.12			-0.07	-4.67
Variance 2			0.03	0.01	-0.13			-0.03	-3.41

Notes

Sample time 1740. Sunny 62.

Grab Samples

Product Name: Low-Flow System

Date: 2016-03-22 17:02:38

Project Information:

Operator Name Shane Bragg
Company Name RDH ENV
Project Name North Ash Management Area
Site Name Daniel
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter 0.17 in
Tubing Length 35 ft

Pump placement from TOC 26 ft

Well Information:

Well ID MW-17
Well diameter 2 in
Well Total Depth 28.5 ft
Screen Length 5 ft
Depth to Water 4.10 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.2462198 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.01 in
Total Volume Pumped 10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	16:39:43	300.01	20.08	5.10	44.53	0.77	4.11	0.84	80.94
Last 5	16:44:43	600.06	20.08	4.91	41.87	0.82	4.11	0.41	94.86
Last 5	16:49:43	900.01	20.12	4.89	41.78	0.78	4.11	0.28	99.76
Last 5	16:54:43	1200.01	20.14	4.89	41.22	0.56	4.11	0.21	101.60
Last 5	16:59:43	1500.01	20.12	4.89	41.30	0.67	4.11	0.17	101.45
Variance 0			0.05	-0.02	-0.08			-0.13	4.90
Variance 1			0.02	-0.00	-0.57			-0.07	1.84
Variance 2			-0.02	-0.00	0.08			-0.04	-0.16

Notes

Sampled@1705

Grab Samples

Product Name: Low-Flow System

Date: 2016-03-22 15:47:20

Project Information:

Operator Name Shane Bragg
Company Name RDH ENV
Project Name North Ash Management Area
Site Name Daniel
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter 0.17 in
Tubing Length 50 ft

Pump placement from TOC 41.9 ft

Well Information:

Well ID MW-18
Well diameter 2 in
Well Total Depth 44.4 ft
Screen Length 5 ft
Depth to Water 14.29 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.3131711 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.01 in
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	15:28:49	300.01	21.58	4.63	55.82	0.59	14.30	0.19	120.63
Last 5	15:33:49	600.01	21.50	4.62	55.72	0.68	14.30	0.11	108.12
Last 5	15:38:49	900.01	21.45	4.62	55.79	0.74	14.30	0.13	104.32
Last 5	15:43:49	1200.01	21.44	4.63	55.20	0.66	14.30	0.15	100.46
Last 5									
Variance 0			-0.08	-0.01	-0.09			-0.08	-12.51
Variance 1			-0.04	0.00	0.07			0.01	-3.80
Variance 2			-0.01	0.02	-0.59			0.03	-3.86

Notes

Temperature: 64 degrees precipitation: none sampled@1350

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-18 09:19:56

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BG-5
Site Name Plant Daniel NAMU BG-5
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 35 ft

Pump placement from TOC 27.4 ft

Well Information:

Well ID MW-19
Well diameter 2 in
Well Total Depth 32.4 ft
Screen Length 10 ft
Depth to Water 19.75 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6412198 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 12 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	08:58:43	600.02	22.18	5.11	40.65	3.27	19.75	0.06	15.23
Last 5	09:03:43	900.02	22.26	5.13	41.13	3.04	19.75	0.04	6.66
Last 5	09:08:43	1200.02	22.35	5.14	41.09	3.21	19.75	0.03	1.44
Last 5	09:13:43	1500.02	22.47	5.13	41.14	3.45	19.75	0.03	-2.00
Last 5	09:18:43	1800.02	22.53	5.14	41.30	3.33	19.75	0.03	-4.68
Variance 0			0.09	0.01	-0.04			-0.01	-5.23
Variance 1			0.11	-0.00	0.06			-0.00	-3.44
Variance 2			0.07	0.00	0.16			-0.00	-2.68

Notes

Sample@0919, Sunny 71

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-12 09:29:15

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU
Site Name Plant Daniel NAMU
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 424893
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 39 ft

Pump placement from TOC 31.5 ft

Well Information:

Well ID MW-11
Well diameter 2 in
Well Total Depth 33 ft
Screen Length 5 ft
Depth to Water 13.39 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 0.2640735 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 49 in
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	09:06:40	600.03	24.49	4.97	82.59	1.90	16.25	0.54	56.89
Last 5	09:11:40	900.03	24.52	5.03	82.49	1.14	16.95	0.47	53.65
Last 5	09:16:40	1200.02	24.60	4.90	81.81	1.07	17.33	0.46	53.95
Last 5	09:21:40	1500.02	24.69	4.89	81.33	1.24	17.46	0.46	52.49
Last 5	09:26:40	1800.03	24.78	4.90	80.68	1.37	17.52	0.36	50.50
Variance 0			0.08	-0.13	-0.68			-0.01	0.29
Variance 1			0.09	-0.01	-0.48			0.00	-1.46
Variance 2			0.09	0.01	-0.65			-0.10	-1.99

Notes

Sample@0927, EQ Blank-02@0945 cloudy 86

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-11 16:34:20

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU
Site Name Plant Daniel NAMU
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 424893
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 30 ft

Pump placement from TOC 20.4 ft

Well Information:

Well ID MW-12
Well diameter 2 in
Well Total Depth 22.9 ft
Screen Length 5 ft
Depth to Water 17.18 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.2239027 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.03 in
Total Volume Pumped 18 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	16:12:59	1500.02	21.05	4.36	75.25	0.47	17.21	4.82	80.70
Last 5	16:17:59	1800.03	21.06	4.35	77.63	0.39	17.21	4.77	76.79
Last 5	16:22:59	2100.02	21.14	4.35	78.48	0.33	17.21	4.66	69.42
Last 5	16:27:59	2400.02	21.08	4.35	78.51	0.38	17.21	4.62	64.57
Last 5	16:32:59	2700.02	21.10	4.35	78.59	0.42	17.21	4.60	64.94
Variance 0			0.08	-0.00	0.85			-0.10	-7.36
Variance 1			-0.06	0.00	0.03			-0.05	-4.85
Variance 2			0.01	0.00	0.08			-0.01	0.37

Notes

Sample@1633 Cloudy 86

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-11 15:27:59

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU
Site Name Plant Daniel NAMU
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 424893
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 31 ft

Pump placement from TOC 24 ft

Well Information:

Well ID MW-13
Well diameter 2 in
Well Total Depth 26.5 ft
Screen Length 5 ft
Depth to Water 22 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.2283661 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.08 in
Total Volume Pumped 10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	15:07:15	300.06	21.68	4.87	75.72	4.84	22.08	3.51	58.87
Last 5	15:12:15	600.02	21.40	4.84	75.88	2.35	22.08	3.60	56.29
Last 5	15:17:15	900.02	21.24	4.85	76.89	1.74	22.08	3.30	56.16
Last 5	15:22:15	1200.02	21.36	4.85	76.67	1.53	22.08	3.47	56.51
Last 5	15:27:15	1500.02	21.33	4.86	76.27	1.00	22.08	3.36	54.98
Variance 0			-0.16	0.01	1.01			-0.30	-0.13
Variance 1			0.12	0.00	-0.22			0.17	0.35
Variance 2			-0.03	0.01	-0.40			-0.11	-1.53

Notes

Sample@1527 Cloudy 89

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-12 10:27:33

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU
Site Name Plant Daniel NAMU
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 424893
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 46 ft

Pump placement from TOC 38.2 ft

Well Information:

Well ID MW-14
Well diameter 2 in
Well Total Depth 40.7 ft
Screen Length 5 ft
Depth to Water 12.84 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.2953174 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.01 in
Total Volume Pumped 10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	10:05:46	300.02	23.54	5.75	73.93	1.48	12.85	3.04	47.06
Last 5	10:10:46	600.02	23.30	5.74	73.64	1.19	12.85	2.90	44.85
Last 5	10:15:46	900.02	23.08	5.71	73.00	1.56	12.85	2.92	44.55
Last 5	10:20:46	1200.02	23.07	5.68	70.08	2.10	12.85	3.03	44.70
Last 5	10:25:46	1500.02	23.18	5.65	71.50	1.96	12.85	2.94	44.87
Variance 0			-0.21	-0.03	-0.64			0.02	-0.30
Variance 1			-0.01	-0.03	-2.92			0.11	0.15
Variance 2			0.11	-0.02	1.42			-0.08	0.17

Notes

Sample@1026 cloudy 86, FB-02@1035

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-12 11:23:24

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU
Site Name Plant Daniel NAMU
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 424893
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 44 ft

Pump placement from TOC 37 ft

Well Information:

Well ID MW-15
Well diameter 2 in
Well Total Depth 39.5 ft
Screen Length 5 ft
Depth to Water 12.30 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.2863906 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.01 in
Total Volume Pumped 10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond µS/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	11:02:33	300.02	23.06	5.07	50.00	0.79	12.31	2.37	56.24
Last 5	11:07:33	600.02	22.90	4.98	49.63	0.87	12.31	2.37	53.19
Last 5	11:12:33	900.02	22.91	5.22	49.78	0.94	12.31	2.29	52.19
Last 5	11:17:33	1200.02	23.07	5.08	49.65	0.22	12.31	2.31	51.40
Last 5	11:22:33	1500.02	22.99	5.03	49.44	0.34	12.31	2.28	51.81
Variance 0			0.00	0.24	0.15			-0.08	-1.00
Variance 1			0.16	-0.14	-0.13			0.02	-0.79
Variance 2			-0.07	-0.05	-0.21			-0.03	0.41

Notes

Sample@1122 Cloudy 86

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-11 14:39:38

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU
Site Name Plant Daniel NAMU
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 424893
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 33 ft

Pump placement from TOC 25.8 ft

Well Information:

Well ID MW-16
Well diameter 2 in
Well Total Depth 28.3 ft
Screen Length 5 ft
Depth to Water 10.54 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.237293 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.02 in
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	14:23:15	300.05	22.71	4.81	50.64	0.60	10.56	0.13	57.10
Last 5	14:28:15	600.03	22.49	4.78	50.80	0.54	10.56	0.09	49.16
Last 5	14:33:15	900.02	22.40	4.76	50.12	0.45	10.56	0.08	45.86
Last 5	14:38:15	1200.02	22.46	4.75	50.43	0.44	10.56	0.07	44.26
Last 5									
Variance 0			-0.22	-0.03	0.16			-0.04	-7.93
Variance 1			-0.08	-0.02	-0.68			-0.01	-3.31
Variance 2			0.06	-0.01	0.31			-0.00	-1.60

Notes

Sample@1439 cloudy 90

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-12 08:27:08

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU
Site Name Plant Daniel NAMU
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 424893
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 33 ft

Pump placement from TOC 26 ft

Well Information:

Well ID MW-17
Well diameter 2 in
Well Total Depth 28.5 ft
Screen Length 5 ft
Depth to Water 7.66 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.237293 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.02 in
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	08:13:03	300.03	23.25	5.36	49.84	0.33	7.68	0.16	22.86
Last 5	08:18:03	600.02	23.20	5.33	49.50	0.47	7.68	0.12	20.78
Last 5	08:23:03	900.03	23.07	5.27	48.29	0.52	7.68	0.10	24.91
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			-0.05	-0.03	-0.34			-0.04	-2.09
Variance 2			-0.13	-0.05	-1.21			-0.01	4.14

Notes

Sample@0826 partly cloudy 81

Grab Samples

Product Name: Low-Flow System

Date: 2016-07-12 07:25:23

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU
Site Name Plant Daniel NAMU
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 424893
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 48 ft

Pump placement from TOC 41.9 ft

Well Information:

Well ID MW-18
Well diameter 2 in
Well Total Depth 44.4 ft
Screen Length 5 ft
Depth to Water 17.01 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.3042443 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 18 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	07:03:24	1500.02	21.42	4.84	57.12	0.43	17.01	2.89	37.19
Last 5	07:08:24	1800.03	21.48	4.77	58.19	0.47	17.01	1.09	37.67
Last 5	07:13:24	2100.02	21.59	4.73	58.69	0.55	17.01	0.69	36.39
Last 5	07:18:24	2400.02	21.64	4.70	58.78	0.59	17.01	0.56	35.63
Last 5	07:23:24	2700.02	21.48	4.70	58.45	0.61	17.01	0.58	35.55
Variance 0			0.12	-0.04	0.50			-0.40	-1.28
Variance 1			0.04	-0.03	0.08			-0.13	-0.76
Variance 2			-0.15	0.00	-0.33			0.02	-0.07

Notes

Sample@0724, DUP-02@0624 partly cloudy 79

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-18 10:10:51

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-6
Site Name Daniel NAMU
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 424893
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 35 ft

Pump placement from TOC 27.4 ft

Well Information:

Well ID MW-19
Well diameter 2 in
Well Total Depth 32.4 ft
Screen Length 10 ft
Depth to Water 18.51 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6412198 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.04 in
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	09:59:48	300.06	22.08	5.31	41.16	2.95	18.55	0.09	-27.16
Last 5	10:04:48	600.02	22.13	5.29	40.84	4.31	18.55	0.07	-29.66
Last 5	10:09:48	900.02	22.04	5.27	41.30	3.33	18.55	0.07	-33.73
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			0.05	-0.02	-0.33			-0.02	-2.50
Variance 2			-0.09	-0.02	0.46			-0.00	-4.07

Notes

Sample @1010,DUP-03@0910 Cloudy 71

Grab Samples

Product Name: Low-Flow System

Date: 2016-09-12 10:50:00

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BG -4
Site Name Plant Daniel NAMU BG-4
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 40 ft

Pump placement from TOC 30.5 ft

Well Information:

Well ID MW-11
Well diameter 2 in
Well Total Depth 33 ft
Screen Length 5 ft
Depth to Water 13.30 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 0.2685369 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 80 in
Total Volume Pumped 11 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	10:28:44	2100.02	22.71	4.72	82.17	1.63	18.70	0.16	169.86
Last 5	10:33:44	2400.02	22.85	4.77	82.46	1.47	18.85	0.16	167.91
Last 5	10:38:44	2700.02	23.15	4.75	81.14	1.33	18.93	0.15	167.93
Last 5	10:43:44	3000.02	23.21	4.74	81.14	1.25	18.95	0.15	167.16
Last 5	10:48:44	3300.02	23.11	4.72	79.73	1.22	18.96	0.15	167.85
Variance 0			0.31	-0.02	-1.32			-0.01	0.02
Variance 1			0.05	-0.00	0.00			0.00	-0.77
Variance 2			-0.10	-0.02	-1.41			0.00	0.68

Notes

Sample@1049 partly cloudy 84

Grab Samples

Product Name: Low-Flow System

Date: 2016-09-13 06:44:56

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BG -4
Site Name Plant Daniel NAMU BG-4
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 30 ft

Pump placement from TOC 20.4 ft

Well Information:

Well ID MW-12
Well diameter 2 in
Well Total Depth 22.9 ft
Screen Length 5 ft
Depth to Water 17.04 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.2239027 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.02 in
Total Volume Pumped 10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	06:23:09	300.07	21.05	3.98	119.77	3.06	17.06	3.11	112.44
Last 5	06:28:09	600.03	20.86	4.16	95.01	2.77	17.06	3.23	95.97
Last 5	06:33:09	900.03	20.87	4.05	94.27	0.86	17.06	3.88	96.66
Last 5	06:38:09	1200.02	20.88	4.05	96.25	0.64	17.06	3.91	98.70
Last 5	06:43:09	1500.02	20.90	4.05	94.92	0.55	17.06	3.90	100.35
Variance 0			0.02	-0.11	-0.73			0.65	0.69
Variance 1			0.01	-0.00	1.98			0.02	2.04
Variance 2			0.01	0.01	-1.34			-0.01	1.65

Notes

Sample@0644, clear72

Grab Samples

Product Name: Low-Flow System

Date: 2016-09-13 07:41:57

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BG -4
Site Name Plant Daniel NAMU BG-4
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 34 ft

Pump placement from TOC 24 ft

Well Information:

Well ID MW-13
Well diameter 2 in
Well Total Depth 26.5 ft
Screen Length 5 ft
Depth to Water 21.85 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.2417564 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.07 in
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	07:25:04	300.02	21.02	4.57	78.33	2.88	21.92	2.93	125.46
Last 5	07:30:04	600.02	20.96	4.55	77.68	1.70	21.92	3.41	122.31
Last 5	07:35:04	900.02	20.95	4.57	78.03	1.56	21.92	3.28	120.26
Last 5	07:40:04	1200.02	20.96	4.56	77.41	1.37	21.92	3.43	120.44
Last 5									
Variance 0			-0.05	-0.02	-0.65			0.49	-3.15
Variance 1			-0.02	0.02	0.35			-0.13	-2.05
Variance 2			0.02	-0.01	-0.62			0.15	0.18

Notes

Sample@0740,FB-02@0750, Sunny 73

Grab Samples

Product Name: Low-Flow System

Date: 2016-09-12 09:15:53

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BG -4
Site Name Plant Daniel NAMU BG-4
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 48 ft

Pump placement from TOC 38.2 ft

Well Information:

Well ID MW-14
Well diameter 2 in
Well Total Depth 40.7 ft
Screen Length 5 ft
Depth to Water 12.66 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.3042443 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.02 in
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	09:04:18	300.02	22.05	5.19	67.79	0.63	12.68	2.49	165.01
Last 5	09:09:18	600.02	21.92	5.13	67.33	0.79	12.68	2.44	165.13
Last 5	09:14:18	900.03	21.92	5.14	67.48	0.66	12.68	2.42	162.97
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			-0.14	-0.06	-0.46			-0.05	0.13
Variance 2			0.00	0.00	0.15			-0.02	-2.16

Notes

Sample@0915, DUP-02@0815, cloudy 77

Grab Samples

Product Name: Low-Flow System

Date: 2016-09-12 08:37:09

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BG -4
Site Name Plant Daniel NAMU BG-4
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 47 ft

Pump placement from TOC 37 ft

Well Information:

Well ID MW-15
Well diameter 2 in
Well Total Depth 39.5 ft
Screen Length 5 ft
Depth to Water 12.16 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.2997809 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.02 in
Total Volume Pumped 10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	08:16:14	300.05	22.35	4.58	50.17	0.38	12.18	1.96	143.20
Last 5	08:21:14	600.02	22.18	4.58	50.19	0.40	12.18	1.91	146.35
Last 5	08:26:14	900.02	22.10	4.62	52.28	0.42	12.18	2.28	148.56
Last 5	08:31:14	1200.02	22.06	4.60	52.72	0.34	12.18	2.33	153.03
Last 5	08:36:14	1500.02	22.07	4.60	52.66	0.33	12.18	2.41	156.50
Variance 0			-0.08	0.04	2.09			0.37	2.21
Variance 1			-0.04	-0.02	0.44			0.04	4.47
Variance 2			0.01	0.01	-0.06			0.08	3.47

Notes

Sample@0836, cloudy 77

Grab Samples

Product Name: Low-Flow System

Date: 2016-09-13 08:32:58

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BG -4
Site Name Plant Daniel NAMU BG-4
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 35 ft

Pump placement from TOC 25.8 ft

Well Information:

Well ID MW-16
Well diameter 2 in
Well Total Depth 28.3 ft
Screen Length 5 ft
Depth to Water 10.38 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.2462198 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.02 in
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	08:20:03	300.02	23.18	4.60	45.99	0.49	10.40	0.17	127.47
Last 5	08:25:03	600.02	23.16	4.56	46.49	0.52	10.40	0.15	126.77
Last 5	08:30:03	900.02	23.25	4.56	46.76	0.46	10.40	0.12	125.77
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			-0.02	-0.04	0.50			-0.03	-0.71
Variance 2			0.09	-0.00	0.27			-0.03	-1.00

Notes

Sample@0831,EQBlank-02@0840 Sunny 75

Grab Samples

Product Name: Low-Flow System

Date: 2016-09-12 13:42:38

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BG -4
Site Name Plant Daniel NAMU BG-4
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 36 ft

Pump placement from TOC 26 ft

Well Information:

Well ID MW-17
Well diameter 2 in
Well Total Depth 28.5 ft
Screen Length 5 ft
Depth to Water 7.74 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.2506832 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.01 in
Total Volume Pumped 12 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	13:21:28	600.03	23.63	4.97	45.81	1.52	7.75	0.12	144.55
Last 5	13:26:28	900.02	23.53	4.96	45.68	0.79	7.75	0.10	141.89
Last 5	13:31:28	1200.02	23.41	4.98	45.40	0.91	7.75	0.10	139.33
Last 5	13:36:28	1500.02	23.29	4.95	45.24	0.60	7.75	0.09	137.99
Last 5	13:41:28	1800.02	23.23	4.94	45.49	0.59	7.75	0.08	136.66
Variance 0			-0.12	0.01	-0.28			-0.01	-2.56
Variance 1			-0.11	-0.03	-0.15			-0.01	-1.34
Variance 2			-0.06	-0.01	0.25			-0.01	-1.32

Notes

Sample@1342 cloudy 88

Grab Samples

Product Name: Low-Flow System

Date: 2016-09-12 12:41:40

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BG -4
Site Name Plant Daniel NAMU BG-4
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 51 ft

Pump placement from TOC 41.9 ft

Well Information:

Well ID MW-18
Well diameter 2 in
Well Total Depth 44.4 ft
Screen Length 5 ft
Depth to Water 16.97 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.3176346 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.03 in
Total Volume Pumped 30 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	12:20:15	3300.02	23.19	4.57	58.40	0.32	17.00	0.09	147.94
Last 5	12:25:15	3600.03	23.39	4.56	57.81	0.39	17.00	0.09	146.55
Last 5	12:30:15	3900.02	23.74	4.58	57.69	0.45	17.00	0.08	143.65
Last 5	12:35:15	4200.03	23.66	4.59	58.57	0.51	17.00	0.09	141.33
Last 5	12:40:15	4500.02	23.64	4.60	58.42	0.55	17.00	0.08	140.13
Variance 0			0.35	0.01	-0.12			-0.01	-2.91
Variance 1			-0.08	0.01	0.89			0.01	-2.31
Variance 2			-0.02	0.00	-0.15			-0.00	-1.20

Notes

Sample@1240, partly cloudy 87

Grab Samples

Product Name: Low-Flow System

Date: 2017-02-10 09:57:06

Project Information:

Operator Name Rick Hagendorfer
Company Name RDH Env
Project Name NAMU BKG
Site Name Plant Daniel
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 424893
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED BP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 35 ft

Pump placement from TOC 27.4 ft

Well Information:

Well ID MW-19
Well diameter 2 in
Well Total Depth 32.4 ft
Screen Length 10 ft
Depth to Water 18.76 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6412198 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.08 in
Total Volume Pumped 16 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	09:33:30	1200.02	21.46	5.11	34.90	2.01	18.84	0.19	-103.70
Last 5	09:38:30	1500.02	21.32	5.14	34.92	2.32	18.84	0.17	-104.02
Last 5	09:43:30	1800.02	21.57	5.12	35.08	2.35	18.84	0.22	-105.07
Last 5	09:48:30	2100.02	21.56	5.15	35.06	3.27	18.84	0.18	-109.45
Last 5	09:53:30	2400.02	21.57	5.14	34.98	3.36	18.84	0.16	-107.62
Variance 0			0.25	-0.02	0.16			0.05	-1.05
Variance 1			-0.01	0.03	-0.02			-0.05	-4.38
Variance 2			0.01	-0.01	-0.08			-0.01	1.83

Notes

Sample time 0957. FB-01 sample time 0935. Sunny 46.

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-18 15:17:14

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BG-5
Site Name Plant Daniel NAMU BG-5
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 30.5 ft

Pump placement from TOC 37 ft

Well Information:

Well ID MW-11
Well diameter 2 in
Well Total Depth 33 ft
Screen Length 5 ft
Depth to Water 14.23 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 0.2261344 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 13 in
Total Volume Pumped 58 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	14:55:35	7504.02	23.97	4.61	69.03	18.70	15.60	0.18	107.99
Last 5	15:00:35	7804.02	23.52	4.64	68.82	15.40	15.60	0.20	107.30
Last 5	15:05:35	8104.02	23.31	4.64	68.73	12.40	15.60	0.18	106.26
Last 5	15:10:38	8407.03	23.20	4.65	69.39	10.90	15.60	0.17	105.42
Last 5	15:15:38	8707.02	23.25	4.65	69.21	8.99	15.60	0.14	104.67
Variance 0			-0.21	0.00	-0.09			-0.02	-1.04
Variance 1			-0.11	0.01	0.67			-0.01	-0.85
Variance 2			0.05	-0.01	-0.18			-0.02	-0.74

Notes

Sample@1516 Sunny 77

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-18 08:31:33

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BG-5
Site Name Plant Daniel NAMU BG-5
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 27 ft

Pump placement from TOC 20.4 ft

Well Information:

Well ID MW-12
Well diameter 2 in
Well Total Depth 22.9 ft
Screen Length 5 ft
Depth to Water 17.45 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6055124 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.02 in
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	08:15:44	300.02	20.68	3.86	117.39	6.45	17.47	3.36	182.62
Last 5	08:20:44	600.02	20.70	3.86	119.19	2.08	17.47	3.10	182.62
Last 5	08:25:44	900.02	20.75	3.87	119.68	1.00	17.47	3.02	181.93
Last 5	08:30:44	1200.02	20.75	3.87	120.38	0.92	17.47	2.98	181.09
Last 5									
Variance 0			0.02	0.00	1.80			-0.26	0.00
Variance 1			0.05	0.01	0.49			-0.09	-0.69
Variance 2			-0.00	0.00	0.70			-0.04	-0.84

Notes

Sample@0831, Sunny 63

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-18 07:44:25

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BG-5
Site Name Plant Daniel NAMU BG-5
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 30 ft

Pump placement from TOC 24 ft

Well Information:

Well ID MW-13
Well diameter 2 in
Well Total Depth 26.5 ft
Screen Length 5 ft
Depth to Water 22.25 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6189027 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.02 in
Total Volume Pumped 16 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	07:22:02	1200.02	19.95	4.37	76.82	42.70	22.27	2.53	167.27
Last 5	07:27:02	1500.02	20.16	4.38	76.77	22.50	22.27	2.54	163.16
Last 5	07:32:02	1800.02	20.20	4.39	76.76	13.00	22.27	2.56	159.82
Last 5	07:37:03	2101.02	20.22	4.40	76.66	7.87	22.27	2.56	156.85
Last 5	07:42:03	2401.02	20.22	4.41	76.60	4.69	22.27	2.62	154.37
Variance 0			0.05	0.00	-0.00			0.01	-3.34
Variance 1			0.01	0.01	-0.10			-0.00	-2.97
Variance 2			-0.00	0.01	-0.07			0.07	-2.49

Notes

Sample@0743 Sunny 56

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-19 07:13:28

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BG-5
Site Name Plant Daniel NAMU BG-5
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 45 ft

Pump placement from TOC 38.2 ft

Well Information:

Well ID MW-14
Well diameter 2 in
Well Total Depth 40.7 ft
Screen Length 5 ft
Depth to Water 13.46 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.685854 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.04 in
Total Volume Pumped 12 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	06:51:53	600.02	19.81	4.94	69.86	0.48	13.50	2.51	140.31
Last 5	06:56:53	900.02	19.72	4.97	76.71	0.85	13.50	2.29	137.16
Last 5	07:01:53	1200.02	19.64	5.01	80.65	0.79	13.50	2.06	133.68
Last 5	07:06:53	1500.02	19.77	5.04	81.16	0.89	13.50	2.11	130.44
Last 5	07:11:53	1800.02	19.81	5.05	80.54	0.92	13.50	2.14	129.00
Variance 0			-0.09	0.04	3.94			-0.22	-3.48
Variance 1			0.13	0.03	0.50			0.04	-3.24
Variance 2			0.05	0.01	-0.62			0.03	-1.44

Notes

Sample@0712, EB-02@0720, cloudy 58

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-19 08:01:52

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BG-5
Site Name Plant Daniel NAMU BG-5
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 44 ft

Pump placement from TOC 37 ft

Well Information:

Well ID MW-15
Well diameter 2 in
Well Total Depth 39.5 ft
Screen Length 5 ft
Depth to Water 12.88 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6813906 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.04 in
Total Volume Pumped 14 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	07:39:25	900.02	19.86	4.56	52.74	0.67	12.92	1.64	137.35
Last 5	07:44:25	1200.03	19.74	4.45	54.20	0.92	12.92	1.85	140.22
Last 5	07:49:25	1500.02	19.47	4.50	54.53	0.63	12.92	2.00	138.18
Last 5	07:54:25	1800.02	19.50	4.50	54.53	0.32	12.92	2.03	136.97
Last 5	07:59:25	2100.02	19.45	4.46	54.70	0.44	12.92	2.09	139.03
Variance 0			-0.26	0.05	0.33			0.15	-2.04
Variance 1			0.03	0.01	0.00			0.02	-1.22
Variance 2			-0.05	-0.04	0.16			0.07	2.06

Notes

Sample@0801,FB-02@0810, partly cloudy 58

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-17 14:24:43

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BG-5
Site Name Plant Daniel NAMU BG-5
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 33 ft

Pump placement from TOC 25.8 ft

Well Information:

Well ID MW-16
Well diameter 2 in
Well Total Depth 28.3 ft
Screen Length 5 ft
Depth to Water 10.85 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.632293 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	14:12:46	300.05	22.80	4.62	43.60	1.56	10.85	0.04	123.31
Last 5	14:17:46	600.02	22.66	4.61	43.56	1.45	10.85	0.04	118.81
Last 5	14:22:46	900.02	22.61	4.60	43.59	1.37	10.85	0.03	114.67
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			-0.15	-0.01	-0.04			-0.00	-4.50
Variance 2			-0.05	-0.01	0.03			-0.00	-4.14

Notes

Sample@1423,DUP-02@1323 Sunny 77

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-18 10:37:08

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BG-5
Site Name Plant Daniel NAMU BG-5
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 33 ft

Pump placement from TOC 26 ft

Well Information:

Well ID MW-17
Well diameter 2 in
Well Total Depth 28.5 ft
Screen Length 5 ft
Depth to Water 8.21 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.367293 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 20 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	10:15:35	1800.02	22.85	4.83	48.29	0.81	8.22	0.01	105.21
Last 5	10:20:35	2100.02	22.38	4.86	48.75	0.47	8.22	0.01	101.52
Last 5	10:25:35	2400.02	22.27	4.83	48.86	0.55	8.22	0.01	99.73
Last 5	10:30:35	2700.03	22.80	4.84	48.65	0.67	8.22	0.01	97.78
Last 5	10:35:35	3000.02	22.22	4.82	48.85	0.44	8.22	0.01	97.93
Variance 0			-0.11	-0.02	0.11			-0.00	-1.78
Variance 1			0.54	0.01	-0.21			-0.00	-1.95
Variance 2			-0.58	-0.02	0.20			0.00	0.15

Notes

Sample@1036, Partly Cloudy 76

Grab Samples

Product Name: Low-Flow System

Date: 2016-11-18 11:22:51

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BG-5
Site Name Plant Daniel NAMU BG-5
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 417744
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 49 ft

Pump placement from TOC 41.9 ft

Well Information:

Well ID MW-18
Well diameter 2 in
Well Total Depth 44.4 ft
Screen Length 5 ft
Depth to Water 17.97 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.7037078 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.03 in
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	11:06:08	300.02	22.22	4.49	55.95	5.24	18.00	0.29	144.55
Last 5	11:11:08	600.03	22.04	4.51	56.07	3.46	18.00	0.05	141.26
Last 5	11:16:08	900.02	21.94	4.52	56.16	2.18	18.00	0.04	138.64
Last 5	11:21:08	1200.02	21.91	4.52	56.22	2.09	18.00	0.03	136.13
Last 5									
Variance 0			-0.19	0.02	0.12			-0.23	-3.28
Variance 1			-0.09	0.01	0.08			-0.02	-2.63
Variance 2			-0.04	0.00	0.07			-0.00	-2.51

Notes

Samole@1121,DUP-03@1021, Partly cloudy 78

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-21 11:06:30

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-7
Site Name Plant Daniel NAMU BKG -7
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 34 ft

Pump placement from TOC 27.4 ft

Well Information:

Well ID MW-19
Well diameter 2 in
Well Total Depth 32.4 ft
Screen Length 10 ft
Depth to Water 18.91 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6367564 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.04 in
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	10:50:38	300.03	22.44	4.89	41.26	2.32	18.95	0.10	33.64
Last 5	10:55:38	600.02	22.53	4.93	41.46	2.20	18.95	0.08	23.06
Last 5	11:00:38	900.03	22.55	4.95	41.46	2.33	18.95	0.08	18.69
Last 5	11:05:38	1200.02	22.62	4.96	41.44	2.40	18.95	0.07	15.58
Last 5									
Variance 0			0.09	0.03	0.19			-0.02	-10.58
Variance 1			0.02	0.02	0.00			-0.00	-4.38
Variance 2			0.07	0.01	-0.02			-0.01	-3.10

Notes

Sample@1106, Sunny 74

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-19 12:55:06

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-6
Site Name Daniel NAMU
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 40 ft

Pump placement from TOC 30.5 ft

Well Information:

Well ID MW-11
Well diameter 2 in
Well Total Depth 33 ft
Screen Length 5 ft
Depth to Water 12.51 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 0.2685369 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 16 in
Total Volume Pumped 36 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	12:33:48	4200.02	22.00	4.76	74.66	6.88	13.95	0.22	129.52
Last 5	12:38:48	4500.02	22.06	4.76	74.58	5.99	13.95	0.24	129.10
Last 5	12:43:48	4800.02	22.17	4.77	74.66	5.09	13.95	0.22	128.76
Last 5	12:48:48	5100.02	22.35	4.77	74.44	4.89	13.95	0.18	128.71
Last 5	12:53:48	5400.02	22.23	4.77	74.34	4.66	13.85	0.23	128.28
Variance 0			0.11	0.01	0.08			-0.01	-0.34
Variance 1			0.18	-0.00	-0.22			-0.04	-0.04
Variance 2			-0.12	0.01	-0.10			0.05	-0.43

Notes

Sample@1254, EB-03@1305 cloudy 75

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-19 09:51:08

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-6
Site Name Daniel NAMU
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 30 ft

Pump placement from TOC 20.4 ft

Well Information:

Well ID MW-12
Well diameter 2 in
Well Total Depth 22.9 ft
Screen Length 5 ft
Depth to Water 16.31 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6189027 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.01 in
Total Volume Pumped 10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	09:30:28	300.02	20.39	4.37	93.96	3.23	16.32	4.82	135.28
Last 5	09:35:28	600.02	20.38	4.38	97.56	2.91	16.32	4.67	134.64
Last 5	09:40:28	900.02	20.40	4.38	100.96	1.31	16.32	4.55	135.18
Last 5	09:45:28	1200.02	20.40	4.36	103.70	0.84	16.32	4.43	135.77
Last 5	09:50:28	1500.02	20.39	4.35	105.06	0.74	16.32	4.36	136.48
Variance 0			0.02	-0.00	3.40			-0.12	0.54
Variance 1			0.00	-0.01	2.74			-0.12	0.59
Variance 2			-0.01	-0.01	1.36			-0.07	0.71

Notes

Sample@0950, cloudy 72

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-19 10:55:26

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-6
Site Name Daniel NAMU
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 30 ft

Pump placement from TOC 24 ft

Well Information:

Well ID MW-13
Well diameter 2 in
Well Total Depth 26.5 ft
Screen Length 5 ft
Depth to Water 21.21 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.2239027 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.06 in
Total Volume Pumped 16 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	10:33:28	1200.02	21.30	4.68	84.86	106.00	21.27	1.99	132.68
Last 5	10:38:28	1500.02	21.28	4.67	84.64	73.40	21.27	2.12	132.18
Last 5	10:43:28	1800.03	21.27	4.68	84.94	25.70	21.27	1.92	131.55
Last 5	10:48:28	2100.02	21.28	4.69	85.07	8.14	21.27	1.99	131.31
Last 5	10:53:28	2400.02	21.30	4.70	84.93	4.21	21.27	1.95	131.51
Variance 0			-0.01	0.01	0.30			-0.20	-0.64
Variance 1			0.00	0.01	0.13			0.07	-0.24
Variance 2			0.03	0.01	-0.14			-0.04	0.20

Notes

Sample@1055, FB-03@1015, cloudy 72

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-18 14:16:01

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-6
Site Name Daniel NAMU
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 424893
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 45 ft

Pump placement from TOC 38.2 ft

Well Information:

Well ID MW-14
Well diameter 2 in
Well Total Depth 40.7 ft
Screen Length 5 ft
Depth to Water 12.09 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.685854 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.04 in
Total Volume Pumped 42 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	13:54:57	5100.02	21.08	5.13	75.32	15.60	12.13	2.38	43.22
Last 5	13:59:57	5400.02	21.12	5.13	75.26	13.90	12.13	2.39	43.94
Last 5	14:04:58	5701.02	21.10	5.11	75.02	15.60	12.13	2.39	44.69
Last 5	14:09:58	6001.02	21.11	5.11	75.12	11.80	12.13	2.39	44.66
Last 5	14:14:58	6301.02	21.10	5.11	75.88	9.89	12.13	2.40	44.15
Variance 0			-0.02	-0.02	-0.24			0.00	0.75
Variance 1			0.01	-0.00	0.11			-0.00	-0.03
Variance 2			-0.01	0.00	0.76			0.01	-0.52

Notes

Sample@1415, cloudy 76

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-19 09:04:29

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-6
Site Name Daniel NAMU
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 45 ft

Pump placement from TOC 37 ft

Well Information:

Well ID MW-15
Well diameter 2 in
Well Total Depth 39.5 ft
Screen Length 5 ft
Depth to Water 11.62 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.685854 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.01 in
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	08:52:39	300.07	21.50	4.67	59.14	4.19	11.63	2.56	126.78
Last 5	08:57:39	600.02	21.49	4.65	58.82	4.81	11.63	2.57	126.61
Last 5	09:02:39	900.02	21.49	4.65	58.75	4.89	11.63	2.59	127.02
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			-0.01	-0.02	-0.33			0.01	-0.17
Variance 2			-0.00	-0.00	-0.07			0.02	0.41

Notes

Sample@0903, DUP-04@0803, cloudy 71

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-18 09:36:10

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-6
Site Name Daniel NAMU
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 424893
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 35 ft

Pump placement from TOC 25.8 ft

Well Information:

Well ID MW-16
Well diameter 2 in
Well Total Depth 28.3 ft
Screen Length 5 ft
Depth to Water 9.76 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6412198 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.04 in
Total Volume Pumped 14 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	09:15:07	900.02	22.17	4.68	45.17	1.75	9.80	0.32	70.89
Last 5	09:20:07	1200.03	22.21	4.67	45.19	1.26	9.80	0.31	59.12
Last 5	09:25:07	1500.03	22.22	4.66	45.20	1.17	9.80	0.31	51.16
Last 5	09:30:07	1800.02	22.25	4.67	45.28	0.94	9.80	0.31	46.47
Last 5	09:35:07	2100.02	22.26	4.68	45.24	0.84	9.80	0.30	42.87
Variance 0			0.01	-0.00	0.00			-0.00	-7.96
Variance 1			0.02	0.01	0.08			-0.00	-4.68
Variance 2			0.01	0.01	-0.04			-0.00	-3.60

Notes

Sample @0935 Cloudy 69

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-18 11:21:56

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-6
Site Name Daniel NAMU
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 424893
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 35 ft

Pump placement from TOC 26 ft

Well Information:

Well ID MW17
Well diameter 2 in
Well Total Depth 28.5 ft
Screen Length 5 ft
Depth to Water 7.24 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6412198 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.03 in
Total Volume Pumped 16 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	11:00:58	1200.02	21.90	5.00	51.37	1.11	7.27	0.16	27.94
Last 5	11:05:58	1500.02	22.09	5.02	51.48	1.12	7.27	0.16	27.16
Last 5	11:10:58	1800.02	21.76	5.02	51.42	0.87	7.27	0.15	24.96
Last 5	11:15:58	2100.02	21.83	5.02	51.35	0.82	7.27	0.14	24.28
Last 5	11:20:58	2400.02	21.92	5.02	51.63	0.72	7.27	0.14	23.78
Variance 0			-0.32	0.00	-0.06			-0.01	-2.19
Variance 1			0.07	0.00	-0.06			-0.01	-0.68
Variance 2			0.08	0.00	0.27			0.00	-0.51

Notes

Sample @1121 Cloudy 75

Grab Samples

Product Name: Low-Flow System

Date: 2017-01-18 12:08:36

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-6
Site Name Daniel NAMU
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 424893
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 50 ft

Pump placement from TOC 41.9 ft

Well Information:

Well ID MW-18
Well diameter 2 in
Well Total Depth 44.4 ft
Screen Length 5 ft
Depth to Water 16.13 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.7081711 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	11:47:57	300.06	21.21	4.63	64.18	0.92	16.13	0.10	49.14
Last 5	11:52:57	600.02	21.19	4.63	64.09	0.64	16.13	0.09	36.66
Last 5	11:57:57	900.02	21.32	4.63	64.18	0.68	16.13	0.09	30.70
Last 5	12:02:57	1200.02	21.19	4.63	64.24	0.71	16.13	0.10	26.49
Last 5	12:07:57	1500.04	21.28	4.63	64.32	0.62	16.13	0.09	22.80
Variance 0			0.13	0.00	0.09			0.00	-5.96
Variance 1			-0.13	-0.00	0.06			0.00	-4.21
Variance 2			0.09	0.00	0.08			-0.00	-3.69

Notes

Sample @1208, partly cloudy 75

Grab Samples

Product Name: Low-Flow System

Date: 2017-04-14 09:38:57

Project Information:

Operator Name Rick Hagendorfer
Company Name RDH Env.
Project Name NAMU
Site Name Plant Daniel
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 424893
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 34 ft

Pump placement from TOC 27.4 ft

Well Information:

Well ID MW-19
Well diameter 2 in
Well Total Depth 32.4 ft
Screen Length 10 ft
Depth to Water 17.85 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6367564 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.08 in
Total Volume Pumped 12 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	09:15:08	600.02	22.26	5.02	33.83	1.07	17.93	0.45	12.26
Last 5	09:20:08	900.02	22.22	5.03	33.71	1.32	17.93	0.41	8.84
Last 5	09:25:08	1200.02	22.46	5.04	33.56	1.41	17.93	0.35	7.42
Last 5	09:30:08	1500.03	22.40	5.06	33.58	1.61	17.93	0.35	5.99
Last 5	09:35:08	1800.03	22.44	5.07	33.64	1.82	17.93	0.32	5.14
Variance 0			0.24	0.01	-0.15			-0.06	-1.43
Variance 1			-0.06	0.02	0.02			0.00	-1.43
Variance 2			0.04	0.01	0.06			-0.03	-0.84

Notes

Sample time 0938. FB-01 sample time 0955. Sunny 65.

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-22 08:05:22

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-7
Site Name Plant Daniel NAMU BKG -7
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 37 ft

Pump placement from TOC 30.5 ft

Well Information:

Well ID MW-11
Well diameter 2 in
Well Total Depth 33 ft
Screen Length 5 ft
Depth to Water 13.16 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 0.6501467 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 19 in
Total Volume Pumped 20 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	07:44:13	1800.02	19.46	4.45	74.74	14.10	14.93	0.70	151.16
Last 5	07:49:13	2100.03	19.58	4.45	74.43	10.90	14.93	0.58	150.40
Last 5	07:54:13	2400.02	19.61	4.45	74.38	7.27	14.93	0.47	149.55
Last 5	07:59:13	2700.02	19.60	4.46	74.10	5.87	14.93	0.49	148.01
Last 5	08:04:13	3000.03	19.63	4.46	74.11	4.79	14.93	0.31	146.45
Variance 0			0.03	-0.01	-0.05			-0.11	-0.85
Variance 1			-0.01	0.01	-0.28			0.02	-1.54
Variance 2			0.03	0.00	0.01			-0.18	-1.56

Notes

Sample@0804, EB-02@0815, Cloudy 67

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-21 10:23:40

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-7
Site Name Plant Daniel NAMU BKG -7
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 27 ft

Pump placement from TOC 20.4 ft

Well Information:

Well ID MW-12
Well diameter 2 in
Well Total Depth 22.9 ft
Screen Length 5 ft
Depth to Water 16.64 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6055124 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.02 in
Total Volume Pumped 12 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	10:02:50	600.02	19.51	3.90	101.89	1.22	16.66	4.51	134.83
Last 5	10:07:50	900.02	19.52	3.89	107.08	0.73	16.66	4.24	132.66
Last 5	10:12:50	1200.02	19.52	3.88	111.42	0.44	16.66	4.03	131.28
Last 5	10:17:50	1500.02	19.54	3.88	113.26	0.36	16.66	3.91	130.08
Last 5	10:22:50	1800.02	19.54	3.88	114.62	0.31	16.66	3.86	129.50
Variance 0			-0.00	-0.01	4.34			-0.21	-1.38
Variance 1			0.02	0.00	1.84			-0.12	-1.19
Variance 2			0.00	0.00	1.36			-0.04	-0.58

Notes

Sample@1023, Sunny 72

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-21 09:28:06

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-7
Site Name Plant Daniel NAMU BKG -7
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 31 ft

Pump placement from TOC 24 ft

Well Information:

Well ID MW-13
Well diameter 2 in
Well Total Depth 26.5 ft
Screen Length 5 ft
Depth to Water 21.5 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.2283661 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.02 in
Total Volume Pumped 20 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	09:06:45	1800.02	20.37	5.12	125.41	20.50	21.56	3.01	105.88
Last 5	09:11:45	2100.03	20.38	5.11	124.17	11.50	21.56	2.96	105.52
Last 5	09:16:45	2400.02	20.39	5.11	119.66	9.41	21.56	3.05	103.51
Last 5	09:21:45	2700.02	20.45	5.10	117.36	5.06	21.56	3.06	103.89
Last 5	09:26:45	3000.02	20.47	5.07	115.67	3.21	21.56	2.86	103.53
Variance 0			0.00	0.00	-4.51			0.10	-2.01
Variance 1			0.07	-0.01	-2.30			0.01	0.39
Variance 2			0.02	-0.03	-1.70			-0.19	-0.36

Notes

Sample@0927, Sunny 69

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-22 10:22:03

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-7
Site Name Plant Daniel NAMU BKG -7
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 45 ft

Pump placement from TOC 38.2 ft

Well Information:

Well ID MW-14
Well diameter 2 in
Well Total Depth 40.7 ft
Screen Length 5 ft
Depth to Water 12.60 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.685854 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.02 in
Total Volume Pumped 44 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	10:01:07	5400.02	20.70	4.86	68.79	8.17	12.62	1.94	95.16
Last 5	10:06:07	5700.02	20.74	4.85	68.84	7.27	12.62	1.94	94.61
Last 5	10:11:08	6001.02	20.79	4.86	68.80	6.84	12.62	1.93	93.63
Last 5	10:16:08	6301.02	20.77	4.86	68.72	5.49	12.62	1.93	92.82
Last 5	10:21:08	6601.02	20.81	4.86	68.73	4.93	12.62	1.92	92.34
Variance 0			0.04	0.01	-0.04			-0.01	-0.99
Variance 1			-0.02	-0.00	-0.08			-0.00	-0.81
Variance 2			0.04	0.00	0.01			-0.01	-0.48

Notes

Sample@1021, FB-01@0830, Sunny70

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-21 07:26:20

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-7
Site Name Plant Daniel NAMU BKG -7
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 44 ft

Pump placement from TOC 37 ft

Well Information:

Well ID MW-15
Well diameter 2 in
Well Total Depth 39.5 ft
Screen Length 5 ft
Depth to Water 12.05 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6813906 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	07:14:58	300.05	20.92	4.52	59.56	5.18	12.05	2.56	156.77
Last 5	07:19:58	600.03	20.99	4.47	59.67	4.06	12.05	2.47	161.73
Last 5	07:24:58	900.02	21.01	4.47	59.70	3.17	12.05	2.50	162.61
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			0.07	-0.05	0.11			-0.09	4.96
Variance 2			0.02	-0.01	0.03			0.03	0.88

Notes

Sample@0725, DUP -02@0625. Cloudy 65

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-21 08:08:53

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-7
Site Name Plant Daniel NAMU BKG -7
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 32 ft

Pump placement from TOC 25.8 ft

Well Information:

Well ID MW-16
Well diameter 2 in
Well Total Depth 28.3 ft
Screen Length 5 ft
Depth to Water 10.10 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6278296 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	07:58:03	300.02	21.23	4.38	48.63	0.87	10.10	0.05	164.63
Last 5	08:03:03	600.02	21.37	4.38	48.66	0.97	10.10	0.03	164.24
Last 5	08:08:03	900.02	21.38	4.39	48.61	0.73	10.10	0.03	163.34
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			0.13	-0.00	0.04			-0.01	-0.39
Variance 2			0.01	0.01	-0.06			-0.00	-0.90

Notes

Sample@0808, cloudy 65

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-21 12:17:33

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-7
Site Name Plant Daniel NAMU BKG -7
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 33 ft

Pump placement from TOC 26 ft

Well Information:

Well ID MW-17
Well diameter 2 in
Well Total Depth 28.5 ft
Screen Length 5 ft
Depth to Water 7.63 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.632293 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.02 in
Total Volume Pumped 18 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	11:56:34	1500.02	24.91	4.83	53.90	1.07	7.65	0.06	83.95
Last 5	12:01:34	1800.02	25.09	4.83	54.02	0.99	7.65	0.05	83.30
Last 5	12:06:34	2100.02	25.23	4.83	53.84	0.91	7.65	0.04	83.46
Last 5	12:11:34	2400.02	25.35	4.82	53.80	0.88	7.65	0.04	84.10
Last 5	12:16:34	2700.02	25.34	4.82	53.59	0.83	7.65	0.04	83.71
Variance 0			0.14	-0.00	-0.18			-0.01	0.16
Variance 1			0.12	-0.01	-0.04			-0.00	0.64
Variance 2			-0.01	0.00	-0.21			-0.01	-0.39

Notes

Sample@1217, Sunny 75

Grab Samples

Product Name: Low-Flow System

Date: 2017-03-21 13:11:13

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-7
Site Name Plant Daniel NAMU BKG -7
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model Hach

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 48 ft

Pump placement from TOC 41.9 ft

Well Information:

Well ID MW-18
Well diameter 2 in
Well Total Depth 44.4 ft
Screen Length 5 ft
Depth to Water 16.78 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6992443 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.02 in
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	12:54:39	300.02	22.11	4.44	66.23	0.86	16.80	0.17	110.89
Last 5	12:59:39	600.02	21.84	4.45	66.24	0.52	16.80	0.03	106.24
Last 5	13:04:39	900.02	21.90	4.46	66.16	0.49	16.80	0.03	104.56
Last 5	13:09:39	1200.02	21.92	4.45	66.30	0.44	16.80	0.02	103.68
Last 5									
Variance 0			-0.27	0.01	0.01			-0.14	-4.65
Variance 1			0.06	0.01	-0.07			-0.01	-1.67
Variance 2			0.02	-0.00	0.14			-0.00	-0.89

Notes

Sample@1310, Sunny 78

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-23 15:49:45

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-8
Site Name Daniel NAMU CCR
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 37 ft

Pump placement from TOC 27.4 ft

Well Information:

Well ID MW-19
Well diameter 2 in
Well Total Depth 32.4 ft
Screen Length 10 ft
Depth to Water 18.51 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6501467 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 16 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	15:28:38	1200.02	22.07	5.00	39.51	1.71	18.51	0.14	-148.55
Last 5	15:33:38	1500.02	22.39	5.00	39.31	2.01	18.51	0.14	-153.79
Last 5	15:38:38	1800.02	22.09	5.00	39.44	2.22	18.51	0.14	-155.97
Last 5	15:43:40	2102.02	22.06	5.01	39.52	2.66	18.51	0.14	-157.72
Last 5	15:48:40	2402.02	22.03	5.01	39.52	2.52	18.51	0.13	-158.74
Variance 0			-0.30	0.00	0.14			0.00	-2.18
Variance 1			-0.03	0.01	0.08			-0.00	-1.75
Variance 2			-0.03	0.00	0.00			-0.00	-1.01

Notes

Sample@1549, cloudy 84

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-24 10:36:11

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-8
Site Name Daniel NAMU CCR
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 35 ft

Pump placement from TOC 30.5 ft

Well Information:

Well ID MW-11
Well diameter 2 in
Well Total Depth 33 ft
Screen Length 5 ft
Depth to Water 12.70 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 0.2462198 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 12.1 in
Total Volume Pumped 30 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	10:11:21	3300.02	22.08	4.78	77.98	4.89	13.71	1.17	40.76
Last 5	10:16:21	3600.02	21.90	4.75	77.36	4.46	13.71	0.84	40.59
Last 5	10:21:21	3900.02	22.30	4.74	77.20	3.65	13.71	0.80	40.12
Last 5	10:26:21	4200.02	22.31	4.73	77.17	2.98	13.71	0.66	39.64
Last 5	10:31:21	4500.02	22.12	4.74	77.49	2.45	13.71	0.66	39.92
Variance 0			0.40	-0.00	-0.16			-0.04	-0.47
Variance 1			0.01	-0.01	-0.03			-0.14	-0.47
Variance 2			-0.19	0.01	0.32			-0.00	0.28

Notes

Sample@1035, FB-02@0920 Partly Cloudy 73

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-23 14:46:55

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-8
Site Name Daniel NAMU CCR
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 25 ft

Pump placement from TOC 20.4 ft

Well Information:

Well ID MW-12
Well diameter 2 in
Well Total Depth 22.9 ft
Screen Length 5 ft
Depth to Water 16.20 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.5965856 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.02 in
Total Volume Pumped 6 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	14:36:20	300.02	20.03	4.04	126.44	2.27	16.22	2.78	78.41
Last 5	14:41:20	600.02	19.98	4.05	123.08	2.14	16.22	2.81	74.62
Last 5	14:46:20	900.02	19.94	4.07	122.10	1.61	16.22	2.81	72.63
Last 5									
Variance 0			nan	nan	nan			nan	nan
Variance 1			-0.05	0.01	-3.36			0.03	-3.79
Variance 2			-0.04	0.02	-0.98			0.00	-2.00

Notes

Sample@1446, cloudy 84

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-23 14:17:15

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-8
Site Name Daniel NAMU CCR
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 31 ft

Pump placement from TOC 24 ft

Well Information:

Well ID MW-13
Well diameter 2 in
Well Total Depth 26.5 ft
Screen Length 5 ft
Depth to Water 20.90 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.2283661 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.01 in
Total Volume Pumped 34 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	13:55:53	3900.01	21.28	5.24	118.83	0.99	20.91	2.73	61.48
Last 5	14:00:53	4200.03	21.27	5.27	113.97	0.87	20.91	2.66	57.35
Last 5	14:05:53	4500.02	21.23	5.17	107.75	0.76	20.91	2.47	58.47
Last 5	14:10:53	4800.02	21.14	5.13	103.64	0.58	20.91	2.48	57.62
Last 5	14:15:53	5100.02	21.18	5.17	106.60	0.69	20.91	2.60	56.46
Variance 0			-0.04	-0.11	-6.22			-0.19	1.12
Variance 1			-0.09	-0.04	-4.10			0.01	-0.85
Variance 2			0.04	0.04	2.96			0.12	-1.16

Notes

Sample@1416, Cloudy 84

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-24 12:23:11

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-8
Site Name Daniel NAMU CCR
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 43 ft

Pump placement from TOC 38.2 ft

Well Information:

Well ID MW-14
Well diameter 2 in
Well Total Depth 40.7 ft
Screen Length 5 ft
Depth to Water 12.21 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6769272 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.04 in
Total Volume Pumped 30 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	12:01:50	3302.02	21.37	5.02	72.01	6.21	12.25	1.87	43.53
Last 5	12:06:50	3602.02	21.41	5.04	71.82	6.13	12.25	1.87	42.09
Last 5	12:11:50	3902.02	21.45	5.03	71.66	6.01	12.25	1.88	42.10
Last 5	12:16:50	4202.02	21.40	5.03	71.83	5.34	12.25	1.89	41.29
Last 5	12:21:50	4502.02	21.33	5.02	71.65	4.87	12.25	1.89	40.85
Variance 0			0.05	-0.01	-0.16			0.01	0.01
Variance 1			-0.06	-0.00	0.17			0.01	-0.81
Variance 2			-0.07	-0.01	-0.18			-0.00	-0.45

Notes

Sample@1222, EB-02@1230, Partly Cloudy 78

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-23 11:42:16

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-8
Site Name Daniel NAMU CCR
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 42 ft

Pump placement from TOC 37 ft

Well Information:

Well ID MW-15
Well diameter 2 in
Well Total Depth 39.5 ft
Screen Length 5 ft
Depth to Water 11.72 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6724638 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	11:25:57	300.02	22.09	4.69	60.07	4.63	11.72	2.27	92.71
Last 5	11:30:57	600.02	22.04	4.69	60.12	4.48	11.72	2.23	84.95
Last 5	11:35:57	900.02	22.07	4.69	60.25	2.87	11.72	2.27	80.26
Last 5	11:40:57	1200.02	22.17	4.69	60.37	1.76	11.72	2.28	77.21
Last 5									
Variance 0			-0.05	0.00	0.05			-0.03	-7.75
Variance 1			0.03	-0.00	0.13			0.04	-4.70
Variance 2			0.10	0.00	0.12			0.01	-3.05

Notes

Sample@1141 Cloudy 77

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-23 12:23:27

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-8
Site Name Daniel NAMU CCR
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 31 ft

Pump placement from TOC 25.8 ft

Well Information:

Well ID MW-16
Well diameter 2 in
Well Total Depth 28.3 ft
Screen Length 5 ft
Depth to Water 9.52 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6233661 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	12:07:52	300.03	22.64	4.58	47.56	1.31	9.53	0.10	85.46
Last 5	12:12:52	600.02	22.62	4.61	47.36	1.13	9.52	0.08	77.24
Last 5	12:17:52	900.02	22.71	4.60	47.38	1.00	9.52	0.08	73.37
Last 5	12:22:52	1200.02	22.70	4.61	47.38	0.98	9.52	0.08	70.65
Last 5									
Variance 0			-0.02	0.02	-0.21			-0.02	-8.21
Variance 1			0.09	-0.00	0.02			0.00	-3.88
Variance 2			-0.00	0.00	0.00			-0.00	-2.71

Notes

Sample@1223, cloudy 79

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-24 07:01:51

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-8
Site Name Daniel NAMU CCR
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 31 ft

Pump placement from TOC 26 ft

Well Information:

Well ID MW-17
Well diameter 2 in
Well Total Depth 28.5 ft
Screen Length 5 ft
Depth to Water 7.51 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6233661 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.02 in
Total Volume Pumped 12 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	06:40:48	600.02	20.38	4.89	49.59	0.56	7.53	1.09	122.69
Last 5	06:45:48	900.02	20.43	4.87	49.68	0.62	7.53	0.54	111.12
Last 5	06:50:48	1200.02	20.37	4.89	49.45	0.66	7.53	0.48	101.37
Last 5	06:55:48	1500.02	20.38	4.89	49.57	0.53	7.53	0.58	96.06
Last 5	07:00:48	1800.02	20.41	4.87	49.92	0.46	7.53	0.62	92.58
Variance 0			-0.06	0.02	-0.23			-0.07	-9.75
Variance 1			0.02	0.00	0.12			0.11	-5.31
Variance 2			0.02	-0.01	0.35			0.04	-3.48

Notes

Sample @0701 ,Sunny 68

Grab Samples

Product Name: Low-Flow System

Date: 2017-05-24 08:48:16

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU BKG-8
Site Name Daniel NAMU CCR
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 47 ft

Pump placement from TOC 41.9 ft

Well Information:

Well ID MW-18
Well diameter 2 in
Well Total Depth 44.5 ft
Screen Length 5 ft
Depth to Water 16.41 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6947809 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.03 in
Total Volume Pumped 30 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	08:26:11	3300.02	20.70	4.52	63.53	0.54	16.44	0.13	9.43
Last 5	08:31:11	3600.02	20.73	4.51	63.61	0.49	16.44	0.12	1.46
Last 5	08:36:11	3900.02	20.70	4.52	63.66	0.35	16.44	0.12	-4.10
Last 5	08:41:11	4200.02	20.73	4.55	63.72	0.41	16.44	0.12	-9.48
Last 5	08:46:11	4500.02	20.77	4.55	63.73	0.38	16.44	0.12	-12.36
Variance 0			-0.03	0.01	0.05			-0.00	-5.55
Variance 1			0.04	0.03	0.05			-0.00	-5.39
Variance 2			0.04	0.01	0.02			0.00	-2.88

Notes

Sample@0847, DUP-03@0747 Partly Cloudy 71

Grab Samples

Product Name: Low-Flow System

Date: 2017-06-26 10:54:13

Project Information:

Operator Name Brett
Company Name Surles
Project Name NAMU BKG-8
Site Name Daniel NAMU CCR BKG-8
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 35 ft

Pump placement from TOC 27.4 ft

Well Information:

Well ID MW-19
Well diameter 2 in
Well Total Depth 32.4 ft
Screen Length 10 ft
Depth to Water 13.50 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6412198 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.02 in
Total Volume Pumped 14 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	10:32:19	900.03	22.81	4.97	39.69	0.67	13.52	0.41	28.18
Last 5	10:37:19	1200.02	22.79	4.93	39.32	0.79	13.52	0.29	19.84
Last 5	10:42:19	1500.02	22.84	4.93	38.99	0.74	13.52	0.23	13.88
Last 5	10:47:19	1800.02	22.88	4.92	38.79	0.69	13.52	0.20	9.25
Last 5	10:52:19	2100.02	22.93	4.93	38.68	0.66	13.52	0.17	5.57
Variance 0			0.05	0.00	-0.34			-0.06	-5.96
Variance 1			0.04	-0.01	-0.20			-0.03	-4.63
Variance 2			0.05	0.01	-0.11			-0.03	-3.67

Notes

Sample @1053, FB-01@1015, Sunny 83

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-17 11:05:11

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU
Site Name Plant Daniel NAMU Wells
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 35 ft

Pump placement from TOC 30.5 ft

Well Information:

Well ID MW-11
Well diameter 2 in
Well Total Depth 33 ft
Screen Length 5 ft
Depth to Water 11.41 ft

Pumping Information:

Final Pumping Rate 200 mL/min
Total System Volume 0.6412198 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 14 in
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	10:41:15	1200.02	19.78	4.71	77.77	5.79	12.60	0.23	64.86
Last 5	10:46:15	1500.02	19.85	4.71	77.44	4.01	12.60	0.20	61.23
Last 5	10:51:15	1800.02	19.94	4.71	77.11	2.68	12.60	0.19	58.18
Last 5	10:56:15	2100.02	19.99	4.71	76.74	2.11	12.60	0.18	55.62
Last 5	11:01:15	2400.02	20.03	4.72	76.51	1.75	12.60	0.18	53.23
Variance 0			0.08	-0.00	-0.34			-0.01	-3.05
Variance 1			0.05	0.01	-0.37			-0.00	-2.56
Variance 2			0.04	0.01	-0.23			-0.00	-2.39

Notes

Sample@1103, FB-02@1025, Sunny 69

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-17 12:20:20

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU
Site Name Plant Daniel NAMU Wells
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 42 ft

Pump placement from TOC 38.2 ft

Well Information:

Well ID MW-14
Well diameter 2 in
Well Total Depth 40.7 ft
Screen Length 5 ft
Depth to Water 11.15 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6724638 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.03 in
Total Volume Pumped 20 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	11:58:58	1800.02	21.10	5.04	69.64	2.99	11.18	1.73	54.46
Last 5	12:03:58	2100.02	21.10	5.03	69.51	2.33	11.18	1.73	54.08
Last 5	12:08:58	2400.02	21.13	5.03	69.32	2.15	11.18	1.73	53.98
Last 5	12:13:58	2700.02	21.23	5.01	69.14	2.04	11.18	1.73	54.51
Last 5	12:18:58	3000.04	21.21	5.01	68.97	1.77	11.18	1.73	55.21
Variance 0			0.03	-0.00	-0.19			-0.00	-0.09
Variance 1			0.10	-0.02	-0.18			0.00	0.53
Variance 2			-0.02	-0.01	-0.18			-0.00	0.70

Notes

Sample@1219, EB-02@1225 ,Sunny 72

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-17 06:47:32

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU
Site Name Plant Daniel NAMU Wells
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 41 ft

Pump placement from TOC 37 ft

Well Information:

Well ID MW-15
Well diameter 2 in
Well Total Depth 39.5 ft
Screen Length 5 ft
Depth to Water 11.00 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6680003 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.02 in
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	06:31:31	300.05	20.40	4.61	46.40	1.94	11.02	3.21	104.98
Last 5	06:36:31	600.02	20.43	4.61	46.06	0.92	11.02	3.22	93.60
Last 5	06:41:31	900.02	20.43	4.63	45.93	0.66	11.02	3.25	87.83
Last 5	06:46:31	1200.02	20.38	4.62	46.13	0.58	11.02	3.27	84.74
Last 5									
Variance 0			0.03	0.00	-0.35			0.01	-11.38
Variance 1			-0.00	0.01	-0.13			0.03	-5.77
Variance 2			-0.04	-0.01	0.21			0.02	-3.09

Notes

Sample@0646, Clear 52

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-17 07:40:55

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU
Site Name Plant Daniel NAMU Wells
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 32 ft

Pump placement from TOC 25.8 ft

Well Information:

Well ID MW-16
Well diameter 2 in
Well Total Depth 28.3 ft
Screen Length 5 ft
Depth to Water 9.51 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6278296 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.01 in
Total Volume Pumped 12 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	07:19:47	600.02	20.48	4.50	54.39	0.31	9.52	0.11	68.92
Last 5	07:24:47	900.02	20.58	4.49	54.44	0.24	9.52	0.10	64.51
Last 5	07:29:47	1200.02	20.71	4.49	54.30	0.14	9.52	0.10	59.91
Last 5	07:34:47	1500.02	20.83	4.49	54.31	0.17	9.52	0.09	55.55
Last 5	07:39:47	1800.02	20.76	4.51	54.30	0.18	9.52	0.09	51.76
Variance 0			0.13	-0.01	-0.14			-0.00	-4.59
Variance 1			0.11	0.00	0.01			-0.00	-4.37
Variance 2			-0.07	0.02	-0.01			-0.00	-3.78

Notes

Sample@0740, DUP-02@0640 Sunny 54

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-17 09:11:30

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU
Site Name Plant Daniel NAMU Wells
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type WED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 30 ft

Pump placement from TOC 26 ft

Well Information:

Well ID MW-17
Well diameter 2 in
Well Total Depth 28.5 ft
Screen Length 5 ft
Depth to Water 6.95 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6189027 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.02 in
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	08:54:38	300.02	19.49	5.00	42.58	7.85	6.97	0.27	92.56
Last 5	08:59:38	600.02	19.63	5.00	42.50	5.09	6.97	0.17	85.75
Last 5	09:04:38	900.02	19.74	5.00	42.44	2.96	6.97	0.16	79.99
Last 5	09:09:38	1200.02	19.76	5.00	42.60	0.71	6.97	0.16	75.90
Last 5									
Variance 0			0.14	-0.01	-0.08			-0.09	-6.81
Variance 1			0.11	0.01	-0.06			-0.01	-5.76
Variance 2			0.02	-0.00	0.15			-0.00	-4.09

Notes

Sample@0910, Sunny 61

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-17 09:58:55

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU
Site Name Plant Daniel NAMU Wells
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 46 ft

Pump placement from TOC 41.9 ft

Well Information:

Well ID MW-18
Well diameter 2 in
Well Total Depth 44.4 ft
Screen Length 5 ft
Depth to Water 15 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6903175 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.03 in
Total Volume Pumped 10 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	09:38:09	300.02	20.47	4.59	57.84	0.24	15.03	0.58	102.83
Last 5	09:43:09	600.02	20.40	4.61	58.05	0.26	15.03	0.18	89.80
Last 5	09:48:09	900.02	20.43	4.62	58.02	0.37	15.03	0.15	82.89
Last 5	09:53:09	1200.02	20.39	4.62	58.05	0.41	15.03	0.15	78.48
Last 5	09:58:09	1500.02	20.38	4.61	58.07	0.54	15.03	0.14	74.28
Variance 0			0.03	0.01	-0.03			-0.03	-6.92
Variance 1			-0.04	0.00	0.03			-0.01	-4.40
Variance 2			-0.01	-0.01	0.01			-0.00	-4.20

Notes

Sample@0958, Sunny 65

Grab Samples

Product Name: Low-Flow System

Date: 2017-10-17 08:30:42

Project Information:

Operator Name Brett Surles
Company Name RDH
Project Name NAMU
Site Name Plant Daniel NAMU Wells
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model HACH

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 35 ft

Pump placement from TOC 27.4 ft

Well Information:

Well ID MW-19
Well diameter 2 in
Well Total Depth 32.4 ft
Screen Length 10 ft
Depth to Water 18.34 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.6412198 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0 in
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 10		+/- 0.2	+/- 10
Last 5	08:14:38	300.03	21.69	4.94	37.04	0.59	18.34	0.13	28.56
Last 5	08:19:38	600.02	21.78	4.97	37.05	1.03	18.34	0.11	25.57
Last 5	08:24:38	900.02	21.90	4.95	37.02	1.11	18.34	0.11	28.65
Last 5	08:29:38	1200.02	21.90	4.93	36.98	1.09	18.34	0.11	33.79
Last 5									
Variance 0			0.10	0.02	0.01			-0.01	-2.99
Variance 1			0.12	-0.01	-0.03			-0.00	3.08
Variance 2			-0.00	-0.02	-0.04			-0.00	5.14

Notes

Sample@0830, Sunny 56

Grab Samples

Product Name: Low-Flow System

Date: 2017-12-15 13:30:10

Project Information:

Operator Name Rick Hagendorfer
Company Name RDH Env.
Project Name NAMU-CCR
Site Name Plant Daniel
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type PP
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 42 ft

Pump placement from TOC 37.0 ft

Well Information:

Well ID MW-15
Well diameter 2 in
Well Total Depth 39.5 ft
Screen Length 5 ft
Depth to Water 11.76 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.7774637 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.08 in
Total Volume Pumped 20 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	13:05:09	1800.02	20.76	4.79	39.11	3.91	11.84	3.14	81.90
Last 5	13:10:09	2100.02	20.70	4.79	38.99	3.53	11.84	3.14	80.83
Last 5	13:15:09	2400.02	20.76	4.80	39.08	3.04	11.84	3.13	79.78
Last 5	13:20:09	2700.02	20.79	4.81	39.04	2.51	11.84	3.12	78.47
Last 5	13:25:10	3001.02	20.74	4.81	38.98	2.34	11.84	3.13	78.83
Variance 0			0.07	0.00	0.09			-0.01	-1.05
Variance 1			0.02	0.02	-0.04			-0.01	-1.31
Variance 2			-0.05	-0.00	-0.06			0.01	0.36

Notes

Sample time 1329. Light rain 49.

Grab Samples

Product Name: Low-Flow System

Date: 2017-12-15 14:18:41

Project Information:

Operator Name Rick Hagendorfer
Company Name RDH Env.
Project Name NAMU-CCR
Site Name Plant Daniel
Latitude 0° 0' 0"
Longitude 0° 0' 0"
Sonde SN 383005
Turbidity Make/Model Hach 2100Q

Pump Information:

Pump Model/Type QED
Tubing Type PE
Tubing Diameter .17 in
Tubing Length 31 ft

Pump placement from TOC 25.8 ft

Well Information:

Well ID MW-16
Well diameter 2 in
Well Total Depth 28.3 ft
Screen Length 5 ft
Depth to Water 10.18 ft

Pumping Information:

Final Pumping Rate 400 mL/min
Total System Volume 0.7283661 L
Calculated Sample Rate 300 sec
Stabilization Drawdown 0.02 in
Total Volume Pumped 8 L

Low-Flow Sampling Stabilization Summary

	Time	Elapsed	Temp C	pH	SpCond μ S/cm	Turb NTU	DTW ft	RDO mg/L	ORP mV
Stabilization			+/- 0.2	+/- 0.2	+/- 5%	+/- 5		+/- 0.2	+/- 10
Last 5	14:00:45	300.06	21.37	4.62	44.68	0.30	10.20	0.31	63.95
Last 5	14:05:45	600.02	21.36	4.60	44.58	0.35	10.20	0.23	59.75
Last 5	14:10:45	900.02	21.38	4.61	44.62	0.29	10.20	0.21	56.34
Last 5	14:15:45	1200.01	21.48	4.63	44.69	0.24	10.20	0.21	53.05
Last 5									
Variance 0			-0.01	-0.02	-0.09			-0.08	-4.20
Variance 1			0.02	0.01	0.04			-0.02	-3.41
Variance 2			0.11	0.01	0.06			0.01	-3.29

Notes

Sample time 1418. Dup-01 fake time 1318. Cloudy 49.

Grab Samples

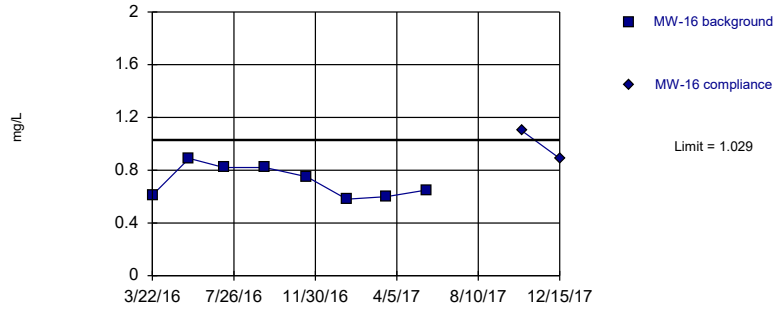
APPENDIX - B
STATISTICAL ANALYSES

Intrawell Prediction Limits - Resample Results

Plant Daniel Client: Southern Company Data: NAMU CCR Printed 12/27/2017, 2:23 PM

<u>Constituent</u>	<u>Well</u>	<u>Upper Lim.</u>	<u>Lower Lim.</u>	<u>Date</u>	<u>Observ.</u>	<u>Sig.</u>	<u>Bq N</u>	<u>Bq Mean</u>	<u>Std. Dev.</u>	<u>%NDsND Adj.</u>	<u>Transform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	MW-16	1.029	n/a	12/15/2017	0.89	No	8	0.715	0.1199	0	None	No	0.00188 Param Intra 1 of 2
Chloride (mg/L)	MW-16	9.095	n/a	12/19/2017	7.8	No	8	6.863	0.8535	0	None	No	0.00188 Param Intra 1 of 2
Total Dissolved Solids (mg/L)	MW-15	57.45	n/a	12/15/2017	20	No	8	22.75	13.26	0	None	No	0.00188 Param Intra 1 of 2

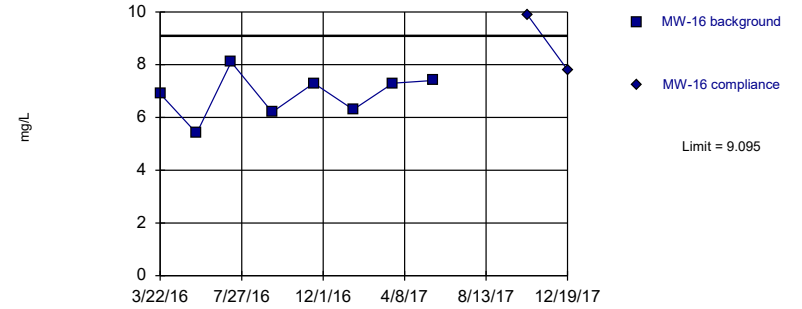
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=0.715, Std. Dev.=0.1199, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.8913, critical = 0.749. Kappa = 2.616 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Calcium Analysis Run 12/27/2017 2:20 PM View: PL's - Resamples
Plant Daniel Client: Southern Company Data: NAMU CCR

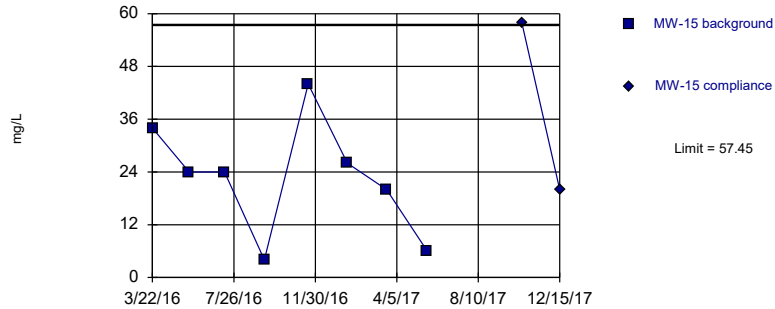
Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=6.863, Std. Dev.=0.8535, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9583, critical = 0.749. Kappa = 2.616 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Chloride Analysis Run 12/27/2017 2:20 PM View: PL's - Resamples
Plant Daniel Client: Southern Company Data: NAMU CCR

Within Limit Prediction Limit
Intrawell Parametric



Background Data Summary: Mean=22.75, Std. Dev.=13.26, n=8. Normality test: Shapiro Wilk @alpha = 0.01, calculated = 0.9449, critical = 0.749. Kappa = 2.616 (c=7, w=4, 1 of 2, event alpha = 0.05132). Report alpha = 0.00188.

Constituent: Total Dissolved Solids Analysis Run 12/27/2017 2:20 PM View: PL's - Resamples
Plant Daniel Client: Southern Company Data: NAMU CCR

Prediction Limit

Constituent: Calcium, Chloride, Total Dissolved Solids Analysis Run 12/27/2017 2:23 PM View: PL's - Resamples

Plant Daniel Client: Southern Company Data: NAMU CCR

	MW-16	MW-16	MW-16	MW-16	MW-15	MW-15
3/22/2016	0.61 (B1)		6.9 (B1)		34 (B1)	
5/18/2016	0.89		5.4		24	
7/11/2016	0.82		8.1			
7/12/2016					24	
9/12/2016					4 (J)	
9/13/2016	0.82		6.2			
11/17/2016	0.75		7.3			
11/19/2016					44	
1/18/2017	0.58		6.3			
1/19/2017					26	
3/21/2017	0.6		7.3		20	
5/23/2017	0.65		7.4		6	
10/17/2017		1.1		9.9		58
12/15/2017		0.89 (RS)				20 (RS)
12/19/2017				7.8 (RS)		

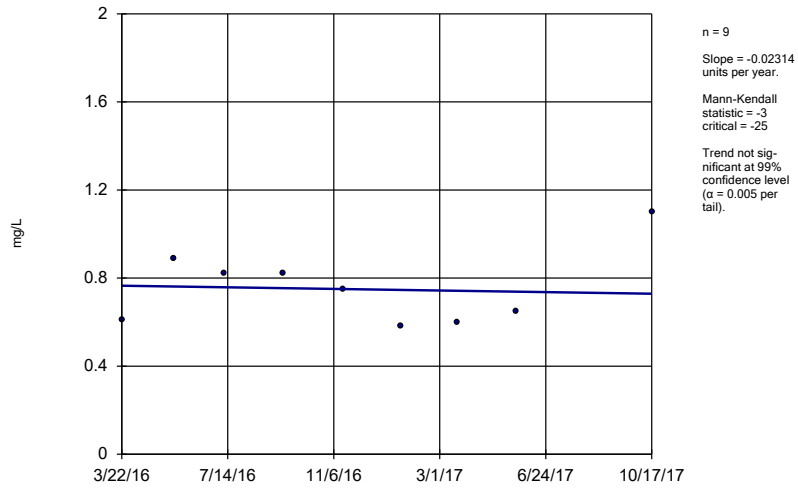
Trend Test Summary Table

Plant Daniel Client: Southern Company Data: NAMU CCR Printed 12/6/2017, 9:40 AM

<u>Constituent</u>	<u>Well</u>	<u>Slope</u>	<u>Calc.</u>	<u>Critical</u>	<u>Sig.</u>	<u>N</u>	<u>%NDs</u>	<u>Normality</u>	<u>Xform</u>	<u>Alpha</u>	<u>Method</u>
Calcium (mg/L)	MW-16	-0.02314	-3	-25	No	9	0	n/a	n/a	0.01	NP
Chloride (mg/L)	MW-16	1.579	17	25	No	9	0	n/a	n/a	0.01	NP
Total Dissolved Solids (mg/L)	MW-15	-2.378	-1	-25	No	9	0	n/a	n/a	0.01	NP

Sen's Slope Estimator

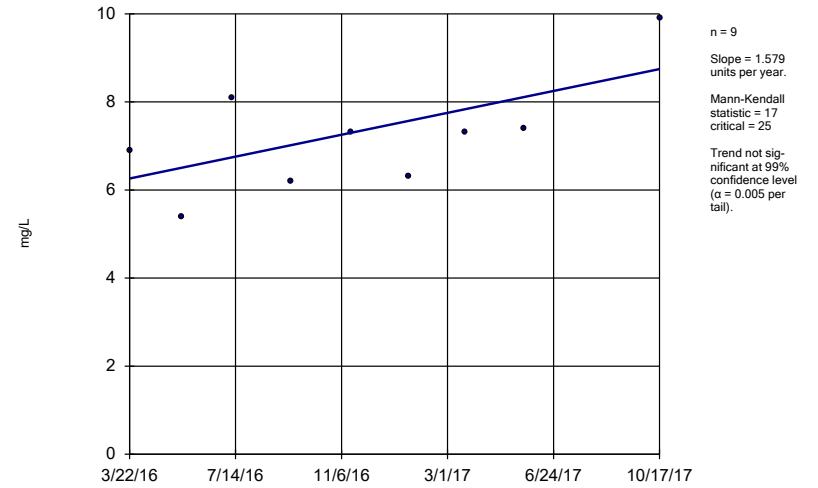
MW-16



Constituent: Calcium Analysis Run 12/6/2017 9:40 AM View: Trend Tests
 Plant Daniel Client: Southern Company Data: NAMU CCR

Sen's Slope Estimator

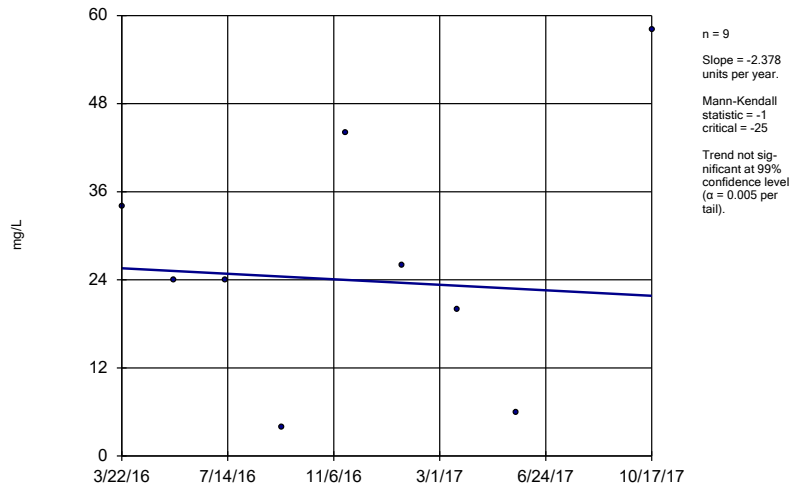
MW-16



Constituent: Chloride Analysis Run 12/6/2017 9:40 AM View: Trend Tests
 Plant Daniel Client: Southern Company Data: NAMU CCR

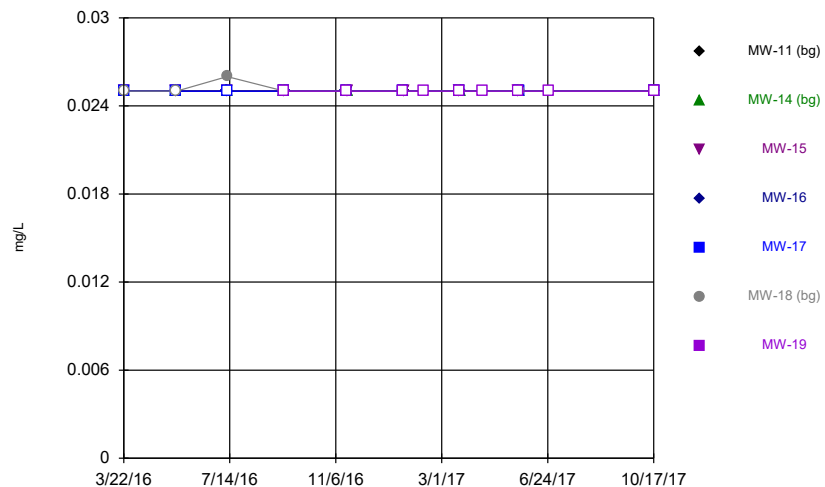
Sen's Slope Estimator

MW-15



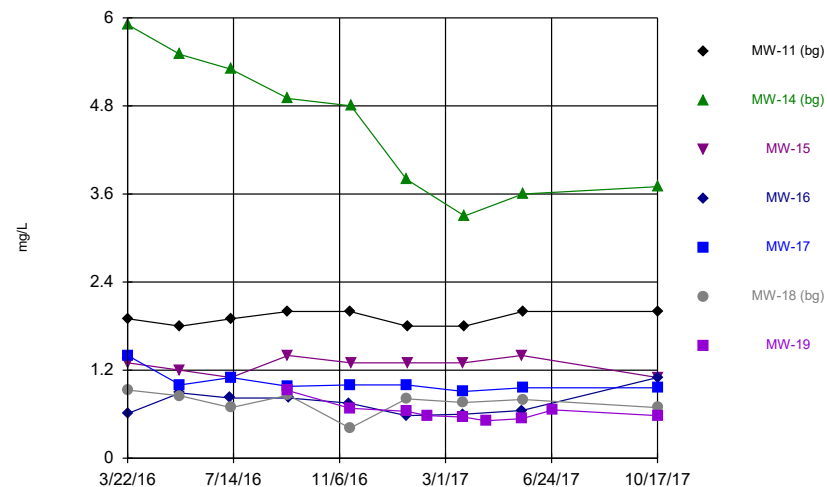
Constituent: Total Dissolved Solids Analysis Run 12/6/2017 9:40 AM View: Trend Tests
 Plant Daniel Client: Southern Company Data: NAMU CCR

Time Series



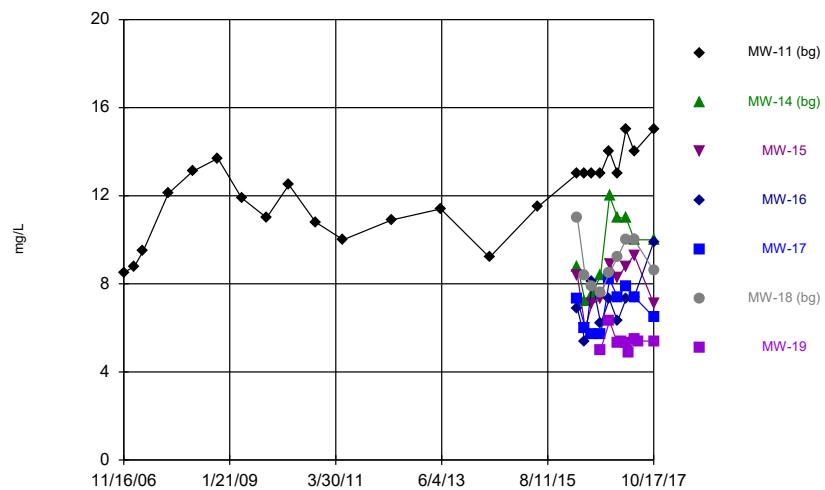
Constituent: Boron Analysis Run 11/17/2017 10:51 AM View: Descriptive
Plant Daniel Client: Southern Company Data: NAMU CCR

Time Series



Constituent: Calcium Analysis Run 11/17/2017 10:51 AM View: Descriptive
Plant Daniel Client: Southern Company Data: NAMU CCR

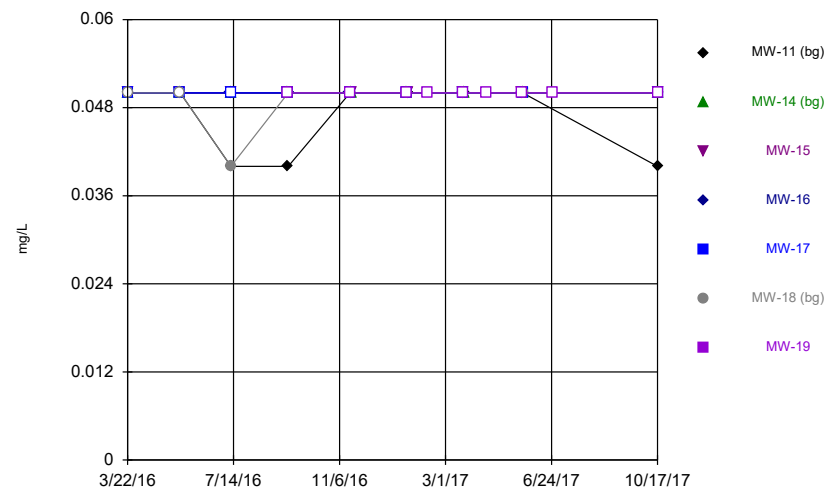
Time Series



Constituent: Chloride Analysis Run 11/17/2017 10:51 AM View: Descriptive
Plant Daniel Client: Southern Company Data: NAMU CCR

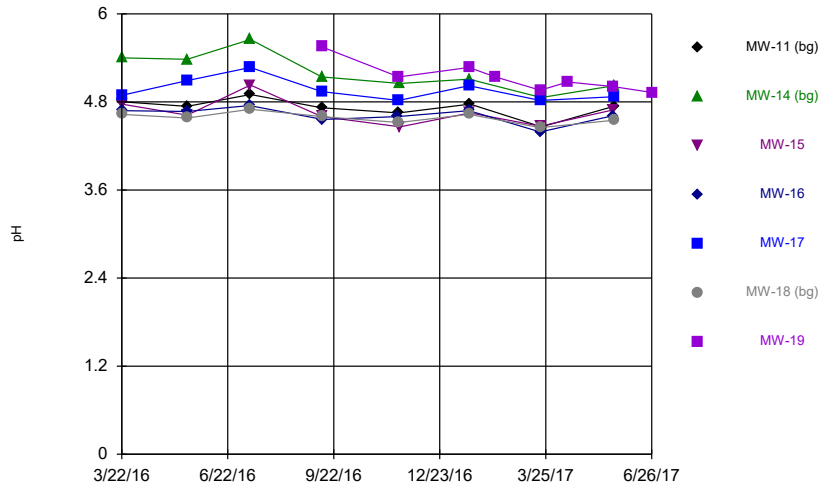
Hollow symbols indicate censored values.

Time Series



Constituent: Fluoride Analysis Run 11/17/2017 10:51 AM View: Descriptive
Plant Daniel Client: Southern Company Data: NAMU CCR

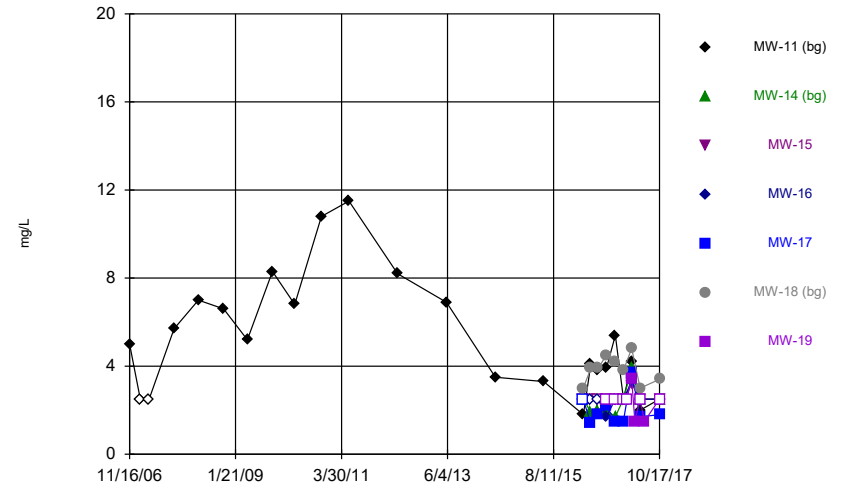
Time Series



Constituent: pH Analysis Run 11/17/2017 10:51 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: NAMU CCR

Hollow symbols indicate censored values.

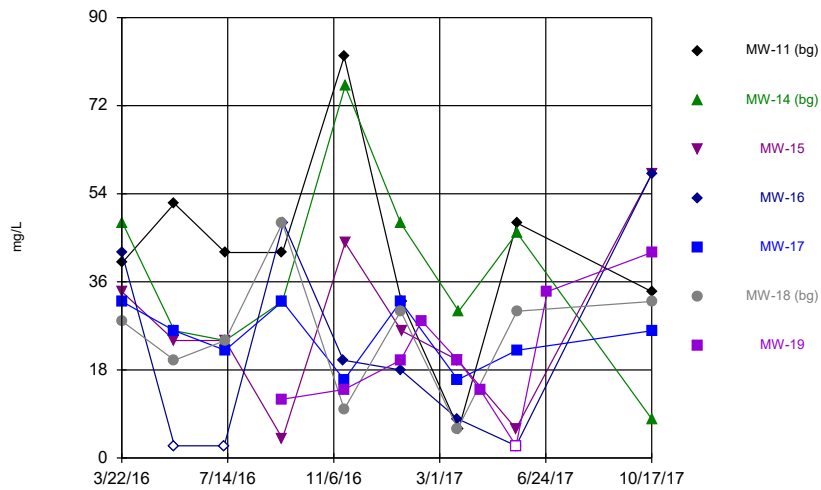
Time Series



Constituent: Sulfate Analysis Run 11/17/2017 10:51 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: NAMU CCR

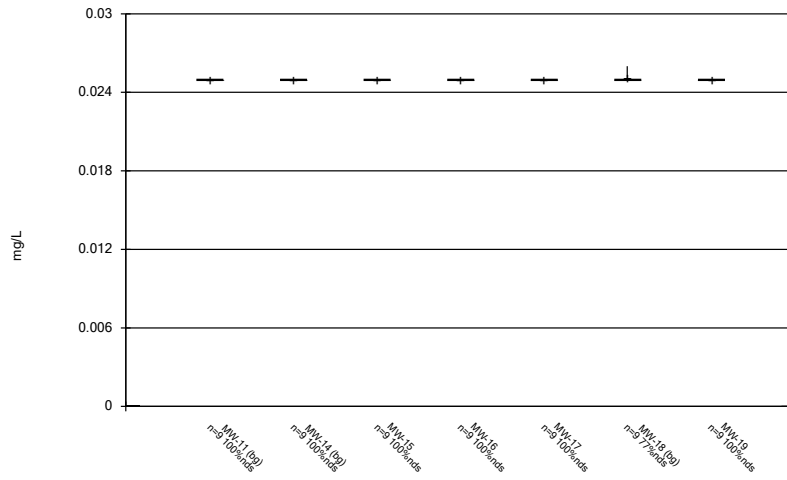
Hollow symbols indicate censored values.

Time Series



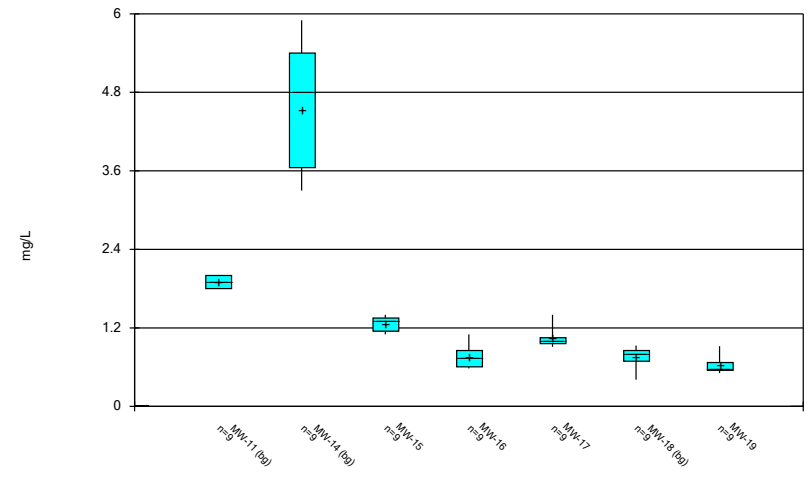
Constituent: Total Dissolved Solids Analysis Run 11/17/2017 10:51 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: NAMU CCR

Box & Whiskers Plot



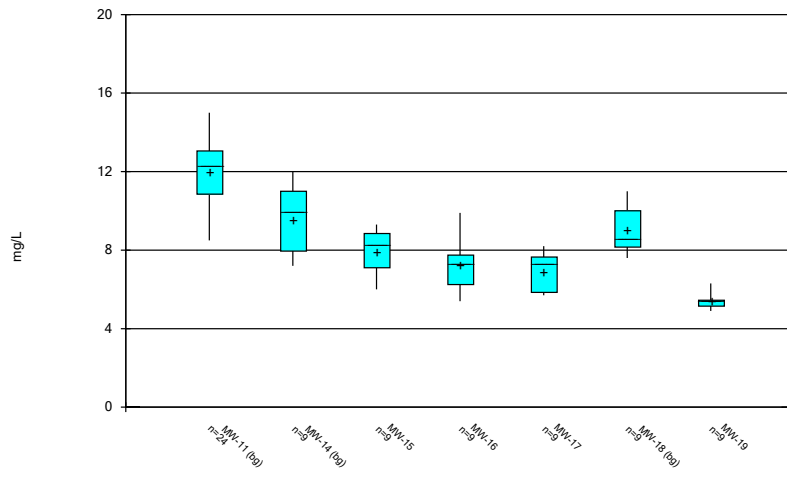
Constituent: Boron Analysis Run 11/17/2017 10:52 AM View: Descriptive
Plant Daniel Client: Southern Company Data: NAMU CCR

Box & Whiskers Plot



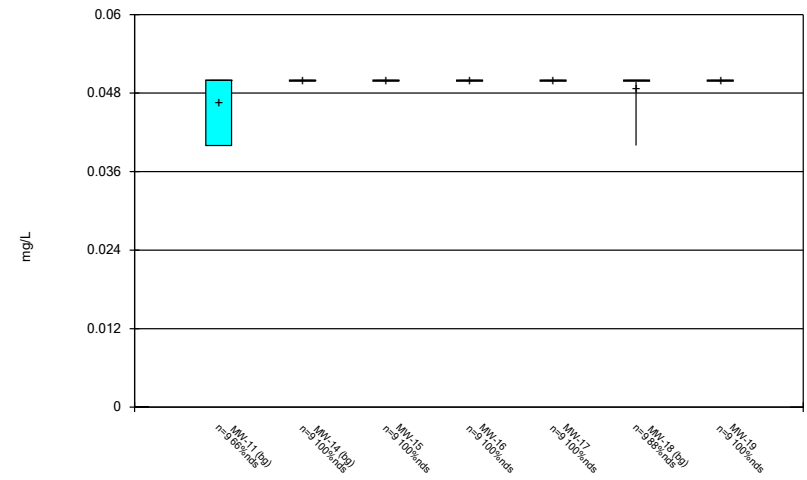
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Plant Daniel Client: Southern Company Data: NAMU CCR

Box & Whiskers Plot



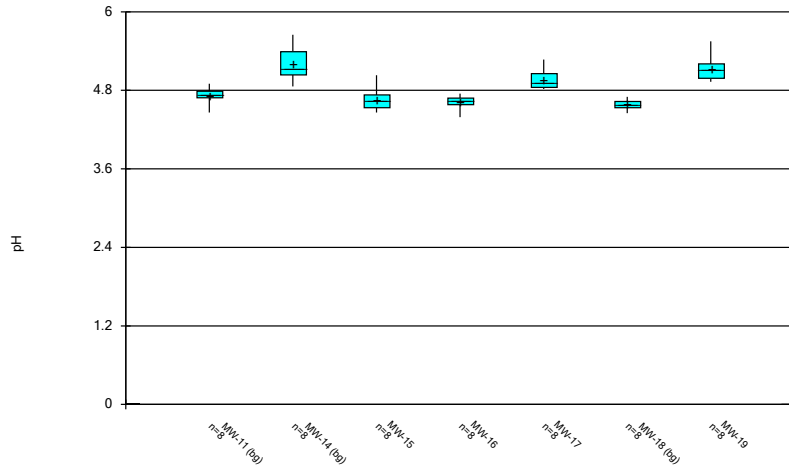
Constituent: Chloride Analysis Run 11/17/2017 10:52 AM View: Descriptive
Plant Daniel Client: Southern Company Data: NAMU CCR

Box & Whiskers Plot



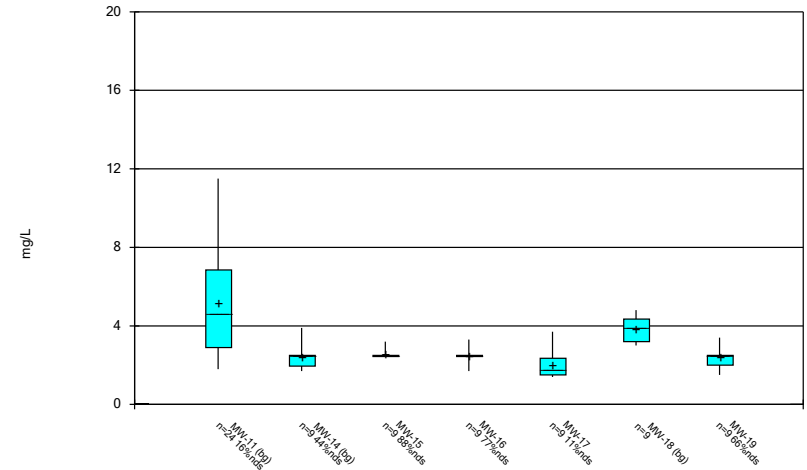
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Plant Daniel Client: Southern Company Data: NAMU CCR

Box & Whiskers Plot



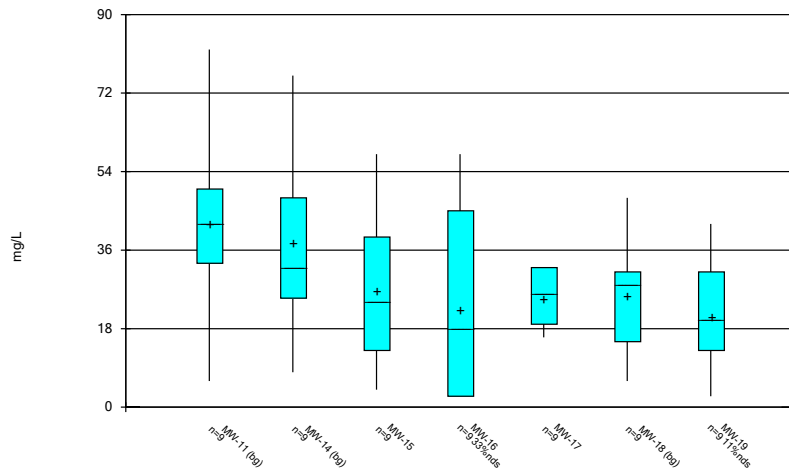
Constituent: pH Analysis Run 11/17/2017 10:52 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: NAMU CCR

Box & Whiskers Plot



Constituent: Sulfate Analysis Run 11/17/2017 10:52 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: NAMU CCR

Box & Whiskers Plot



Constituent: Total Dissolved Solids Analysis Run 11/17/2017 10:52 AM View: Descriptive
 Plant Daniel Client: Southern Company Data: NAMU CCR